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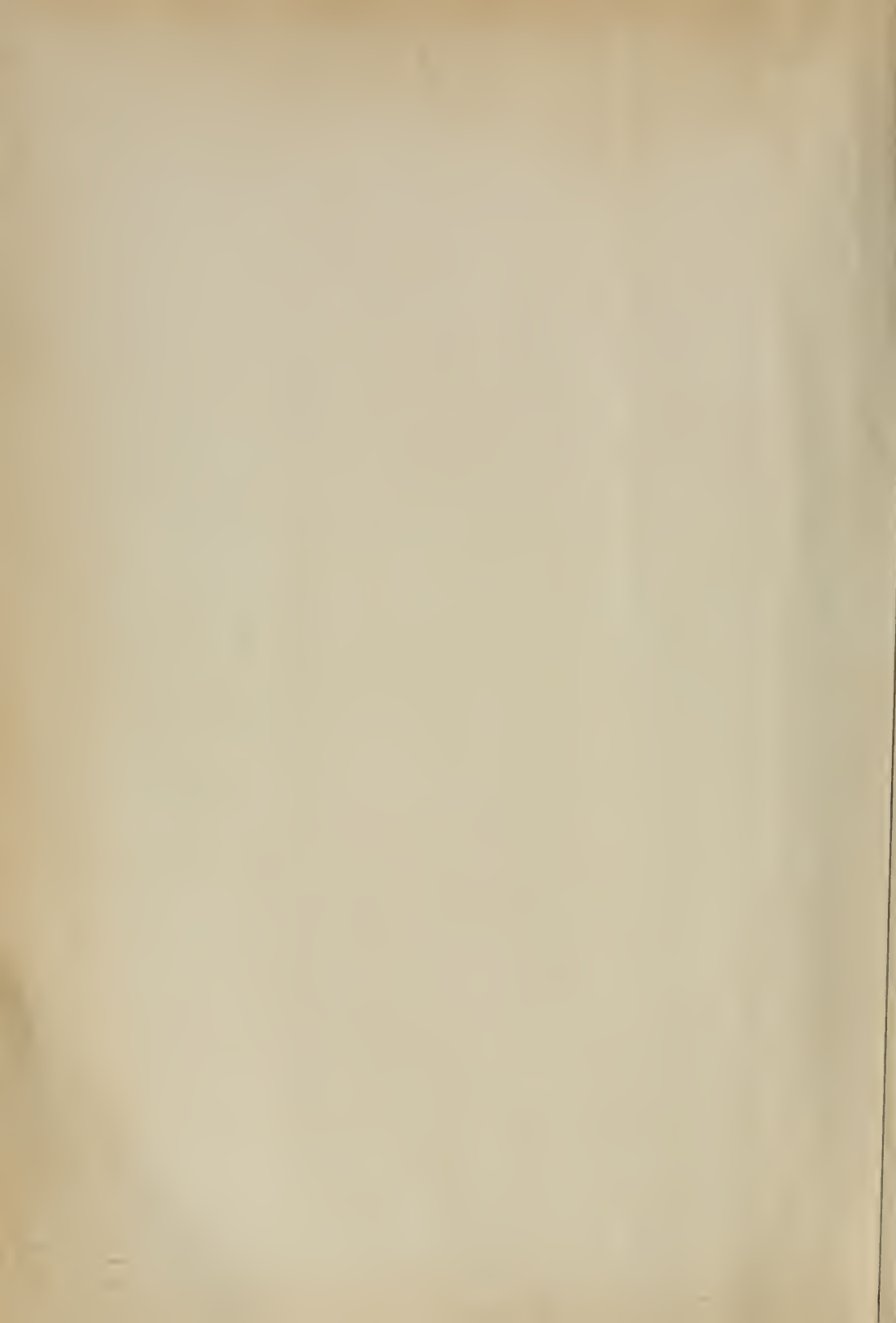
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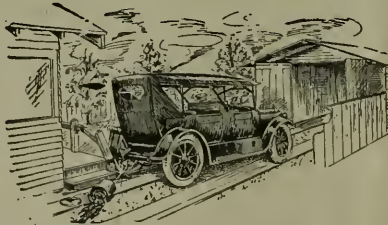
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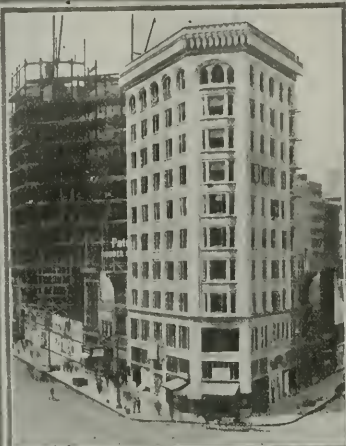
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San Francisco, July 7, 1915

Fifteenth Year, No 26

Report of Board of Public Utilities of Los Angeles on Grade Crossing Elimination, to the City Council— Review of the Situation.

We have been making an exhaustive study of the grade crossing elimination problem in this city and have made one report thereon covering the general situation and advised you that we would from time to time submit additional reports on the various branches of grade elimination required. One of those branches is, of course, viaducts across the industrial district upon which we now submit the results of investigations.

We note that your public works committee recognized the necessity for viaducts at Ninth street, Seventh street, Macy and Fourth streets. This is a step in advance, though in our opinion not far enough in advance, for we find such viaducts are required at First street and Main street in addition to those recommended by your committee.

Our investigations further show that these six viaducts would total 35,500 lineal feet, and could be built at a cost of \$4,260,000, and that in a piece of work of this magnitude a saving could be made if the city should furnish the steel, cement and broken stone buying in wholesale lots, furnishing cement from the Monolith plant and broken stone from the county crushing plants. Letting contract for erection and placing of the materials.

Offers of Co-operation.

While this expenditure of more than \$4,000,000 looks like a heavy expenditure and a difficult matter to finance, we can get nowhere in the elimination of dangerous grade crossings unless we look the facts straight in the face and endeavor to overcome them; we have carefully sounded out the public both within the city and county, and find very much more definitely favorable opinions of this expenditure than we had expected. The County Supervisors have expressed a willingness to co-operate as have individuals and associations.

Assuming that the city and county bear equally their proportion of the expense, of say 50 per cent of the total, or 25 per cent each; then that the railroad should bear 50 per cent of the cost of such structure of the same type as that adopted, that would be required should each crossing be considered separately. These separate crossings then when summed up will yield a proportion of the whole equal to 14½ per cent for the Southern Pacific Company, 13½ per cent for the Santa Fe and 12½ per cent for the Salt Lake Railway, which, with the city and county 50 per cent, leaves only 9½ per cent that should be divided between the Los Angeles Railway for the use of the viaducts, say 4½ per cent and the industrial district 3 and 4, 4½ per cent for relief from this through traffic.

Tabulated Figures.

Reducing these percentages to figures would give:

	Per Cent.	Estimated Expenditure.
City as a whole	25	\$1,065,000
County as a whole	25	1,065,000
Los Angeles Railway	4½	202,350
Industrial district 3 and 4	4½	202,350
Southern Pacific Company	14.5	617,500
Santa Fe	13.5	575,100
Salt Lake	12.5	532,500
Totals	100.5	\$4,260,000

We are submitting this information also to the County Supervisors and to other interested parties, and it might be advisable to call a general meeting of all parties at interest, or to appoint a general committee to devise ways and means.

We enclose you herewith maps and plans which we have prepared and our chief engineer's report on the

matter for further detail information and urge that you give this whole matter your careful consideration.

Respectfully submitted,
BOARD OF PUBLIC UTILITIES.

A new irrigation project of promising dimensions will soon take shape if the Victor Valley residents and certain Senators and Congressmen can convince Secretary Lane and the Reclamation Bureau that the expenditure of \$7,000,000 to \$8,000,000 on the project will give ample returns to the valley to secure an appropriation for the preliminary work.

A report of the feasibility of the project has been made by Mr. J. B. Lippincott, Consulting Hydraulic Engineer of Los Angeles, and he gives it his unqualified approval.

Supply and Cost.

To supply the water there are only two good storage reservoirs available that are at elevations great enough to serve the land under this project by gravity flow. The lands on the east side of the valley must be supplied from the Little Bear Valley reservoir, while that on the west will receive its supply from the Forks reservoir.

Following are estimates made by Mr. Lippincott, being a summary of costs of collection system, storage dams, outlet systems and distribution systems for the entire project:

Little Bear Valley reservoir	\$1,005,719
Little Bear Valley dam	200,564
Outlet system to west mesa	1,071,007
Cost of collection system Forks reservoir	366,785
Cost of Forks dam	387,692
Cost of outlet system to east mesa	326,352
Cost of distribution east mesa	418,200
Cost of distribution west mesa	848,595

Total cost of complete project, excluding value of construction work done by Arrowhead Reservoir and Power Company, \$4,614,915
Total gross area under project 56,470 acres
Cost per acre, excluding value of construction work on Arrowhead Reservoir and Power Company, also value of power that can be developed, \$81.75
Mr. Lippincott's report as to the acreage to be benefited by the project includes only that which would receive direct irrigation. He has made no estimate of how much of the 500,000 acres would ultimately be irrigated by the subterranean flow of water.

When the irrigation works have been built it will be possible by the expenditure of an additional amount of \$313,000 to develop an output of 4,320 kilowatts for a period of six months each year, which if wholesaled at the rate of one-half cent per kilowatt hour would produce an annual net income of \$56,000, which could be applied to reduce the construction costs.

The paving controversy in Portland, Oregon, has served to bring out a lot of information about paving and road making embodied in the several reports submitted that ordinarily is not made available for the ordinary layman and taxpayer.

The Chamber of Commerce of the City of Portland are to be congratulated that their report committee covers all the different types of pavement being offered in this field.

They did not confine themselves to any one group of promoters, but listened to all, and investigated every kind of paving.

It is fortunate that the Chamber committee tackled this hard problem in a spirit of open-minded fairness, and have produced a report which is virtually a descriptive manual of all available types of paving for country roads.

Paving Report of the Portland Chamber of Commerce.

Hon. C. C. Colt, President, Portland Chamber of Commerce.

Your committee, to whom was referred for report and recommendation the public contracts which will be let relative to the bond issue recently passed for good roads, begs to report as follows:

Took Stenographic Notes.

Your committee first met on the 28th day of April and decided that it would be a wise procedure to institute a series of hearings at which stenographic notes be taken for the purpose of extending the same in transcript form for present and future reference. It was thought that in this way your committee would establish an orderly procedure for giving opportunity to any one who might desire to present themselves and state their qualifications and views on the general subject of highway construction.

Visited Pavements.

These hearings were supplemented by an investigation of pavements and highways within the city limits of Portland and contiguous thereto, as well as visits to chemical laboratories where pavements are subjected to various tests to ascertain whether they conform to established standards.

In this way your committee feels that it has approached and investigated the subject in as comprehensive a manner as the limited time placed at its disposal would permit. Attached to this report and made a part hereof is a copy of the transcript of the testimony taken by your committee.

No Need Travel Far.

In its personal inspection of pavements of the city of Portland and vicinity, your committee arrived at the conclusion that it was not necessary to visit any other community to ascertain the behavior of all forms of hard surface pavements under traffic conditions, for your committee was able to find in Portland and its vicinity all of the standard hard surface types of pavement being actually subjected to daily traffic and weather conditions.

There is this much to say with reference to the construction of permanent country roads as distinguished from city pavements—in country road construction opposite lines of travel are confined to a relatively small area of surface. This is due to the fact that country road construction usually varies in width from 12 to 30 feet, as far as hard surfacing is concerned, while in city pavements opposite lines of travel are spread over a greater area, the width of hard surfaced streets being generally wider than country highways.

Problem Diggers from City.

The result of this is that there is a concentration of the lines of travel upon a country highway that does not exist in city streets.

The next difference between country

highways and city streets is this—that upon the question of repair the problem is a different one with reference to the country road than to the city street.

Long Way from Plant.

A country road is apt to be, on an average, a greater distance from the base of the supply of repairing material than is a city street. The result of this is that there is an increase of the unit cost of repair upon a country road over that of the city pavement.

Traffic Interruptions.

Another distinction is this—that in the repair of the hard surfaced city street, during the time of repair, traffic may be diverted to parallel streets within a short distance of the street to be repaired, which can, without any great inconvenience, reach the almost identical territory which is served by the street under repair, while on the country highway the interruption to traffic for the purpose of the repair is apt to inconvenience a territory that is not otherwise served.

Takes Longer to Clean.

Another important factor in a comparative sense is the facility and opportunity for cleaning highways and city streets. With reference to the cleansing of the city street, cities usually maintain efficient cleaning departments with comparatively low cost, owing to a sufficient number of hard surfaced pavements, allowing cleaning to be done upon both the outgoing and returning trip.

Ordinarily in the cleaning of a country road there is a large loss of time for the cleaning apparatus in returning from the end of the cleaning trip to the base of operation. This may be somewhat mitigated if country highways are constructed along the lines of complete out-going and returning circulation. However, it is not reasonable to expect that as efficient a country cleaning force can be maintained as is maintained in the city. It is neither desirable or necessary if the type of pavement is chosen for country highways whose life is not vitally dependent upon its being kept clean.

Shows Basis Comparison.

The effect of the above distinctions is that with reference to county highways a city pavement, particularly in regard to its life and cost of maintenance, is not an absolute criterion for a country road type. It is a criterion, however, for the purpose of ascertaining the behavior of various types of pavement under weather and traffic conditions.

There is another distinction which might be made between a city pavement and a country road, and that is this—generally, adjacent to a roadway devoted to general vehicle traffic is a sidewalk for pedestrians, which is separated from the roadway area by a substantial curb, while the country roads have made a practice, from the

standpoint of economy, of having the hard surface area of less width than the right of way of the road.

In such construction, ordinarily the roadway is not divided by a substantial curb, but there is a construction, a shoulder general, of macadam, which furnishes a width of road on which traffic may pass or turn. The junction of the hard surfaced part of the road with the macadam next to it introduces a road problem that is not generally met in the city street.

Not Cut Up So Often.

On the other hand, the most trying problems of the city pavement are not often met with in country road construction; they are the continual cutting in of the pavement of the city street for the purpose of getting at pipes and wires and the establishing in city streets of auxiliary furniture, generally in the way of catch basins and man-holes; and the laying of hard surfaced pavement adjacent to street railroad tracks.

It has been found that many city pavements that were otherwise good, have failed owing to these complications; therefore, the fact that a city pavement does not fail otherwise than above specified would seem to commend it for use upon country roads.

Discusses Legal Status.

At this point it might be well to make reference to the principal sources of statutory law under which Multnomah County must look for the construction of its contemplated highway system under the \$1,250,000 bond issue recently authorized:

The principal statute on the subject is Chapter 103 of the Laws of 1913, found on page 170 et seq of the General laws of Oregon for 1913. Under this law, after the fourth year until the maturity of the bonds, the law requires that a specified amount be set aside, the object being to retire the bonds serially at the end of 15 years the county will have retired its indebtedness created for road construction. It therefore seems advisable that the kind of pavement be selected which, with a reasonable amount expended for maintenance, will insure a condition of the road as good at the time the bonds are retired as it was at the date of construction.

Minimum, 15 Years Life.

In other words, it would be extremely poor public finance to have the road system in such a state of dis-repair prior to the time all bonds are retired, as to be for all practical purposes, useless. Therefore, 15 years should be required as the minimum life of any road system constructed under the 15 year bond issue.

Returning again to Chapter 103 of the General Laws of 1913, your committee found that in a good many instances the law is somewhat indefinite, but as this developed points of construction applied to matters that occurred before the authorization of the bond issue by election, and are of an immaterial nature, your committee refrains from giving consideration to most of them.

At this stage of the road development, however, there are two sections of the law that should be discussed. They are Sections 13 and 24. Section 13 is as follows:

"All monies raised under the provisions of this act shall be used in constructing permanent public roads in that county, which roads shall be constructed by the county court under its exclusive jurisdiction and such expert assistance as they may employ."

Section 24—"The County Court shall prepare plans and specifications of said road and shall invite bids in conformity to such plans and specifications, and may also receive and consider any and all bids in conformity to any plans and specifications furnished by any individual, firm or corporation offering to build such roads. The County Court shall have power to reject any and all bids."

In legal parlance it may be stated that these two sections of the road law become the subject of construction. This is true because there is a possibility of a conflict between the provisions of one, when considered with reference to the provisions of the other. A general rule of construction of statutory law requires that statutes, or sections of the same statute that seem to be in conflict should be reconciled if possible. That is to say that in this particular case, if the two sections are subject to a construction that makes one in conflict with the other, and also a construction that will reconcile one with the other, the rule is that the one that reconciles them is the governing rule of construction.

The possible conflict between Section 13 and 24 is this—that in the sense of Section 13 be taken standing alone it would seem to indicate that the County Court is given authority under the law to purchase material and employ labor and expert assistance for the construction of county roads. While if Section 24 is taken by itself, it would seem to indicate that the authority of the County Court is limited to the preparation of plans and specifications and therefore must receive bids for the construction of roads by contractors. However, if the general rule of law be followed, which your committee thinks of necessity must be the construction that could be placed upon these two sections is this—that in the first instance the County Court cause plans and specifications to be prepared.

In the preparation of this work, under Section 13, it would have authority to employ expert assistance; that the plans and specifications must be published and bids received. The right is reserved, however, to the County Court to reject any and all bids. It accepts a bid, then, under Section 13, it would have authority to employ such expert assistance in the way of inspection and otherwise as would insure a proper conformity by the contractor of his contract.

But Section 24 must be given consideration over and above its possible construction with Section 13, and that is this—under Section 24 the County Court is to be under the necessity to make its award to the lowest responsible bidder bidding on the same type of pavement. Authority under this section is also given to the County Court to reject all bids. The law however—that is, Chapter 103—is silent as to what procedure the County Court may follow in case all bids are rejected. The law seems neither to contemplate that the County Court may re-advertise for bids or to proceed to construct the road by the purchase of material and the employment of labor.

This being so, your committee is of the opinion that the law with reference to this subject must be found elsewhere, possibly among the general statutes of the state with reference to the power and jurisdiction of the County Court to construct roads. Further, the statute being silent as to what procedure the County Court may follow in case all bids are rejected, your committee is of the opinion that Section 25 of Chapter 103 would not act as a repealing clause against any general road statute which dealt with the special matter of the power of the county with reference to roads in a

case where all bids were rejected. Your committee has not had time to investigate the general road statutes with reference to this subject, but in its investigations it was brought out by Mr. E. E. Coovert, an expert lawyer on the subject of road law, that in his opinion in many particulars the general road law and other statutes should be construed as supplementing Chapter 103 of the laws of 1913.

Build by Day Labor.

A proposition has been brought to the attention of your committee by Messrs. McMullen and Dulin that they stand ready to enter into a contract with the county by which the county is to construct the contemplated road system by the purchase of material and the employment of labor.

Labor Council Supports Plan.

These gentlemen have submitted a proposition to the county under the date of April 21st, 1915, supplemented by a further communication, copies of which are hereto attached and for better reference are marked Exhibit A.

Their plan is that the county establish a paving plant at Kelly Butte and control the mixing and laying of the pavement, the county to pay all expenses of running the plant and labor incident to the mixing and laying, these gentlemen to act as expert assistants to the county for which they would receive a compensation of \$200 per month.

Claim 60c Cost

It is their claim that they can lay types of bituminous pavement at a cost to the county of less than 60 cents per square yard, not taking into consideration the cost of royalty if the county decides to hard surface the system of county roads or any portion thereof by using a patent pavement. That, in addition to their compensation of \$200 per month each for their services, they receive a bonus equal to thirty-three and a third (33-1/3) per cent of the amount saved by laying such pavement at less than 60 cents per yard; their proposition providing that none of this bonus shall be paid to them at the completion of the pavement but shall remain in trust for five years.

Is Ingenious Proposal

If, during that period, any defects appear in the pavement as laid there shall be deducted from the bonus an amount sufficient to defray all expenses of repairing pavement, and only the amount remaining in the bonus after repairs have been made shall be paid to them.

This presents an interesting proposition.

Are Chemical Experts.

Your committee held conference with Messrs. McMullen and Dulin and visited the paving testing laboratory of the city of Portland where these gentlemen are at the present time employed.

Honest and Sincere.

All the members of your committee became profoundly impressed with the knowledge that these gentlemen possess with reference to the physical and chemical properties of pavements.

Your committee was further impressed with the honesty and sincerity of these gentlemen.

Incidentally, throughout these hearings paving contractors were interrogated with reference to the cost items

presented in the communications of Messrs. McMullen and Dulin.

Figures Seem Too Low.

Where these interrogations were made the answers were that the figures of Messrs. McMullen and Dulin were too low; that they had failed to take into consideration certain overhead and depreciation expenses.

Undoubtedly, in a measure, this criticism is correct, but our investigations also led us to the conclusion that certain items which contractors habitually include as cost items, while legitimate in the general paving business, would not and should not be considered if the county were to employ labor, purchase material and directly construct the road system.

These items principally concern themselves with what might generally be called items of sales expense. A contractor or a paving company must of necessity be brought in competition with other types of pavement, and in order to get the business an efficient and intelligent sales department must be maintained.

This is usually a high salaried department, because it requires exceedingly clever men—men convincing, persuasive, honest and possessing a profound knowledge of the details of the paving business. This, we say, would not apply to the county after it once settles the type of pavement that it desires to construct. There is an element, however, that enters into the cost items of construction possibly not contemplated by Messrs. McMullen and Dulin, and that is this:

That the success of most types of pavement depends upon the skill and accuracy in preparing the preparation and laying it upon the roadbed.

Cost of Maintaining Organization.

That in order to command the services of the best skill in this respect it is necessary to carry on the payrolls of whoever is constructing a pavement these skilled employees over a period of time when seasonal conditions prevent paving construction.

It goes without saying, of course, that if the county were to enter into general hard surface road construction it would eliminate contractors' profits in road construction. The county, however, as well as any contractor, would have to meet royalty payments if it decided to use a patent pavement, assuming, of course, that the patent to the pavement is sustainable.

Danger Political Interference.

As against this item of the contractor's profit, however, is the danger of political interference in road construction by the county. Your committee does not wish to be understood to imply or intimate that there is political influence existing at the present time with reference to the road system of the county as administered by the Board of County Commissioners. In fact, your committee knows of no such influence, and does not wish to infer that any exists. But, it does say that this danger is one that has arisen where construction is done directly by public authority, and therefore, the danger might confront us in the future.

Not Free from Doubt.

It is the understanding of your com-

mittee that the Board of County Commissioners has rejected the proposition of Messrs. McMullen and Dulin. Your committee also desires to state that their proposition is not free from doubt as a legal question. Your committee will not and does not say that their proposition could be accepted by the county as a matter of law or that it could not be accepted as a matter of law.

Portable Plant Suggested.

Objection has been urged to their proposition on the ground that a \$50,000 plant at Kelly Butte could not furnish the facility for material for the contemplated road construction on two grounds—first, that the material could not be turned out fast enough; second, that in order to economically construct all the portions of the road system portable plants must be established to furnish a near base of supply.

To this Messrs. McMullen and Dulin answer that at a very low cost the county could establish the portable plants suggested. It is also urged that, without an undue expenditure of money for equipment, the county would be unable to hard surface the road system contemplated within a reasonable length of time; while under the contract system, if work were let to a responsible contractor, he could bring to bear upon the work sufficient equipment to rapidly perform the work, due to the fact that his plant has already been assembled in his contracting business and after the completion of the contract he would have reasonable prospect of employing his plant in his general business.

County Plant Idle.

While in the plant of the county, unless the county were to continue in blocks of work equal to or nearly equal to the present block of hard surface construction—in other words, inasmuch as probably during the first five years of the pavement the repairs would be slight, there would be little use for large equipment; much of the equipment would be idle unless the electors of the county authorized large future bond issues, and it is undoubtedly true, considering the problematical utility of a large county equipment, that the county would have to carry a disproportionate depreciation account on its plants, both fixed and portable.

There is some tendency for cities and counties to maintain their own paving plants. It may be said, however, that this question is one on which, as a policy, there is a considerable divergence of opinion. In a measure Multnomah County now maintains such a system with reference to the macadamizing of the present county roads, and we understand that Pierce County, Wash., partially maintains such a system, or has done so while constructing its cement roads, in order that its roads may be supplied with properly selected and washed sand, gravel and broken stone.

Question of Public Policy

In conclusion, on this point your committee is of the opinion that the items of road cost do not lie entirely in Messrs. McMullen's and Dulin's figures, nor do they lie entirely with the cost items of contractors. They seem to repose somewhere as a middle

ground between the two, and your committee feels that the general membership of the Chamber or its Board of Directors is fully capable of deciding for itself whether the work shall be done under the contract system or under direct construction by the county for, after all, it is a question of policy upon which public and individual opinion is divided.

What Are Fundamental Requirements?

Your committee now comes to the point in its report in which it approaches the question of desirability of pavement.

In order that pavements may be classified, an outline of just what requirements a pavement should conform to seems desirable. After this has been ascertained, the prevailing types of hard surface pavements should be subjected to an analysis in order that it may be ascertained which of the pavements contains most of the elements of desirability. The best discussion of the subject under present consideration that your committee has been able to find appears in "Byrne on Highway Construction," the fifth and latest edition, which was issued in 1913. We have found the discussion of this author so good that we must be pardoned for quoting rather heavily from his opinions. On page 1 he says:

These Qualities Essential.

The qualities essential to a good pavement may be stated as follows:

- No. 1—It should be impervious.
- No. 2—It should afford good foothold for horses.
- No. 3—It should be hard and durable, so as to resist wear and disintegration.
- No. 4—It should be adapted to every grade.
- No. 5—It should suit every class of traffic.
- No. 6—It should offer the minimum resistance to traffic.
- No. 7—It should be noiseless.
- No. 8—It should yield neither dust nor mud.
- No. 9—It should be easily cleaned.
- No. 10—It should be cheap.

Continuing, he says:

Of the above requirements Nos. 2, 4, 5 and 6 affect the traffic and determine the cost of haulage by the limitation of loads, speed, wear and tear of horses and vehicles.

If the surface is rough or the foothold bad the weight of the load a horse can draw is decreased, thus necessitating the making of more trips or the employment of more horses and vehicles to move a given weight.

A defective surface necessitates a reduction in the speed of movement and consequent loss of time.

It measures the wear on horses, thus decreasing their life service and lessens the value of their current services.

It also increases the cost of maintaining vehicles and harness.

Nos. 7, 8 and 9 affect the occupiers of the adjacent premises, who suffer from the effect of dust and noise; and second, the owners of said premises whose incomes from rents is diminished when these disadvantages exist. Nos. 2 and 10 affect the taxpayers alone; first as to length of time during which the covering remains serviceable and second as to the amount of annual repairs.

No. 1 affects the adjacent occupiers principally on hygienic grounds.

Nos. 7 and 8 affect both traffic and occupier.

Motors New Problem.

With reference to present traffic conditions and their application to county roads, the above essential qualifications of Byrne need modification. At the present time the large volume of traffic is moved by motor vehicles

and this introduces a new traffic problem of its own, and minimizes the traffic problems of horse drawn vehicles.

Must Not Ignore Horses.

But, while this is so, horse traffic must not and cannot be ignored on county roads. The quality of a pavement being noiseless is not as necessary on a county road as on a city street, and its ease of being cleaned, except where dirt affects the life of the pavement, is not so important a country as a city problem, although it cannot be entirely ignored in country construction. The element of cost is a more vital problem in the country road than in the city street, owing to the fact that in city streets the original cost of construction is usually charged to abutting property, and the improvement by hard surfacing an adjacent street represents a greater percentage of increased value to abutting property.

Elements of Cost Vital.

There is a tendency for city property to sell more rapidly in small lots than there is for country property to so sell, and the street assessment represents a smaller element measured against property value in the city than the country. The result is that the city owner can more readily transfer the cost of the hard surfaced pavement assessed to abutting property while the country land owner cannot.

This applies more particularly where a country road is constructed under an assessment against abutting property; but, nevertheless, even where the county constructs directly it has an indirect bearing, inasmuch as the general tax is a more distasteful tax than an assessment for special benefits. Therefore, country road construction consistent with durability should be a cheaper pavement than a city pavement.

Compares Cost of Hauling.

On page 3 of the above cited authority is given a table which sets out the cost of transportation by horse and wagons per ton mile on different road coverings. The table is as follows:

Transportation on iron rails...	1.25c
On asphalt	2.70c
On stone paving, dry and in good order	5.33c
On stone paving, dry and in ordinary condition	6.12c
On stone paving, covered with mud	21.30c
On earth, dry and hard	18.00c
On earth, full of ruts and mud	39.00c
On loose gravel	51.60c
On gravel, compact	12.80c
On plank in good condition	8.80c
On sand, wet	32.60c
On sand, dry	64.00c

On page 4 the author says:

The problem involved in the selection of the most suitable pavement is composed of the following factors—first, adaptability; second, desirability; third, serviceability; fourth, durability; fifth, cost.

Must Fit Local Use.

Adaptability: Continuing the author says:

The best pavement for any given roadway will depend altogether on local circumstances. Pavements must be adapted to the class of traffic that will use them. The pavement suitable for a road through an agricultural district will not be suitable for the streets of a manufacturing center, nor will the covering suitable for heavy traffic be suitable for a pleasure drive or residential district.

Must Satisfy Users.

Desirability: With reference to this, he says:

The desirability of a pavement is its possession of qualities which make it satisfactory to the people using and seeking it. Between two pavements alike in cost and in durability, people will have preferences arising from the condition of their health, personal prejudices and various other intangible influences, causing them to select one rather than the other.

The economic desirability of pavements is governed by the ease of movement over them, and is measured by the number of horses or pounds of tractive force required to move a given weight, usually one ton, over them.

Compares Horse Effort.

The author then gives a table for level roads, surface of which is formed of different materials, in which he takes asphalt as the standard of excellence. By this table he shows the number of horses required to move one ton over these different pavements. The table is as follows:

FIVE JULY 1	HOYT
Asphalt	1.00
Stone blocks dry and in good condition	1.50 to 2.00
Stone blocks in fair condition	2.00 to 2.50
Stone blocks covered with mud	2.00 to 2.70
Macadam, dry and in good condition	2.50 to 3.00
Macadam, in a wet state	3.50
Macadam, in fair order	4.50
Macadam, covered with mud	5.50
Macadam, with stones loose	5.00 to 8.20

Smoothness Is Economy.

From the above table the great economy of smoothness becomes at once apparent. But it is evident that, as in all lines of transportation, the greatest resistance regulates the load over the rest of the route, unless there be auxiliary power; so the continuity of the surface should remain unbroken by any other grade of material which would increase the resistance.

Expense Caused To Traffic

The author discusses serviceability as follows:

The serviceability of a pavement is its quality of fitness for use. This quality is measured by the expense caused to the traffic using it. * * * No statistics are available from which to deduct the actual cost of wear and tear. It has been estimated as follows:

	Per Mile of Travel.
On cobblestones .....	.5c
Belgian blocks .....	.4c
Wood	2.5c
Broken stone in first class class condition	1.2c
Asphalt	1c

Foothold for Horses.

The serviceability of any pavement depends in a great measure upon the amount of foothold afforded by it to the horse, provided, however, that its surface be not so rough as to absorb too large a percentage of the tractive energy required to move a given load over it. Cobblestones afford excellent foothold but the resistance to motion requires the expenditure of about 250 pounds of tractive energy to move a load of one ton. Asphalt affords the least foothold but the tractive force required to overcome the resistance it offers to motion is only about 30 pounds per ton.

When Horses Fall.

Comparative safety. The comparison of pavements in this respect is the distance traveled before a horse falls. The materials affording the best foothold for horses are as follows, stated in the order of their merit.

1. Earth dry and compact.
2. Gravel.
3. Macadam.
4. Wood.
5. Sandstone and brick.
6. Asphalt.
7. Granite blocks.

*Note—Committee's explanation, not given by author, this would include Belgian blocks.

How Far Horse Will Travel.

The author then gives a table showing how far a horse will travel over the various pavements, which was worked out by Capt. F. B. Greene, and it is as follows:

Asphalt	533 miles
Granite	413 miles
Wood	272 miles

Haywood Favors Wood.

For the same purpose observations were made in London by Col. Haywood. He compared wood, asphalt and stone under conditions as nearly identical as possible. The observation was for fifty days, and it showed that before meeting with an accident a horse would travel a greater distance on wood than he could either on asphalt or stone. Col. Haywood's table is as follows:

Weather Affects Horse Safety.

Dry Weather Distances.

Wood	646 miles
Asphalt	223 miles
Granite	178 miles

Damp Weather Distances.

Wood	193 miles
Asphalt	125 miles
Granite	168 miles

Thoroughly Wet Weather.

Wood	132 miles
Asphalt	192 miles
Granite	537 miles

Under another mode of observation the distance may be given as follows:

Wood	446 miles
Asphalt	191 miles
Granite	192 miles

Compares Slipperiness.

It thus appears, from the above tables, that asphalt is the most slippery when damp and safest when perfectly dry; granite slippery when dry and safest when wet; wood most slippery when damp, safest when dry.

Stone Blocks Safest.

When climatic conditions of Western Oregon are considered, granite or Belgian blocks being slippery when perfectly dry but safe when perfectly wet, stone blocks must be considered the safest pavement, and that as between asphalt and wood, wood is the safest. Granite seems to be least safe when clean and wood and asphalt most safe when clean. Slight rains make asphalt and wood more slippery than they do at other times. Asphalt becomes slippery almost at once after a slight rain, while wood requires more rain before it reaches its worst condition, but slipperiness lasts longer on wood.

It will be noted in the above that the tables of Greene and Haywood differ, Greene's tables having been taken in the eastern cities of America and Haywood's with reference to the London pavements. Probably climatic conditions explain the difference in the two tables.

How to Overcome.

There is also another explanation for the behaviour of asphalt, and that is that asphalt as laid in Europe is a more slippery pavement, owing to the methods of its construction, than the asphalt laid in the United States. The authorities seem to agree that slipperiness can be cured in asphalt by the spreading of sand, and on wood block pavements by the spreading of pea gravel and the rolling of the same over the surface by a steam roller.

Difference in Falls.

On page 21 of his work on Highway Construction, Byrne discusses the character of falls on various pavements as follows:

The commonest falls on wood are falls on the knees, which are less likely to injure the horses and are less inconvenient to traffic than other falls. Falls on haunches are more numerous on asphalt than on wood. Complete falls are fewest on wood and most on granite. The falls on asphalt are generally due to sudden pulling up and short turning; those on granite to excessive width of the blocks, which fail to support proper foothold.

Makes Difference in Durability.

On page 10 the author discusses the durability of the pavement and says: The durability of the pavement is its quality which relates to the length of time during which it is serviceable, and not the length of time it has been down. The only measure of the durability of a pavement is the amount of traffic tonnage it will bear before it becomes so worn that the cost of replacing it is less than the expense incurred by its use.

Length of Pavement Life.

On page 11 he says:

The life or durability of the different pavements under like conditions of traffic and maintenance may be taken as follows:

Granite blocks	12 to 30 years
Sandstone	6 to 12 years
Asphalt	10 to 14 years
Wood	3 to 5 years
Limestone	3 to 5 years
Brick	5 to 12 years

With reference to this table it may be stated that no reference is made to Belgian blocks. They should be properly classified. In our judgment, with granite blocks. No reference is made to asphaltic concrete, which, in our judgment, should occupy a position between Belgian blocks and asphalt, possessing a higher degree of merit than asphalt. In the reference to the classification of wood the author fails to state whether the wood has been preserved by creosote or otherwise. We are inclined to the opinion that, if wood blocks are properly treated with a preservative, they would take a higher classification than that given in the table. The author also further fails to state whether the paving bricks were vitrified. We are inclined to the opinion that vitrified bricks should take a better classification than given by the author.

Why Cost Varies.

Continuing on page 13, the author says:

The cost of construction is largely controlled by the locality of the place, its proximity to the particular material used and character of the foundation.

On page 14 he says:

The first cost of pavement is like any other permanent investment, measurable for purposes of comparison by the amount of annual interest on the sum expended.

Dispers Popular Error.

Maintenance. Under this head must be included all outlays for repairs and renewals which are made from time to time when the pavement is new and at its best to a time subsequent, when by any treatment it is again put in equally good condition.

The prevailing opinion that no pavement is a good one unless, when once laid, it will take care of itself is erroneous. There is no such pavement.

Attention! Says Committee.

At this point your committee wants to, with great emphasis, call attention to the above statement. Your committee is of the opinion that the greatest problem in permanent road

construction is the wearing surface. Your committee is of the opinion that the wearing surface of any road has a comparatively short life. This being so, your committee regards the real vital problem in road construction as the maintenance problem. As verification of this point, your committee will continue the quotation of Byrne. He says:

Maintenance the Vital Problem.

All pavements are being constantly worn by traffic and the action of the atmosphere, and if any defects which appear are not quickly repaired they soon become unsatisfactory and are destroyed. To keep them in repair incessant attention is necessary and is consistent with economy. Yet claims are made that particular pavements cost little or nothing for repairs, simply because repairs are not made, while anyone can see the need of them. Byrne gives a table showing the comparative cost of various pavements in Liverpool, including interest on first cost, sinking fund, maintenance and cleaning, when reduced to a uniform traffic of 100,000 tons per annum for each yard in width of the carriage way. It follows at top of next page:

SHOWS COST PER YEAR FOR LAST FIFTY YEARS.

Byrne's Table Includes Interest, Repairs, Maintenance, Replacement and All Other Expense, Based on Experience of Half a Century in United States.

	Granite Blocks	Asphalt	Wood	Brick
Foundation	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
Materials, labor, etc.	3.25	2.50	1.40	1.80
Total first cost	\$ 4.25	\$ 3.50	\$ 2.40	\$ 2.80
Interest on material, and sinking fund, 50 years, 4%	26.00	20.00	11.20	14.40
Interest on foundation	2.00	2.00	2.00	2.00
Maintenance 50 years	2.50	4.50	7.50	2.50
Cleaning 50 years	5.00	1.00	6.00	2.50
Three renewals of surface at \$3.25 ..	9.75	....	....	....
Five renewals at \$2.50 .....	....	12.50	....	....
Twelve renewals at \$1.40 .....	....	....	16.80	....
Eight renewals at \$1.80 .....	....	....	....	14.40
Consequential damages	10.00	1.00	1.50	2.00
Cost of service estimated	30.00	10.00	20.00	15.00
Total	\$89.50	\$54.50	\$67.40	\$55.60
Less value of foundation	1.00	1.00	1.00	1.00
Less value of old material	\$88.50	\$53.50	\$66.40	\$54.60
Which, divided by 50, that being the life of the pavement in years, gives the annual gross cost per square yard per annum as follows:	1.00	.10	.00	.25
Granite blocks	\$87.50	\$53.40	\$66.40	\$54.35
Asphalt	1.068	1.75	1.32	1.087
Wood	1.32	1.087	1.32	1.087
Brick	1.087	1.32	1.087	1.32

Per sq. yd. per annum
Block pavements of hard granite .. 23c
Block pavements of soft granite .. 28c
Bituminous concrete .. 47c
Wood pavement .. 53c
Macadam on pitch foundation .. 71c
When the traffic is taken at 40,000 tons per annum for each yard, the showing is as follows:

Bituminous concrete .. 27c
Wood .. 41c
Macadam .. 47c
Asphalt is not given in this table, neither are Belgian blocks or vitrified brick, and it not stated whether the wood was treated with a preservative. Byrne places asphalt between wood and bituminous concrete, making it better than wood but inferior to bituminous concrete.

On page 209 is Byrne's table showing the approximate comparative gross cost of various pavements in the United States for a period of 50 years, the pavement at the end of that period to be in as good condition as when first

laid, cost being per square yard.

Classifies "Asphaltic Concrete."

It will be noted that in this table asphaltic concrete is not given. Neither are Belgian blocks. In the opinion of your committee asphaltic concrete should take as good, or better, a classification as does sheet asphalt, and Belgian blocks will take the classification of granite blocks. The table fails to state whether the bricks are vitrified. If they are, they should take a classification more nearly approaching granite blocks. The table fails to state whether the wood has been subjected to a preservative.

Treating Wood Blocks.

We thing that treated wood blocks should take a better classification than that which appears in the table. It will be noted that the items of consequential damages and cost of service are particularly severe on granite blocks and brick and are comparatively light on asphalt and wood. These items are of an intangible nature and any items of expenditure arising under them are more properly chargeable to

3d.	Wood
4th.	Vitrified brick
5th.	Granite blocks
	Hygienic Fitness.
1st.	Asphalt
2d.	Asphaltic concrete
3d.	Brick
4th.	Granite blocks
5th.	Wood
	Service on Grades.
1st.	Granite or Belgian block
2d.	Brick
3d.	Wood
4th.	Asphaltic concrete
5th.	Asphalt
	Gross Annual Cost.
1st.	Asphaltic concrete
2d.	Asphalt
3d.	Brick
4th.	Wood
5th.	Granite or Belgian block

However, as before explained, brick and Belgian block if all intangible elements are eliminated should take a better classification.

Facility for Cleaning.

1st.	Asphalt
2d.	Asphaltic concrete
3d.	Brick
4th.	Granite or Belgian block
5th.	Wood

In the opinion of your committee this is not so important on a country road as on a city street.

Agencies of Destruction.

Under this head, on page 24, Byrne says:

The agencies causing destruction of paving materials may be classified as mechanical, chemical and physical and organic. It is estimated that the mechanical agencies cause 80 per cent of the destruction and the others 20 per cent. The mechanical and physical agencies exert the greatest action on the surface, while the chemical affects both the surface and the sub-stratum.

The mechanical agencies due to traffic are (a) Impact produced by the action of horses feet. (b) The percussive and abrading action of moving wheels. (c) The crushing due to the weight of the load on the wheels.

The mechanical agencies are generally applied in their most destructive forms, namely, in the presence of water, in producing abrasion in the presence of a solvent, in which condition their destroying effect is most energetic.

The chemical agencies are water and the various acids present in the atmosphere, and the humus acids derived from the decomposition of animal and vegetable matter. The action of the chemical is very slow, and their effect may be ignored except in the case of rock already in a state of decomposition or containing readily soluble mineral matter. The rocks that are most susceptible to the solvent action of water impregnated with acids are the limestone, calcareous sandstone and granite containing feldspar. The physical agencies are:

- (a) Air in the form of wind.
- (b) Heat due to changes of atmosphere, and
- (c) Ice.

Air acts mechanically to remove the loose material and transport it in the form of dust. * * * Heat, through changes of atmosphere, causes expansions and contractions which produce a slight movement among the component particles of material, thus breaking their cohesion and leaving them more susceptible to the destroying effect of the other agents. Ice water penetrates into all the materials employed for paving purposes, and at the freezing temperature it acts mechanically to disrupt the material by the pressure exerted while passing from the liquid to the solid state.

Organic agencies. The organic agencies are vegetable or fungus growths that thrive in damp shady places.

Continuing on page 26, he says:

The properties which the material used for paving must possess in order to resist the destroying agencies are physical and chemical. The physical properties comprise resistance to crushing, impact and abrasion. The chemical properties consist in the abili-

the users of a highway than to a county laying a system of permanent roads.

Charge to Users, Not County.

They are elements which your committee thinks in considering the sole question of ultimate cost to the county in laying a pavement, should be eliminated and their elimination would materially alter the classification given to each pavement. The table is of value and interest, however, and all elements entering into the life of the pavement are to be taken into consideration. In conclusion, the rank of pavements as to all of the elements above discussed may be classified as follows:

	Durability.
1st.	Vitrified brick
2d.	Granite
3d.	Asphaltic concrete
4th.	Asphalt and wood
	Serviceability.
1st.	Asphaltic concrete
2d.	Asphalt

ity to resist, for a considerable length of time, the disintegrating action of the several physical, chemical and organic agencies due to weather and present on the surface of the roadway. This quality is generally designated by the term durability.

The ability to resist crushing varies with the character of material and frequently varies to a considerable extent in the same material. In the plastic or viscous materials it depends upon the strength of the cementing medium or adhesive power of the matrix; in stones, brick, etc., it depends upon the cohesion and interlocking of the component particles.

Since the resistance to crushing possessed by all the material commonly regarded as suitable for paving is in excess of that actually required in use, this property is of secondary importance in determining the enduring quality of material, especially when it is to be placed upon a good foundation. With a weak foundation high resistance to crushing and cross breaking is essential.

Resistance to Impact and Abrasion. This property depends upon hardness and toughness of the material. These two properties are closely related, are not always coincident; some materials, although extremely hard are yet so brittle that they crush easily under pressure. Materials possessing extreme hardness polish readily under friction and produce slippery and dangerous road surface.

Hardness is generally defined as that property of a solid which renders it difficult to displace its parts among themselves. When applied to the materials used for paving it signifies the resistance offered by the material to wear by abrasion under the action of wheels.

Toughness, as applied to paving material, may be defined as that property which enables it to resist fracture under the blows produced by traffic.

Durability depends upon the hardness, toughness and chemical stability of the material. Physical defects and abrasion generally cause the destruction of the material long before it is injured by chemical changes.

Deducts Important Conclusions.

From the above the following conclusions may be deducted:

That any pavement that is weak in resisting mechanical and physical destruction is not a desirable pavement.

Any pavement that is durable against destructive agencies which are mechanical and physical but is weak in its resistance to chemical agencies is the most desirable pavement, provided that its chemical resistance exceeds in life the period of time that the best pavement, showing failure from mechanical and physical causes, possesses.

Chemical Action Main Trouble.

As a general rule it may be stated that any pavement which is protected against mechanical destruction must be one which depends for its resistance to mechanical destruction upon chemical affinity employed to resist mechanical destruction generally takes the form of a cement principle and is often in those pavements having a sheet surface.

Advantage of Sheet Surface.

The advantage of the sheet surface, as long as it maintains its chemical vitality, is that traffic in borne upon its surface in the form of compression rather than in the form of tension or shear.

However, sheet pavements must be distinguished in their resistance to tension and shear, with reference to the manner in which the blows and shocks of traffic are received by the sheet pavement.

With reference to this principle, sheet pavements are of two kinds:

(1) Those that resist blows and shocks of traffic under the principle of resiliency, and

(2) Those which receive the same under the principle of rigidity.

In those receiving shocks by resiliency there is very little abrasion, while those which receive them rigidly are subject to abrasions. The principle of resiliency is found in sheet asphalt pavements and in asphaltic concrete. The principle has been likened to successive poundings or blows upon lead; subjected to such force the lead shows but slight abrasion, but it thins out.

This is not the entire principle of the sheet asphalt or the asphaltic concrete pavements, however, inasmuch as after blows lead retains the new position that it assumed under the blows, while sheet asphalt and asphaltic concrete pavements conform to the principle of elasticity, and after cessation of traffic blows, develop the character to return to their former position.

Like Bread Dough.

The kneading of bread dough is a fair illustration of the principle.

But when shear of traffic destruction is considered, all sheet pavements, if they maintain the consistency that they assume at the time of completion, effectively resist the shear force, and it is only when under either physical force or chemical disintegration they lose their sheet-like surface, that they rapidly break down under the destruction of traffic.

Defines Block Pavements.

Pavements that do not possess a sheet surface may be designated as block pavements.

These are found in granite or stone blocks, brick, wood, concrete blocks and asphaltum molded or compressed blocks. The use of block pavements results in either one or two things. There will either be two materials presented to surface wear, or if traffic is borne upon the block surface entirely there must be crevices between the various blocks.

Either one of these surfaces resulting in the employment of auxiliary material is due to the interlocking principle of the block pavement.

Block pavements, being composed of small units, require a grouting principle to maintain their position under traffic conditions. If the grout is brought flush with the surface of the block, two materials come in contact with traffic—the surface of the block and the surface of the grouting material. The result of this is, especially with reference to stone blocks and brick, that both the face of the block and the face of the grouting material is subjected to mechanical and physical destruction.

Ordinarily the block is both hard and tough; that is, it is highly resistant to chemical disintegration, while if the grouting material is of a pitch, tar or bituminous nature, it is apt to be subject to chemical disintegration. If the grouting material is cement it results in the employment of a material that is rigid.

In stone block pavements the blocks are apt to become smooth, which is the result of abrasion, and the grouting material is apt to disintegrate chemically.

The pavement, or any pavement in fact, is no stronger than its weakest part.

If the block surface becomes smooth it becomes an undesirable pavement. If the grouting material disintegrates it becomes displaced and the block has a tendency to shift under traffic conditions. If the cementing principle is not brought flush with top of the surface of the pavement, the corners of the block pavement are exposed to shear and tension. The result is that there is danger of chipping under these forces.

They Live Long.

However, the history of stone block pavements and vitrified brick pavements is that they present a long life of durability. They are admirably suited for grades upon roads. In regard to block pavement the tendency of modern practice seems to be to make the blocks of smaller dimensions than formerly and to grout with tar or asphaltum in preference to concrete or cement. The principal objection to stone block pavements and vitrified brick pavements is their original cost. However, where grade conditions and heavy traffic conditions are of paramount importance their employment is of the highest necessity and the increase in cost justified.

Wood Favored Back East.

In regard to the wood block pavement as laid in Europe and in eastern cities of the United States, it has developed remarkable durability as to wear under heavy traffic conditions. Its principal fault lies in its tendency to swell and rot. Both of these tendencies have been controlled by the use of preservative forced into the wood under pressure principally creosote or carbolineum.

Never Tested Fairly Here.

Wood block pavements, in the opinion of your committee, have never been given a fair test in Portland.

However, there are samples of wood block pavements which have given splendid service in the city of Portland. There is a wood block pavement on Yamhill street which was accepted by the city on the 23rd day of August, 1903, and is still in fair condition. The wood pavement on the south portion of Fourth street was laid in 1903 and taken up, as we recall, in the fall of 1913. It was subject to some swelling, but gave excellent results.

Why Failed in Portland.

In our opinion the wood blocks that have been laid in Portland have failed principally for the following reasons:

1st. They were laid upon a cushion of sand which is not good practice.

2nd. The wood blocks were not properly selected as to the closeness of their grain and defects existing in the material.

3rd. Expansion joints were absolute disregarded.

4th. Sufficient attention was not given to the entire removal of sap.

5th. They were not properly impregnated with the preserving materials.

Wood blocks have given excellent service in Europe. The type of wood principally employed in Europe has been gumwood and Baltic fir, while the principal kind of wood used in the United States has been long leaf yellow pine, tamarack and gumwood. The pavements in the City of Portland have been composed, as we understand it, of Douglas fir.

Fir Compares Favorably.

From the behavior of the Fourth street and Yamhill street pavement we think that Douglas fir compares favorably with any material that has been employed in the wood block pavement. The authorities seem to be NINE JULY 2 HOYT also, pretty well agreed that soft woods are more preferable in the block pavement than are hard woods.

Costs More at First.

It has been found, however, that a good wood block pavement, laid under careful supervision, is a pavement more expensive in first cost than pavements having the sheet-like principle. Our recommendation on wood block pavements is reserved for later discussion in this report.

Concrete Cheapest at First.

We now pass to the construction of the sheet pavements. Of these pavements the cheapest in first cost is the concrete pavement. This pavement is laid in what is known as 1 course or 2 course, and it ranges in price from about \$1.00 per square yard to \$1.37, unless a reinforcing principle is employed, when the cost is so materially increased as to place it in the same category with other sheet pavements, and if the thickness of the material is increased in addition to the reinforcing principle, the cost approaches some of the cheaper grades of other block paving.

Gets Full Force of Shock.

As has been said heretofore in this report, a concrete pavement is a rigid pavement. It therefore, receives the full force of traffic shock. It is particularly susceptible to physical forces. This susceptibility is caused by its tendency to expand and contract, principally to contract. The result is that at an early period of its life it develops cracks. These cracks are not considered by the authorities, as a vital defect in a concrete pavement. It does necessitate, however, an immediate repair of the crack, and if not repaired in a short time, the pavement having departed from its sheet principle and presenting an edge, develops a weak point which at once becomes subjected to the tension and shear of traffic. The result is concrete being weak in its resistance to these forces, the cohesion of the mass is broken down and the pavement begins to ravel.

It is generally conceded that the cracking of a concrete pavement cannot be entirely eliminated. It can, however, be controlled.

It is generally controlled by the introduction of expansion joints. It has been found that if a concrete pavement be constructed without expansion joints and subjected to the cycle of weather conditions, that the cracking manifests itself under a fairly accurate rule of ascertainment.

Use Expansion Joints.

It is found that this pavement will crack transversely at distances varying from 25 to 30 feet. This has resulted in the introduction of expansion joints at from 25 to 30 feet. However, the introduction of an expansion joint must, of necessity, result in the employment of two different materials at the place where the expansion joint is introduced. These two materials are the concrete material forming the surface of the pavement and the material

composing the expansion joint itself.

If the material composing the expansion joint is destroyed either as the result of chemical disintegration or as the result of mechanical or physical destruction, it no longer serves its purpose, and the concrete pavement at that point immediately becomes subjected to the primary destructive forces to which the concrete pavement itself is subject.

These, to repeat, are principally shear and tension.

The authorities seem to differ as to whether these expansion joints should be right angle joints or oblique. The theory of the oblique expansion joint is that the shear and tension is distributed over the joint at a different angle than over the right angle, thus reducing the destructive force.

Ruts and Pit Holes.

The other disintegrating weakness of the concrete pavement is its tendency to abrasion, owing to its being a rigid mass. This tendency manifests itself in ruts and pit holes which ultimately expose the surface to unevenness, breaking down under tension and shear.

The principal remedy for this defect in concrete is to cushion the surface. This is done either by spreading over the surface a preparation of tar, scattering over this stone chips, which is known as the Dolarway process, or by putting over a sheet surface more or less in the nature of an asphalt sheet surface.

Cushion the Surface.

The objection to the Dolarway process is that it seems to lack adhesion; that is, it has a tendency to flake off under traffic. The result is that it must be frequently renewed. This increases the cost of maintenance of the pavement.

Neither is the cost of maintenance limited to the cost of resurfacing. This is so because the flaking of the surface is not uniform; so that, in order to prevent frequent resurfacing by Dolarway, owing to the flaking of old surface which has not developed failure at the time of patching, it is necessary to remove the old Dolarway coating by a solvent, so that the cost of maintenance must include both the old Dolarway removal and the new spreading.

Just Like a Foundation.

If the other surface is employed it can be readily seen that the original concrete pavement in fact becomes a base, and there is a new surface possessing all of the characteristics of the sheet asphalt pavement. In order to prevent the creeping of such a surface it would probably require a bituminous binder to get proper adhesion.

The result would be that the original concrete pavement would be converted into a sheet pavement of asphalt, involving all of the failures and elements of repair and all the defects that an original asphalt pavement would possess, and quite closely approaching in cost the cost of an original asphalt pavement.

These remarks are not to be construed as applying to the patented pavement known as the Hassam pavement, which will receive consideration later in this report.

It might be well at this place to discuss some of the authorities with refer-

ence to concrete pavements. It has been earnestly urged at the hearings before us that a great deal of the failure of concrete pavements has been due to faulty specifications, dirty material, particularly sand and rock, and lax inspection, and this is undoubtedly true.

Causes of Failure.

Your committee, however, is of the opinion that a great deal of the failure, or at least premature failure, is also due to the above causes.

In the book known as "Highway Engineers' Handbook," Messrs. Harger & Bonney being the authors, the book being dated April, 1912, on page 81 is said:

Solid concrete pavements have been tried, the best being the Hassam pavement which is sometimes especially reinforced to prevent cracks resulting from temperature or heaving. It is understood, however, that both transverse and longitudinal cracks have developed in this type of construction. This seems to be an inherent defect in all rigid types of construction for county roads.

Where the traffic comes directly on the concrete surface it often wears unevenly, failing in spots. This defect has led to the application of a thin wearing coat of bituminous material and stone screenings. How successful this will prove is still to be demonstrated.

On page 71 they say:

The selection of the most economical top course that is suitable for a given road is the hardest problem of highway engineering. The relative economy of different constructions is theoretically expressed by the sum of the first coat and the capitalized cost of maintenance and renewal. The first can be readily estimated, but the cost of maintenance and renewal cannot be figured with any degree of accuracy for single special cases, and even on large systems it can only be approximately because of the new factor of motor vehicle traffic. The life of any surfacing is comparatively short, a fact generally overlooked in most of the popular literature on Good Roads.

On any road the amount and class of traffic will fluctuate, and roads that are designed for light traffic will often fail under temporary heavy traffic which, for some reason, is diverted from its normal course. The first improved roads built in any locality will, for a time, carry more than their share of the traffic which is naturally reduced by the subsequent construction of adjacent improvements. It can readily be seen that it is difficult to judge the amount of traffic a road will handle, and that a short time traffic estimate is valueless as a basis for definite conclusion. The design of the top course is usually based upon a comparison of the actions of the different kinds of previously improved roads that serve districts similar to that under consideration.

Cement Experience Too Recent.

In the text book on "Roads and Pavements" by Frederic P. Spalding, professor of Civil Engineering, University of Missouri, and member of American Society of Civil Engineers, fourth edition, dated, June, 1912, it is stated:

The use of Portland cement as material for surface of sheet pavement has been in use in a small way since about 1895. Until 1900, however, these pavements were very few in number, and regarded as rather doubtful experiments. Since 1900 there has been a considerable increase in the use of this material and quite a number of cities have tried it to some extent.

Most of the work that has been done is of too recent date to show final results, or determine the best methods of construction. In several instances the earlier pavements have given good wear under modern traffic, but more experience is necessary to determine the extent to which these materials may meet the requirements of more general

use, and to formulate methods of construction to secure the best results.

The objects in most instances of engineers who have constructed pavements of this kind have been to secure pavements for light traffic at less cost than brick, or other satisfactory pavements, could be constructed. Several methods of construction have been patented and many, if not most, of the concrete pavements now in use have been constructed under some of these patents. These refer both to the composition of cement mortar or concrete employed for surfacing the pavement and to the method of construction.

Three types of construction have been used for pavements of this class—(a) Mortar surfaced pavements, in which a surfacing of mortar is applied to an ordinary concrete foundation before the concrete has set, in order that adhesion may develop between the mortar and concrete in setting.

(b) Monolithic concrete pavements, which consist of a single layer of concrete of the full thickness of the pavement.

(c) Grouted concrete pavements, constructed by first placing the coarse aggregate to the required thickness and then pouring a grout of cement mortar over the surface so as to fill the voids in the aggregate, which is rolled to a firm surface, either before or after the grout is applied.

Concrete pavements seem to give promise of considerable development in the immediate future, and it is probable that their use will rapidly extend.

In the Fourth Report of the Illinois Highway Commission, dated the 1st day of June, 1913, and covering the years 1910, 1911 and 1912, on page 82 it is said:

Concrete pavements present many characteristics totally unlike other forms of pavement in much more general use. A concrete pavement has a rigid monolithic surface and is properly to be classified a sheet pavement. Practically all forms of rigid surface pavements are of the block type, while all other sheet pavements are somewhat resilient. The fact that concrete pavements are composed of large monolithic slabs of rather brittle nature, having a coefficient of expansion due to temperature, differing not greatly from that of steel, makes it necessary to consider certain features of construction not usually important in other forms of pavement.

The fact that a concrete road is rigid results in the surface layer becoming subjected to far greater impact stresses than is received by a pavement of a more resilient type.

The strength of concrete to resist stresses of all character depends upon the strength of the matrix or mortar holding the aggregate together, assuming that we have an aggregate of sound hard particles. The concrete being made of various sized particles held together by the matrix, it becomes necessary that none of these particles is loosened under the action of traffic.

Impossible to Prevent Cracking.

Owing to the constant movement of a concrete pavement due to temperature changes, it is impossible to prevent cracks from forming. On hot days the pavement tends to lengthen and on cold days to shorten. It is evident that the cracks form when the pavement tends to shorten.

If the formation of cracks in a hazardous way is to be prevented, it will be necessary to provide joints close enough together that there will be sufficient strength in the concrete to drag one-half its length between the joints. . . .

The advantage of making the cracks beforehand is that their edges may be properly protected from traffic. It will be realized at the outset that the expansion joints constitute the weak points in the pavement and that there should be as few of them as possible.

Influence of Temperature.

If a concrete pavement is laid without expansion joints, it might pass the first season without any serious consequences from the cracks. If it will be formed by the low temperature might not become sufficiently filled with incompressible material but that they afforded some relief as the

pavement expanded under subsequent temperature rise. But as time goes on the cracks will become more and more filled with grit, become more nearly incompressible, so that in no very long time the cracks will cease to be expansive and afford no opportunity for movement of the pavement, which movement must be taken up by deforming the concrete and the stresses that will be produced by such deformation are beyond what is to be expected a thin slab can withstand without buckling.

On page 87 of the same report it is said:

Like all other forms of road construction, if a concrete road is to give proper service it must have proper maintenance. Just what will be necessary to do to maintain properly a concrete road cannot be entirely foreseen owing to the limited experience of this form of construction.

Cement Requires Maintenance.

Most uneven places in concrete roads are started by the formation of a crack, the edges of which will become broken down under traffic. That a crack of this kind shows the true movement of the concrete, and doubtless the cause resulting in the cracks still exists. If the cracks should become filled with incompressible material either by pouring in a thin grout or gradually filled with dust or grit from the road, there is every likelihood that the crack will expand under subsequent movement of the concrete slab.

It is believed that it is important to leave the concrete surface free to move, as it shows by the appearance of the cracks that it is necessary for it to do so. Therefore, as soon as cracks are formed, and a sharp lookout should be kept for them, they should be cleaned out as thoroughly as possible, and filled immediately with some plastic material, such as asphaltum pitch. This will prevent the water seeping through the cracks and also offer considerable protection to the edges, especially if the crevice is flushed with a slight excess of the pitch.

In the University of Oregon Bulletin of January, 1913, in an article entitled "Concrete Roads vs. Macadam" by Prof. E. H. McAllister, Dean of the School of Engineering of the University of Oregon, on page 5 it says:

Will Be Standard Highway.

Considering its many merits, and the fact that in the long run it is relatively inexpensive, it seems probable that a concrete road, either with or without a bituminous wearing surface, will become the standard highway of the future.

Is Most Promising Material.

On page 13 he says:

The writer favors a concrete base with a thin bituminous wearing surface, as adopted in New York and California.

On page 16 he says:

Standard types of city pavements, such as bitulithic or vitrified brick, are too expensive for the great majority of country roads, and concrete is the most promising material in sight that embodies at once a moderate cost and reasonable maintenance charge.

In the Fifth Biennial Report, covering the period from 1912 to October 1st, 1914, of the State Highway Commission of the State of Washington, on page 128, in discussing the roads in Pierce County, Washington, it is said:

Experience in Pierce County.

This county is the first in the state to undertake a large mileage of concrete pavements. In 1912 the construction of 8 miles of granitoid pavement was completed in the Puyallup Valley. This pavement has given excellent satisfaction, but the cost was excessive.

In 1913 the county commenced the construction of one-course concrete pavements, using a standard mixture. One contract of this kind of pavement was a failure on account of poor aggregate and lax inspection. This section has been used as a base for a standard sheet asphalt finish.

Another contract gave a pavement which has been giving very good satisfaction up to date. Owing to the

difficulty of controlling quality of aggregate the county installed a large gravel and sand pit near Lakeview, and undertook to furnish crushed and washed gravel and clean sand for all its contracts as well as its own work.

The 1914 specifications for one-course pavements changed the proportions of aggregate and cement to 1:2:3½, and undertook a very rigid system of inspection and control of all features of the concrete work. The 1911 work is particularly noticeable for the careful attention given to special details, such as treatment of curves, shoulders, drains, expansion joints, etc.

Long Time to Set.

With reference to concrete pavements, the time of construction becomes an important element, particularly considering the comparatively short season for favorable road construction in Western Oregon. It is pretty generally admitted that in all types of concrete construction, with the exception of the Hassam pavement, that the concrete must be kept carefully dampened for a period of 7 or 8 days, and a period of 30 days should elapse before the pavement has sufficiently set to allow traffic upon it.

This, of course, from the standpoint of interrupted traffic, is a considerable objection.

Data Is Lacking.

As will be noted from the discussion of the authorities, there is very little data on the cost of maintenance of concrete roads. During the hearings of your committee it has been asserted that the cost of maintenance of a concrete road is so slight that it is not to be taken into consideration. Your committee, however, is not convinced of the soundness of this assertion.

Here Is Best Discussion.

The best discussion of concrete country roads that has come to the attention of the committee of that of Mr. Paul E. Green, a member of the American Society of Civil Engineers, in a report he made to the authorities and taxpayers of Highland Park, Illinois. Mr. Green was commissioned by the taxpayers of that village, which is a suburb of the city of Chicago, Illinois, to make an inspection of the concrete road system as it then existed in Wayne County, Michigan. Mr. Green made his inspection in June, 1913.

He was employed for the reason that the authorities of Highland Park were desirous of improving their thoroughfares, and wanted to ascertain the merits and faults of concrete road construction. On the general subject Mr. Green says:

Doubts Utility of Concrete.

The large proportion of failures observed by the writer has caused him to seriously doubt the utility of this product as a wearing surface, in cities especially.

While cracking will not be a serious defect as far as concerns the appearance on country roads, the writer has always believed that in city streets, where the value of abutting property is largely dependent upon the character of the street pavement, and is so recognized by the laws of practically all states, the tendency of concrete to crack and spall is a serious objection to its use.

It has been maintained, however, by the advocates of concrete pavements, that much, if not all this cracking has been caused by improper specifications and that it can be eliminated by careful construction and also by proper reinforcement with steel. It is believed that this assertion is at least partially correct and that while such reinforcement will not eliminate this tendency entirely, it will reduce it largely. The steel reinforcement will, however, if

used in the proper quantities and correctly and carefully placed, add a very appreciable item to the cost of construction.

Another weak point in the lasting qualities of concrete as a wearing surface, is the fact, about which there can be little dispute, that it is deficient in its ability to withstand abrasive action. As long as the surface is smooth and perfect, the destructive effect of traffic is small, but if any break occurs, the ravelling action of iron-shod horses and iron-tired vehicles is very apparent and the action rapidly disintegrates the concrete, the surface soon becoming rutty and full of holes. This result is to be expected from the character of the material, since concrete will withstand a very considerable compression, but a very inconsiderable shear or tension. In reinforced concrete the allowable working stress for tension is rarely over one hundred (100) pounds per square inch; and for shear eighty (80) pounds per square inch, and for reinforced work these figures are reduced. Thus, when a hole is started in a concrete surface, it is exposed at its weakest points.

Mr. Green gives the advantages and disadvantages of concrete pavements as follows:

Advantages.

1. Cheap first cost.
2. Dustless and sanitary.
3. Good appearance if no cracks appear.

Disadvantages.

1. Liability of cracking.
2. Inability to withstand abrasive action.
3. Bad appearance after cracking.
4. If covered with bitumen, high maintenance charges.

He also gives his opinion that the proper location for such a pavement is:

First: Streets of light traffic (less than one hundred vehicles per day.)

O. K. for Light Traffic.

With reference to this he says:

It is quite possible that this figure is too low, but the writer is inclined not to change the figure, it being understood that the one hundred vehicles per day refers to iron-tired, horse-drawn vehicles.

Will Do for Some Roads.

Continuing, he says:

Another proper location for such a road was stated to be country roads where the value of the property will not be affected by cracking, and on which two hundred and fifty vehicles per day would be considered a heavy traffic.

He gives a summary as follows:

Practically all cases of concrete pavements on city streets observed by the writer in the last five years have cracked badly before they are two years old. In most cases they are also badly worn.

The same statement is true of Windsor, Ontario.

Of the Wayne County roads observed, 22 per cent of the individual slabs of the 1909 work, 27 per cent of the 1910 work, 14 per cent of the 1911 work and 21 per cent of the 1912 work is cracking and showing signs of wear.

Are Wearing Badly.

All streets and roads observed which have a considerable commercial traffic, and which are more than one year old, are wearing badly; as, for example, Gratiot, River and Mack roads, in Wayne County, Michigan; Park street, Windsor, Ontario; Ohio street, Chicago; Green Bay road, Highland Park, Illinois, and many others.

To keep concrete roads and streets in good condition there must be constant maintenance the first year, and thereafter the maintenance will increase materially year after year. This maintenance may consist of tarring cracks and holes, or covering the entire surface with tar and sand, or if the latter course is followed, the maintenance expense will amount to about 10c per square yard per year.

Joins Are Weak Points.

To reduce the cracking and spreading to an unobjectionable minimum, it is necessary to reinforce the concrete and

also to increase the number of expansion joints above those now generally used. These joints should be protected. Every joint, no matter what its character, is another point of weakness of the pavement and it is a debatable question whether it will not be well to go to the other extreme and eliminate all transverse expansion joints, use longitudinal expansion joints adjoining the curb only, let the cracks come when they will, and after their appearance—maintain them.

Other Types Are Superior.

It is believed that a first class concrete road cannot be built for less than \$1.60 to \$1.75 per square yard, and at this it will be inferior to the cement grouted brick pavement, or an asphaltic concrete pavement, or bitulithic pavement or a sheet asphalt pavement, any of which can be constructed at this price, or at a slight increase over these figures.

The reason for this is because of its inability to stand abrasion.

Analyses Michigan Figures.

In Mr. Green's report he comments upon the assertion as to the Wayne County roads, dealing with the cost of maintenance, the assertion being that only \$200 was expended in 1911 and \$100 in 1912 on the 65 miles of concrete highway in Wayne County, Michigan, from which, however, must be eliminated the 1912 construction of 40 miles, which was too recent at the time of his investigation to take into consideration the cost of its repair and maintenance.

Mr. Green points out that the report of the Commission credits certain Dolarway treatment of concrete roads to the cost of experimental road work, when, as a matter of fact, it should have been credited to the maintenance account. He also estimates that, if the cracks as discovered by him in the road system were properly repaired that the cost of maintenance of the system would be as follows:

Joins and cracks for 1912.....	\$1,427.30
Joins and cracks for 1913.....	2,375.84
Holes	820.40
Surfacing with Dolarway 1912	
and 1913	3,425.18

Total

And he says that in addition to this it would require not less than \$1,000 to put back road in good condition, making a grand total for maintenance to date of \$9,051.72, or about \$140 per mile, if the entire mileage of 65 miles is considered; or about \$226 per mile if only work constructed previous to 1912 is considered.

And he concludes this discussion in this way:

This figure is the minimum figure possible; relates to the surface of the pavement alone, and takes no account of ditching, draining, sealing, replacing entire slabs, etc. In fact, it is the opinion of the writer, after talking to the foreman making repairs, that the actual maintenance is \$5,000 more than this.

Is Costly to Maintain.

It thus appears that a concrete pavement, as above discussed, is an expensive pavement to maintain, and the opinion of your committee is that a concrete construction should be limited to a base and not used for the surface. It is the understanding of your committee that a concrete pavement can be laid for an average price ranging from \$1.04 to \$1.10.

Cannot Use Existing Foundation.

There is another matter to be taken into consideration, and that is that a considerable portion of the contemplated mileage improvement is now improved with a macadam surface. If

concrete were employed it would be necessary to take up this macadam surface, and if the material could be utilized in concrete construction it would have to be cleaned and broken to proper sizes.

However, this is not as much of an objection if concrete is employed as it would be to other types of pavement which would require the destruction of this macadam base. This is so because of the cheapness of the original construction of concrete. The objection to concrete is the objection to the probable cost of its maintenance, and if the pavement were to fail badly, as it often has done, the necessity of having to put in entirely new slabs, which would require at least thirty days before such repaired sections could be opened to traffic.

Hassam Is an Exception.

The above discussion in no way is to be taken as applying to the patent pavement known as Hassam. This pavement will now be considered. It has been employed considerably in the city of Portland for street paving.

It is composed of broken rock of designated sizes, grouted with cement. The surface is then spread over with a cement mortar, which is broomed in by a rough brush. The prevailing practice of the Hassam Company is not to establish expansion joints but allow cracks to appear where they will.

Some attempt has been made to fill cracks with tar after they appear, but the manager of the company states that this has not been particularly successful, owing to the fact that the cracks are surface cracks not extending in depth into the pavement any great distance, the result being that not much of a key is furnished for the holding of plastic material which is ordinarily employed in filling cracks in concrete pavements.

We are informed that the cost of this pavement will range from \$1.40 to \$1.80 per square yard, depending upon the thickness of the pavement and local conditions.

The oldest Hassam pavement seen in the city of Portland is that on Grand avenue south of East Morrison street. We were informed that this pavement has been down about six years. It shows much better behavior than any other concrete pavement which your committee has seen, and from the investigations of your committee the Hassam pavement is entitled to more consideration than any other concrete pavement that has been called to the attention of your investigators.

Good and Weak Points.

It does crack, however, these cracks are both transverse and longitudinal. It shows evidence in places of both abrasion and pit holes. There is ravelling, principally confined, however, to the end of the day's run. Its behavior with reference to its proximity to street car rails is the best of any pavement we have seen.

Expensive to Repair.

Your committee is unable to form an opinion as to just what the ultimate life of the surface of the Hassam pavement will be. In the opinion of your committee, however, in case of the destruction under traffic of the Hassam pavement, it would be an expensive pavement to repair. The patent rights

of the Hassam Company will be discussed elsewhere in this report.

Results Much More Satisfactory.

It has been stated by the present manager of the Hassam Company that a good deal of the Hassam pavement laid in Portland before 1911 has been unsatisfactory owing to the lack of interest of contractors in the pavement itself; but that since the Hassam Company are laying the pavement much greater care has been taken and the results have been much more satisfactory. In the opinion of your committee Hassam pavements since 1911 have been laid with greater care in Portland than before that time, and the result is noticeable with reference to pavements laid before and after that time—much more favorable to those laid subsequent to 1911.

Two Asphaltic Concrete Types.

The next sheet pavement which we desire to discuss is the asphaltic concrete pavement. There are two general types of this pavement—that laid by the Warren Construction Company or by others under royalty license from them, which is known as the bitulithic or Warrenite. The other is an asphaltic concrete pavement which is laid under what are known as the Topeka specifications.

Warrenite Discussed Here.

Our attention will first be given to the Warren product. It is not necessary, at this time, to discuss the Warren patents as that is reserved for later consideration.

It may be stated that pavements laid under the Warren patent are designated as bitulithic or Warrenite. There seems to be no substantial difference between bitulithic pavement and the Warrenite pavement, although there is considerable difference of opinion as to just what type of pavement is contemplated by each of these two designations.

It has been stated to us that the bitulithic pavement is one in which the ingredients entering the mixing pot are those that are weighted on a multiple beam scale; that the Warrenite pavement is one in which the ingredients are measured instead of being weighed.

It has also been stated that the difference is this: that the bitulithic pavement has a greater thickness than a Warrenite pavement, but the explanation as given by a member of the firm of Warren Bros is that there is no distinction other than this—that the company always lays a bitulithic pavement in cities and a Warrenite pavement outside of cities.

If this distinction be taken as correct, it appears that the only difference is in designation for specific purposes, and that bitulithic and Warrenite are merely trade names.

Bitulithic pavement has been laid upon streets in the city of Portland since 1903, and your committee has found plenty of examples from which to form an estimate of the behavior of this pavement.

Laid Eleven Years

Fifth street, from Jefferson north with the exception of a block between Morrison and Alder was paved with Warren's bitulithic in 1903 or 1904. At the present time the street is in good condition except along the street car

rails. This street has been repaired.

Nature of Repairs.

No flume as to the cost of repairs to this street have been obtainable by your committee. It is claimed by Warren Bros. that the only repairs made to this street have been those caused by the settlement of foundation areas due to excavating in the laying of water pipes and other street furniture, and the subjecting of the surface of the street to a flush coating which forms a thin bituminous cushion surface, the purpose being to seal the surface of the street to keep it waterproof.

Best pavement in City.

Others have claimed, however, that this street, in certain places, has been subjected to a heavy asphalt cushion due to failure developing in the street. However, your committee is of the opinion that Fifth street, considering the traffic upon it, is the best pavement in the city of Portland, and it gives every indication of having a future life of a great many years.

Absence of Cracking.

No cracks have developed in this street that your committee has been able to find, and this absence of cracking seems to be characteristic of Warren's bitulithic pavement, and by virtue of this fact it is to be put in a class by itself when compared with other sheet surfaced streets. The advantage that it possesses in this particular is that it maintains a smooth surface taking compression and that there is no tension or shear upon its surface because it does not crack.

Only Found One Bad Place.

Your committee has only found in its inspection of many bitulithic streets in the city of Portland and its inspection of Warrenite pavement within the vicinity of Portland one spot where cracks have developed in a bitulithic pavement.

Some Failures Noted.

A number of failures of Warren's bitulithic pavement have been called to the attention of your committee. Second street in the city of Portland has undoubtedly given the Warren people a great deal of trouble. The same is true of Grand avenue, north of Morrison street, and your committee has heard of a failure developing in the city of Eugene, Oregon, as well as some of the Warrenite pavement laid on the county roads in King County, Washington.

Opinion on Failures.

But your committee is of the opinion that this percentage of failures is small when compared with the large percentage of successes that this pavement has shown under traffic conditions varying in volume and covering a period of years all the way from 5 to 11 or 12.

In regard to the failures of the Warrenite pavement in King County, Washington, the Warrens maintain, and your committee believes it to be true, that these pavements were laid by contractors, under license royalty, and in several instances the contractors were inexperienced, while in others sufficient supervision and care were not taken either in mixing or in laying.

The failure in Eugene was probably due to a bad foundation problem as it is well known that the street in Eugene which was laid with bitulithic

presented a bad foundation problem owing to the low flat nature of the street.

Committee in Doubt.

Second street in Portland was laid at a time when weather conditions were bad. In regard to the Warren pavement—it has been asserted that Warrens do not always lay a pavement up to their specifications, and that in case of repairs they have used a mixture which did not contain a bitulithic aggregation. In some instances your committee is of the opinion that possibly the first assertion might be true, although your committee is in doubt on this point.

Thin Coat for Repairs.

In regard to the second assertion, the point is undoubtedly correct, and it seems to be admitted by the Warrens that in making repairs they cannot always use their preferred aggregate, owing to the fact that the surface to be repaired is so small in area that they could not employ the aggregate and make a neat repair and, therefore, they use less sized particles in cases of that kind.

How Samples Are Selected.

A sample was shown your committee of a piece of pavement taken from Division street near 30th in the city of Portland, which did not have the appearance of conforming to the bitulithic aggregate. Your committee requested the Warren people to make an investigation of this pavement. They did so, and submitted an analysis and a sample of the pavement which materially differed from the original sample shown to your committee.

Committee Gets Own Sample.

In all probability each side selected a sample most favorable to its position. It became necessary for one member of the committee to obtain an independent sample, which seems to possess the characteristics of standard bitulithic.

It is but fair to the Warren Company to state, however, that this Division street pavement was not laid by the Warren Construction Company. It was laid by a company having license from the Warrens to lay it.

Behavior on Linnton Road.

There has been a great deal of talk concerning the behavior of the Warrenite pavement on the Linnton road, Multnomah County. This pavement was laid about the year 1911 or '12. It has recently been flush coated at the cost of about 2 cents per square yard. At the edges it developed some failure.

It is claimed by the Warren people, however, that the county failed to run a header along the edges of this road, with the result that when the pavement was rolled it feathered out under the compression and it was these thin edges that developed failure.

It was also asserted by the Warrens that the Linnton road has a bad foundation problem, and that they would not desire or care to construct any more Warrenite pavement on the Linnton road, unless the pavement were carried on a concrete base. The Warrens advocate that a flush coating on their bitulithic pavement be applied about once every five years, that this has a tendency to keep the pavement sealed and waterproof.

Effect of Water

At this point it might be well to explain the failure of a street having an asphalt or asphaltic concrete surface as a result of the action of water upon its sheet surface. Water, if it stands any length of time upon a street of this character, has a tendency to disintegrate the asphaltum cement. It has a tendency to cause the pavement to become brittle due to the volatilization of certain chemicals in the asphaltum.

When this occurs the pavement shows a lifeless surface, showing particles of sand over the surface and rapidly disintegrates. From this it can be readily seen that if the asphaltum loses its power to withstand compression and shear, there will be a shoving of sand particles and the crystallized asphalt with the result that holes develop and the pavement rapidly breaks down under tension and shear. Therefore, it is necessary to keep the water out of an asphaltic concrete pavement, and this flush coating process of the Warrens seems to be resorted to for that purpose.

Side by Side.

A good illustration of a street that has been flush coated and one that has not may be seen on Jefferson street between Fifth and Sixth, in Portland; one-half of this street has been flush coated, the other half has not. The difference is quite noticeable.

Small Cost of Maintenance.

There is another point about the Warren pavement which merits attention. Your committee is of the opinion that it can be easily and cheaply repaired, so that with the small maintenance cost the life of the pavement will cover the minimum period of 15 years as before referred to in this report. The ease of repair seems to be principally due to the fact that where the repair must be made by the incorporating of new material, it can be done by building the pavement up without having to go down to any sub-foundation. This is so because there seems to be perfect adhesion between the new repairing material and the old material. This is not true of an asphalt sheet pavement.

Repairs Require Finer Mixture.

It, however, may be said in this connection that where repairs of this character are made that a finer-sized mixture must be used in making the repair than in laying the original pavement. In the opinion of your committee the repairs by the adhesion of new material to old and the filling of holes would not even have to be resorted to if the foundation maintained its integrity, the principal repair being the flush coating of the surface of the road.

Its Source of Strength.

Your committee is of the opinion that inherently the Warren aggregate, by virtue of employing a graded size of stone from 2 inches down to fine powder, presents a pavement which is strong in its power to resist compression, irrespective of the asphalt binder employed in the mixture.

Stone, Not Bitumen, Carries Weight.

In most sheet pavements employing the asphalt principle, the resistance to compression is obtained from the inherent stability of the asphalt or bitumen after it is set, while in the Warren pavement dependence is placed

upon the stone in the aggregate rather than the asphalt.

Binder Is More Elastic.

The result is that either a less amount of asphalt may be used, owing to the arrangement of the stone sizes resulting in the reduction of voids, or a grade of asphalt may be employed which results in a permanent binder which is soft and more oily, thereby resisting in greater degree the volatilization and tendency to become brittle that asphalt develops as a result of its chemical failure.

Won't Displace Even When Warm.

It has been asserted and your committee believes it to be true, that after the mixture in the bitulithic pavement has been spread upon the surface to be paved and rolled, that motor trucks can drive over it without a displacement as a result of the compression of this traffic. This is evidence of the fact that before the asphalt binder has cooled, as it must do before it can set, that the aggregate of stone in the mixture possesses an inherent stability of its own.

Broken Stone and Old Macadam.

We will not dwell further upon these points at this time as they will be more fully discussed under the head of the Warren patents. It may be remarked, however, that this stability presented by the Warren pavement results in the employment of a different type of foundation without violating safe practice, for in this type of pavement we think it has been demonstrated beyond successful dispute—that under ordinary conditions a foundation of broken stone may be used for bitulithic or Warrenite pavement. The result of this would be to greatly reduce the cost of the Warrenite pavement on those portions of the county roads which require new foundations. This is true unless other standard types of pavements can be successfully laid upon a similar foundation.

It would also allow the employing of the present macadam on those roads which are now surfaced with that material, but this is not of so much importance as in all probability a sheet asphalt pavement or a pavement of the Topeka specifications could use the same base.

Here Is Topeka Mix.

We come now to the construction of the Topeka specifications. As will be more fully explained in the discussion of the Warren patents, the Topeka specifications were the result of the analysis of certain asphaltic concrete pavements laid in the city of Pittsburgh, Pa., a number of years ago.

It is not contended by the Warrens that a pavement of the Topeka specifications is an infringement on their patent. These pavements have been laid in the city of Portland, but are of recent date.

Your committee examined a number of them, and is of the opinion that this pavement, as far as they could tell from the pavements they saw, should be placed in the category of sheet asphalt pavements. They have been laid in Portland for about two years.

One pavement was put down in Springfield, Oregon, in the year 1911; and also in 1911 the street known as D street in Salem.

Much In Valley Towns.

A considerable amount of this pavement has been laid in the Willamette Valley towns of Oregon.

The pavements that your committee saw in Portland, down about two years, have developed a tendency to crack, showing both transverse and longitudinal cracks.

Develops Tendency to Cracks.

This cracking is analogous to the behavior of sheet asphalt streets.

Your committee, however, is not able to absolutely classify this pavement.

High Per Cent of Voids.

It does know, however, that the pavement possesses more than 21 per cent of voids and that the aggregate of material in the mixture, aside from the asphalt binder, possesses no inherent stability. Still, reliable evidence as to the good behavior of this pavement under traffic has been brought to the attention of your committee. It where it was first employed, although after a time it appears to have been abandoned in Pittsburgh and was not employed again until used in Topeka, Kansas.

Meets With Much Favor.

It seems to meet with favor upon the part of Mr. Linn White, the engineer of the South Park Board, Chicago, Illinois. Your committee has been unable to obtain data concerning the method employed in its repair or cost of its maintenance as it has been of too recent date to absolutely establish items of cost in this particular.

At Least Is Equal of Asphalt.

It is the opinion of your committee that this pavement, if carefully laid, will be at least the equal of an asphalt street and probably better than an asphalt street, particularly if it could be repaired by the obtaining of adhesion to old and new material. Your committee is of the opinion that this adhesion can be obtained, as it finds that where bitulithic pavements are repaired, due to foundation failures, that, what in effect amounts to the material of Topeka specifications has been employed in the repair and proper adhesion has been obtained.

One or two of the earlier streets of the Topeka specifications laid in Portland employed a flush coat similar to that used on the Warren's bitulithic. The more recent constructions under the Topeka specifications have employed a cement dust surfacing instead of the flush coat. There is no unanimous opinion as to the reason for the departure from the flush coat to the cement dust surfacing. It seems to have been brought about at the instance of the city.

Patent on Flush Coat.

The Warren Bros. claim that they informed the city that the use of this flush coat on a pavement of Topeka specifications violated one of their patent rights, as they claim to have a patent on the flush coat employed. On the other hand, it seems to be maintained by others that the flush coat is composed of hot tar and sand and that the only right that the Warrens have is to the trade name on some of the asphaltic oil entering into the flush coat as an ingredient. The patent right of the Warrens as to this flush coat will be discussed later.

Sheet Asphalt Pavements.

We now arrive at a discussion of sheet asphalt pavements. This discussion can be brief. **Asphalt is not suitable for country road construction as compared with other standard types.**

First, because it is high in price.

Second, because it is slippery.

Third, because its chemical life is comparatively short.

Fourth, because of the difficulty of its repair.

We know of no advocate for a sheet asphalt surface on the contemplated county road improvement. If it were to be used on roads requiring the use of new foundations, it would require either a concrete base or a bituminous base. It is doubtful if the crushed rock base could be used. It could, however, be used on the old macadam base on roads where such a base exists.

Reason for Failures.

But, the principal objection to asphalt is that, more than any other pavement in existence, it must be attuned to traffic conditions; that is to say, where traffic is light the mixture should be different than where traffic is moderate, and should not be used at all where traffic is heavy. The failures of asphalt are due to its disintegrating as above pointed out, and also due to the fact that under light traffic it is apt to crack.

Condition Often Lifeless.

Your committee examined sheet asphalt pavements in Portland upon which there was little or no traffic and where the pavements had been down only two or three years; these pavements presented a lifeless condition and were full of cracks, and will go to pieces in a very short time, irrespective of the volume of traffic upon them. This is due to the fact that asphalt maintains its vital principal longer under the kneading process of moderate traffic, and if it is not given this kneading process it becomes brittle and develops, under expansion and contraction numerous cracks which, of course, are great faults in any pavement, as they are readily torn to pieces by the destruction of traffic.

Discussion of Patents.

So much has been said about the legality of the Warren patents that your committee feels it necessary, at the expense of some length and slight repetition, to discuss this matter. From time to time during its investigation, the assertion has been made to your committee that the Warren patent covering Bitulithic and Warrentite pavements, and the patent covering the Warren flush coat mixture, were invalid and had been held so by the Courts.

It has also been claimed that the Warrens have always sought to avoid litigation on the merits of their patent rights. That in various suits instituted by them to protect their patents, if they saw that the evidence of their opponents was particularly strong, the policy of the Warrens was to make a compromise by agreeing that if their opponents in the litigation would consent to a decree to the effect that the Warren patents were valid and had been infringed, the Warrens would waive all royalty under their patents.

Review of Litigation.

In view of these assertions and claims, your committee deems it necessary to review the litigation as far as it has been able to find the same reported in the printed reports of the various courts.

Moral Right at Stake.

In regard to the general subject of patents your committee is of the opinion that if a patent for a pavement is valid that no sound reason can exist why the inventor or owner of the patent should not be entitled to the fruit of his genius in the form of a royalty.

This right is guaranteed to all inventors under the laws of their country.

A sound public policy justifies patent monopoly.

The protection of a patent furnishes strong incentive for inventive genius.

Public Gets the Benefit.

The general public, in countless instances, has reaped great benefit which otherwise never would have been had not inventive endeavor had for its goal the hope of monetary reward held out by the limited monopoly that the patent laws give. The ultimate public benefit under the patent laws is that the public will, after the limited time has expired protecting a patent, have the use and benefit of the invention or discovery for all time, and that too, without charge or price for the discovery or invention, after the expiration of the patent period.

Depends on Validity.

On the other hand if a patent be in fact invalid, then all reasons for the protection fails and the public is under no legal or moral duty whatsoever to compensate the holder of such illegal patent or process when it becomes necessary or desirable to use the same.

History of Warren Patent.

The Warren patent for a bitulithic or Warrentite pavement was granted to Frederick J. Warren on May 5, 1903, and bears serial number 727,505 and was for a new and useful improvement in street pavements. The patent has been attacked on the principal ground that the Warren method for street pavement was not new, had been used before, and therefore had, under the patent laws, been anticipated. Also, that what is known as double patenting the patent was invalid. These claims are questions of fact, any one of which, if true, would invalidate the patent. They have all been passed on by the courts, as will hereafter be shown.

Nature of Invention.

The pavement that Warren invented has for its component parts broken stone in graded percentages from stone that will pass through a 2-inch ring and be retained by a 1½-inch ring down to impalpable powder mixed with bitumen or coal tar; subjecting the graded stone and bitumen mixed together to heat, the stone and bitumen forming a conglomerate mass which is spread hot over a foundation of either concrete, bituminous base, broken stone or old macadam.

Avoiding Voids the Object.

The mixing of the properly graded stone from 2 inches down, having added to it a certain percentage of impalpable powder fills the spaces between the stone of larger sizes. Thus

it is claimed that the density of the large solid stone will result in a given mass of less percentage of voids than the use of small particles. That this is true appears from the following example:

Here Is a Sample Illustration.

Let a 3-inch cube of stone be placed in a box of close fit; now let the stone be broken into small particles; these particles will more than fill the box; the surplus of particles over the filled box is the result of the voids or interstices between the particles.

Results Obtained.

The reduction of voids in the use of graded stone in mass results in three things:

First, a combination that resists in high degree compression or static force independent of the bituminous or coal tar binder.

Second, less voids to be filled by the binder, resulting in the destructive force of traffic being borne in a greater per cent upon the stone than upon the bitumen.

Third, inasmuch as the bitumen that must carry a high percentage of compression must be of a grade so as to become hard when set, while a grade that is used for a binder remains more plastic after setting, the hard being more susceptible to disintegration under water than the soft, the result of the Warren patent was that less bitumen was used, and the grade less subject to water disintegration, thereby resulting in a pavement more impervious to the elements to which pavements must, of necessity, be subjected.

Product, Not Process.

Warren claimed his invention was a product, not a process; that is, he admitted that before his invention broken stone, bitumen or coal tar and stone powder had been used in combination for paving. He made no claim for a patent based upon the novelty of the process, but he did claim that the process before his patent was confined to layer combination resulting in a pavement having no inherent stability and having more than 21 per cent of voids.

Cases Are Cited.

In cases in which the Warren patent No. 727,505 has been before the courts the courts have upheld the Warren patent with the exception of one in which the Warrens dismissed their suit for infringement after the court had denied them a preliminary injunction.

In this case, after the denial of the preliminary injunction, the suit was still before the court on the merits of the Warren patent, particularly with

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reference to the question of anticipation or prior use.

This was a case in which the Warrens claimed the city of Chicago, through its South Park Board, and a paving contractor, were infringing patent No. 727,505. The opinion of the court was never reported in the law reports. The detail of as much of it as we have been able to obtain will appear elsewhere in this report.

We will now consider the reported cases with reference to Patent No. 727,505 in the order in which they appear in the books:

The first is the case of Warren Bros. Co. vs. City of Owosso, decided on January 13, 1909, and reported in No. 166 Federal Reporter, page 369. This was an opinion by the United States Circuit Court of Appeals for the Sixth Circuit. In a patent case under the act of Congress of March 3, 1891, the judgment or decree of the United States Court of Appeals is final within the territorial limits of its jurisdiction and beyond its territorial limits is followed on points of law by other United States trial and intermediary appellate courts under the rule of comity.

Also by the Act of March 3, 1891, the Supreme Court of the United States may review the final judgment or decree of the United States Circuit Court of Appeals when, as questions of law they are certified to it by the United States Circuit Court of Appeals or by a writ of certiorari or otherwise issued by the Supreme Court itself. The practice of the Supreme Court, however, as we understand it, is not to issue any such writ unless United States Circuit Courts of Appeals in the various circuits hold contradictory opinions on the same points of law. The object of the writ of certiorari being to have the Supreme Court of the United States establish uniformity of law through the United States when two or more Circuit Courts of Appeals of the United States in different circuits have ruled differently on such points of law.

The bearing of the above on the Warren patent is this: that two circuit courts of appeals in different circuits have upheld the Warren patent, and one circuit court up to the present time has held the patent to be invalid.

STATUS IN SUPREME COURT.

The result of this is that in the absence of an adverse ruling the Supreme Court of the United States will not take jurisdiction of the validity of the patent. In fact, it appears that the United States Supreme Court has declined to issue a writ of certiorari with reference to the patent. This is not saying, however, that the refusal to issue the writ was an adjudication on the patent.

We are of the opinion that if any United States Circuit Court of Appeals held the patent invalid that the Supreme Court of the United States will take jurisdiction of the case and decide the same as it sees fit on the merits.

For all present purposes of litigation, however, the Warren patent has reached final adjudication on its merits under the rule of comity, unless it is possible to produce new evidence on the subject of anticipation or prior use.

But to return to the Owosso case.

In this case Judge Lurton upheld the patent, holding that the evidence did not show prior use or anticipation, and, in effect holding that the patent was not invalid on account of double patenting. The leading case on the Warren patent No. 727,505.

This case has been criticised, it being contended that the defense to be alleged infringement was conducted by the Barber Asphalt Co., it being a party defendant with the City of Owosso; and that the Barber Co. intentionally made a weak defense.

It is also asserted that the principal

evidence in the case, with reference to prior use, was an abandoned sidewalk constructed in front of the asphalt company at Long Island City, New York.

It also maintained that the Court made a distinction between anticipation in the use of a sidewalk and a street pavement. We think, however, that the alleged weak defense theory is not borne out, nor is the assertion that the Court passed its ruling entirely on the sidewalk case.

QUOTES COURT DECISION.

In this we do not restrict ourselves to our own opinion in the matter, but cite the language of the United States Circuit Court of Appeals for the Second District, in the case of Warren Bros. vs. the City of New York, 187 Federal Reporter, page 831, in which case on page 835 the Court says:

"It is stated that in the Owosso suit the only defense made to the patent was an assertion of the invalidity of a single instance of prior use in the shape of a sidewalk laid at Long Island City.

Reference to the Owosso record, however, showing numerous prior patents and prior publications introduced and commented upon by expert witnesses, and page after page of discussion of the art generally and of the meaning of the specifications and claims of this and other patents taken out by Warren and others. The most cursory examination shows that 1,800 pages were not wholly devoted to the reasons and character of the sidewalk pavement at Long Island City, and the opinion of the Circuit Court of Appeals shows that prior patents were discussed and analyzed at length.

Nor do your committee find that the Owosso opinion was based solely upon the distinction between a sidewalk and a pavement. On page 313, (166 Federal Reporter) in the Owosso case the Court says:

"Whether a patentable invention would be involved by employment of the same construction for roadway purposes which had been publicly employed for sidewalk purposes is another question, and one which we pre-empt now as not necessarily presented upon the facts of the case."

The Court then goes on to review the evidence of the sidewalk. At page 315 it says:

"The sidewalk construction was made by the closest approximation to the invention of Warren."

The Court then states the sidewalk to be an experiment and at page 317 says:

"The contention that the construction of this sidewalk was not an experiment, because it was laid upon a public highway and subjected to practical public use, does not take it from the category of experiments. It was a product which could only be tested with respect to its durability for pavement purposes by laying it upon a highway. The facts in this respect are similar to those of Elizabeth vs. Paving Co., 97 United States 126, where it was held that Nicholson's pavement had not been in public use, within the meaning of the patent law, because an experimental section had been laid down and used by the public for some six years before he applied for a patent. The use was held, upon the facts of the case, to have been purely an experimental one."

The next case in which this patent was called in question was that of Warren Bros. vs. City of Montgomery, 172 Federal Reporter 414. In this case the Warrens claimed that the specifications for the construction of a pavement on East Jeff Davis avenue in the city of Montgomery, Ala., was an infringement. In defense to this claim it was contended that the Warren patent had been anticipated by certain prior pavements in the City of Washington and by double patenting. The case was decided in favor of the Warren Company. At page 421 the Court says:

"When the defense is anticipation, it must be shown, and, if there is any reasonable doubt on that point it must be resolved against the defendant, on a motion for a preliminary injunction cases cited and in view of these precedents, and after careful consideration of the new evidence regarding the Washington pavement, which was not before the Court in the Owosso litigation, but

was before the Circuit Court of Illinois, this Court holds that the defense of anticipation is not made out.

"The substances of the other defenses, leaving out the question of infringement, were such that the patent does not disclose invention and that there have been double patents. On these points the Court is of the opinion that at this state of the proceeding it should follow the opinion of the United States Bros. vs. Owosso supra. While the decision does not discuss the question of double patenting, it inevitably overrules that defense."

The ruling of the court in this case was that substantial justice would be done if the defendants filed a bond in a given amount in addition to paying all costs and damages as may be awarded against defendants if, upon final hearing, it should be adjudged that the street paving in East Jeff Davis avenue infringed any claim the Warrens might have in the new order letters patent No. 727,505. This order of the Court reserved the right to litigate the merits of the patent on final hearing. The final outcome of this case has not been available as far as your committee can find.

The next case was that of Warren Bros. vs. City of New York, 187 Federal Reporter 831. This was an appeal from the Circuit Court of the United States for the Southern District of New York from an order granting a preliminary injunction to the Warrens and the order of injunction was affirmed by the Circuit Courts' opinion appears in the reported opinion of the United States Circuit Court of Appeals. In this litigation it was contended that the prior use of pavement in Washington, D. C., Chicago and Cincinnati were anticipations of the Warren patent. At page 833 the Circuit Court says:

"I have examined the affidavits and the testimony taken in the case of Washington pavements and am confident that the testimony does not establish anticipation beyond a reasonable doubt."

"That Cincinnati use is even more remote. The pavement there is laid in blocks and is not intended at all for vehicular traffic. The Chicago uses were not the same as those which are better references than those to which our attention has been called."

At page 826 the Court says:

"As to the three new alleged prior uses and the question of infringement we are in entire accord with Judge Cox's reasoning and conclusion."

The next case is that of the City of Grand Rapids vs. Warren Bros., 196 Federal Reporter 892. This was an appeal from an order of the Circuit Court granting Warren Bros. a preliminary injunction restraining defendant Seaman from putting a certain street in Grand Rapids under specification that were an infringement on Warren's patent. The appeal was on a collateral issue. This case came before the District Court of the Eastern Division, S. D. Michigan, on its merits in Warren Bros. vs. Grand Rapids, 216 Federal Reporter page 364. The question was whether certain specifications showing a mineral aggregate of less than 21 per cent of voids was an infringement of the Warren patent. At page 366 the Court says:

"The sole question here to be determined is whether the evidence and the ruling of the Circuit Court of Appeals for this circuit, will the wearing surface of a pavement constructed with the above specifications constitute an infringement of complainant's patent."

At page 367-368 the Court continues: "For, assuming defendant's contention to be correct and viewing the evidence most favorably to defendant, the general aggregate produced by them, and which they claim will be used in the construction of the pavement, fairly falls within the claims of the patent. The test is not whether the aggregate is such a mineral aggregate when thoroughly mixed and properly compacted will have less than 21 per cent of voids, but whether the aggregate of the patented product. While such a mineral aggregate would not contain the inventor's preferred maximum sizes of stone, yet the evidence, which is at least not contradictory, shows that it will contain the preferred proportions and the essential grades of sizes, and that it will have a useful degree of stability. Having the required

elements of density and stability, the product must necessarily possess the "inherent stability" which is the broad and fundamental idea embodied in the invention and embraced in the patent. A decree will be entered enjoining the defendants from carrying out their contract for the construction of the Barclay street pavement."

Celebrated Topeka Controversy.

There now remains the question of consent decrees in which it has been claimed that the Warrens have made agreements in litigation whereby they have waived their royalty in consideration that it be stipulated that decrees be entered upholding their patents. As near as can be ascertained, the grounds for these claims seemed to have originated in the litigation the Warrens had in Topeka, Kansas.

No report of this Topeka case seems to appear in the printed law reports. As we gathered the facts, it seems that in the case of Warren Bros. vs. the City of Topeka, the city had prepared specifications for pavements which the Warrens sought to enjoin for infringement of their patents. On a hearing the City of Topeka defended their right on the ground that the Warren patent had been anticipated by the construction of an asphalt concrete pavement on Lang avenue, also Bellfield avenue and Sherman street in the city of Pittsburgh, Pa., which pavements were constructed prior to 1891 and had been in constant use from date of construction until the present time (August 1909) and were in good condition:

"That said asphaltic concrete pavements were composed of a mixture of crushed stone, sand and bituminous cement so proportioned and mixed as to produce enough bituminous mortar from the finer particles of stone, the sand and bituminous cement to fill the voids or interstices of the stone and produce a solid, homogenous mass, free from voids."

These facts were supported by the affidavits of Joseph W. Watt, superintendent of the City Asphalt Paving Plant, Wm. D. Hamilton, an employee of the Department of Public Works of Pittsburgh, and James Martin, a resident of Sherman street in said city, having lived on that street for a period of about eleven years. The Warrens contended that the Pittsburgh streets were not of a density having less than 21 per cent voids, and the specifications under which Topeka was seeking to lay pavements did have. They said they did not consider the specifications of the Pittsburgh streets as being an infringement of their patents—that if the Topeka people wanted to lay pavements like the Pittsburgh pavements to go ahead and do so.

Topeka Abandoned Attempt.

The outcome of the case seems to have been that the city of Topeka abandoned its attempt to lay pavements under the specifications upon which it was sued and laid pavements after the Pittsburgh specifications which was not contested by the Warrens. This is the original, as we understand, of the now famous Topeka specifications for asphalt concrete.

Alleged Breking of Patent.

The next case is that of Warren Bros. vs. City of Creston, Iowa et al. In this case it has been claimed that the Warren patent was broken, and thus we are unable to concur. The material part of the decree is conclusive on the point: it is as follows:

"Thereupon it was agreed that the following decree might be forthwith entered as hereinafter specified. And, it appearing to the satisfaction of the Court that the specifications for the work as constructed by the defendant City of Creston, Iowa, requires said contractors to use in the construction of the wearing surface of the pavement contracted to be built in said city of Creston, Iowa, no particles of stone that would not pass a screen with openings $\frac{1}{8}$ in diameter, and that less than ten per cent of the stone or coarse sand or gravel retained upon a screen with openings $\frac{1}{4}$ in diameter, and all the remaining mineral matter used should be finer than $\frac{1}{4}$ in diameter.

"And it further appearing that the pavement constructed by the use of

mineral particles as above described would not infringe the claims of complainant's patent in this case, No. 835,421, and it further appearing that the pavement to be constructed in said city of Creston, Iowa, will be constructed in substantial compliance with the following formula, to-wit: Bitumen from 7 to 11% Mineral aggregate pass—ing 200 mesh screen..... from 5 to 11% Mineral aggregate pass—ing 40 mesh screen..... from 18 to 30% Mineral aggregate pass—ing 10 mesh screen..... from 25 to 55% Mineral aggregate pass—ing 2 mesh screen..... from 8 to 22% Mineral aggregate pass—ing 2 mesh screen..... less than 10% same to be used in the order named and that said pavement so constructed will not infringe the claims of said patent.

"It is, therefore, ordered that the matters in controversy between the parties aforesaid be settled in accordance with the above findings, the bill heretofore filed in this case be dismissed without costs as against every party.

Done and so ordered of record this June 16th, 1910.
(Signed) SMITH McPHERSON, Judge."

Case Adjusted Without Trial.

We have now arrived at that point when it is necessary to consider the South Park Board Chicago case. There can be no doubt about it—the Warrens failed to obtain a preliminary injunction for the infringement of their patent. This left the case for trial on its merits. It was never tried. The contractor not being prevented by a preliminary injunction finished his contract. An affidavit by McLeod, General Counsel for Warren Bros. filed in the case of Warren Bros. vs. City of New York above discussed, says of this case:

"The defendant has heretofore filed an affidavit in this case and that as General Counsel for Warren Bros. he was present in the City of Chicago, Illinois, and took part as counsel in the ex parte application for a preliminary injunction against the South Park Commissioners and Metropolitan Construction Company to prevent the construction of a street pavement on Michigan Boulevard in said city of Chicago, which construction, it was claimed, would infringe the patent No. 727,505, owned by Warren Bros. Co., covering a street pavement; that at the hearing of said application and after the argument had progressed for some time the defendants brought before the Court and exhibited a section of the patent, which it was claimed had been taken from one of the streets of the City of Washington, D. C., and which it was claimed had been laid during the year 1872 or 1873; and was offered as evidence of a pavement construction which anticipated the claims of the Warren patent.

"Affiant states that the section of pavement exhibited appeared on its face to anticipate the claims of said patent, and evidently made such an impression upon the mind of the Court that upon presentation of that exhibit the Court felt constrained to refuse the issuance of the preliminary injunction and so stated in making the order in the case.

Validity Acknowledged by Contractor.

"The defendant further states that immediately thereafter further steps were taken to make a thorough examination of the contract and specifications under which said pavement had been laid in the city of Washington; and also to make a careful examination and analysis of the same; and that as soon as said examination had been made, affiant undertook to renew the application for the preliminary injunction before Judge Kohlsaat but was unable to secure a hearing before him, owing to the fact that it was the midsummer and the Judge intended to leave the city on a day of vacation; at Judge Kohlsaat's suggestion, affiant then attempted to have a re-hearing before Judge Sanborn but was unable to secure a day for the same in September during which time the work had been vigorously prosecuted and a large portion of the street torn up and rendered unfit for use. Affiant further states that owing to the fact that this street had been torn up and

tendered impossible for traffic affiant realized that it would be impossible to secure the issuance of a preliminary injunction to prevent the further prosecution of the work at that time, and the application for said injunction was, therefore, never argued; affiant further states that before further legal steps were taken in this case the contractor to whom the contract for the improvement of Michigan Boulevard had been awarded, compromised and settled its differences with complainant and accepted a license acknowledging the validity and agreeing to use the patent of complainant in further construction of street pavements; that, therefore, the complainant dismissed its suit against South Park Commission and Metropolitan Construction Company, the matter having been settled and adjusted."

Another View of Same Case.

With reference to this Chicago case, Linn White, Chief Engineer of the South Park Board of Chicago, Illinois, in an address before the Civil Engineers' Society of St. Paul, on April 7th, 1913, says:

"Some litigation was had in Chicago with the Bituthibic Company, of which the following is a brief statement: In 1909, when the South Park Commissioners let a contract for paving Michigan Park from 12th to Jackson with asphaltic concrete, the Bituthibic Company sought an injunction in the Federal Circuit Court. The injunction was denied by one judge but under some circumstances the case was reopened before another Federal judge in the same circuit. The injunction was again denied, and as this left the case before the Court in such a shape that any further action would have to be a trial on its merits, the complainants dismissed the complaint and no attempt has since been made to renew it. It is reached this partial conclusion in the court's regular opinion, and, of course, before then the contract over which the litigation started was completed and the pavement in use. The South Park Commissioners, however, had proceeded to lay other considerable quantities of similar pavement and if good grounds for an injunction had been shown the result would have been a forced agreement to terms with the Bituthibic Company and account for royalties in both past and future work. Up to date, considerably over a million yards of asphaltic concrete pavement has been laid in Chicago, and the royalties would amount to a considerable sum."

Committee on Law Points.

From the facts as your committee has been able to obtain them, it would seem, with the possible exception of the Chicago case that the patent has been fully sustained in the courts. It is also a noteworthy fact that the alleged Washington anticipation before the Court in the Chicago case has been held by other courts not to be considered anticipations.

Of course, as your committee has heretofore intimated, the question of the Warren patents has not been fully closed and probably never will be, for it is always open to the introduction of evidence of new alleged anticipations that have never been before the courts.

Advises Against Litigation.

However, for this county to litigate with the Warrens the validity of their patent would mean protracted litigation, which would greatly delay highway construction.

Main Point Is Ultimate Cost.

After all, the point is not whether the Warren patent is valid, but whether the Warren pavement, with the royalty to be paid in connection with their original cost plus maintenance, is the cheapest pavement in the long run for the county.

Patent on Flush Cont.

There now remains to be disposed of the question of Warren's patent for their flush coating process.

This patent is No. 69,422, which must be taken with their patents for machine for spreading the flush coat, which are Nos. 791,726 and 691,708. All these patents were sustained by the United States District Court for the Western District of Texas, El Paso Division, by a decree entered in the case of Warren Bros. Co. vs. John E. Bank et al. entered on the 13th day of April, 1915. Whether this suit will be appealed we are unable to state. This seems to be the only case in which the just above named patent rights have been litigated.

Discusses Hassam Patents.

In conclusion on the subject of patents, we desire to discuss the letters patent for the Hassam pavement.

These bear serial Nos. 819,652 and 851,625. These patents were sustained in the District Court of the United States for the District of Oregon by a decree in the case of Hassam Paving Co. et al. vs. Consolidated Contract Co. et al. This decree was filed April 27, 1914. We understand that this suit has been appealed to the United States Circuit Court of Appeals and is now pending there. As far as we have been able to find, the above suit is the only one in which the Hassam pavement has been in litigation.

Wood Block Should Be Tried.

During these hearings your committee took the testimony of several gentlemen interested in wood block pavements. However, we understand that the trustees of the Chamber of Commerce have passed a resolution favoring a trial of wood block pavement. Under these circumstances, your committee feels that the trustees have acted upon the special matter of wood block pavement so that little need be said further than what has been heretofore in this report said concerning the general type and behavior of such pavements.

Your committee is unanimous that experiment be made with wood block; however, we think that the experimental pavement should be confined to units of one mile each and on different roads, and that the experiment be limited to three miles of wood paving. In view of the fact that this pavement in its cost will exceed other standard types, it is thought advisable that the difference in cost be taken care of by those interested in the wood block pavement.

Here Are Main Recommendations.

As a general recommendation, your committee recommends that on grades and sharp curves either brick or Belgian blocks be employed; that if a Belgian block pavement can be laid as cheaply as a vitrified brick pavement on grades and curves, that stone blocks be employed in preference to brick, as it will furnish an avenue for the employment of an Oregon product.

Your committee further recommends that the Warren pavement be employed on the majority of the mileage for the contemplated hard surface improvements of the county.

In arriving at this conclusion your committee hesitated somewhat in this recommendation as against an asphaltic concrete pavement of the Topeka specifications, and its preference for Warrenite over Topeka is due to the fact that it has been unable to ascertain what the cost of maintenance of the Topeka pavement would be, measured by the minimum period of 15 years, which your committee believes should be the basis for determining the maintenance charge.

If, however, a pavement of the Topeka specifications is to be considered,

the question of type of foundation becomes an important one. It would seem to your committee that this pavement, if requiring a new foundation, should have a foundation of either a concrete base or the bituminous base which, of course, would eliminate a crushed rock base.

Your committee is of the opinion, however, that if the Topeka specification pavement were to be used on the roads at the present time improved with macadam that the macadam base would furnish a sufficient foundation for this pavement. To again emphasize the point of your committee, it eliminates asphaltic concrete of the Topeka specifications and gives preference to Warrenite purely upon the ground of lack of information with reference to the probable life and cost of maintenance of the pavement of the Topeka specifications.

During our investigations it was stated to us by a member of the firm of Warren Bros. that it was the policy of their company, when their pavement was used, not to exact royalty for future flush coating or for repairs with the Warren mixture. This, of course, should be reduced to contract form so that there can be no possible misunderstanding upon this point. The opportunity for the county to avail itself of such privileges if it may so desire, without the payment of royalty, of course is of vital importance.

Your committee is unable to recommend the use of sheet asphalt pavement on the county highways owing to the fact that when damp it is extremely slippery; also, your committee is convinced that the cost of repairs for this type of pavement is comparatively high.

Your committee at this time, does not deem it necessary to discuss the question of a separate maintenance contract for the pavements after they are once laid, as it understands that this matter has been satisfactorily disposed of by asking for bids for maintenance under a contract separate from the specifications that call for bids for original construction.

Confidence in John B. Yeon.

In conclusion, your committee takes this opportunity to express its confidence in the honesty and integrity of Mr. John B. Yeon, roadmaster of the county. Mr. Yeon, without compensation, is giving all his time and abilities to this very commendable plan of constructing a permanent highway system. Your committee has found him well grounded and informed on the subject of pavements, and it is the opinion of your committee that the only motive Mr. Yeon has in his views and activities is that of obtaining the very best pavement for the least amount of money. By this we do not mean the cheapest pavement in first cost, but the pavement that will ultimately be the cheapest. Whether Mr. Yeon is mistaken in his conclusions, whether your committee is mistaken in its conclusions, can only be revealed by the future.

But, of this, we are certain—that everybody concerned in this paving problem who is entirely disinterested has been and is now seeking to get the very best available pavement for the county, because it is realized that in so doing the county will be furnish-

ing an object lesson which will be an incentive to depart from the unwise policy of the past, which has resulted in throwing money away for useless macadam roads.

Respectfully submitted,

F. W. MULKEY, Chairman,
RODNEY L. GLISAN,
FRANK MC CRILLIS.

NOTES FROM CHILE.

[Commercial Attache Verne L. Havens, Santiago, April 23.]

Supplies for Government Railways.

The Chilean Government railways have asked for bids on spare parts of cars and locomotives, such as tires, axles, springs, and bolts. The bids close on July 17, 1915, and representatives of several North American manufacturers are on the ground. It is interesting to note that the material "shall be in accordance with the specifications of the Pennsylvania Railroad Co. if it comes from the United States and with the standard British specifications if it comes from England." The National Railways ask for bids to be opened on July 27 at the Alameda Station Material Department, Santiago, for 4,600 car axles and 1,410 locomotive tires; also 6,850 volute car springs and 3,020 spiral car springs, according to Pennsylvania Railway specifications. Local representation is necessary.

The Government Railways will also open bids on July 27, 1915, for 1,000 kilos (2,204.6 pounds) of sheet asbestos one-eighth of 1 inch thick, 146 kilos (322 pounds) one-fourth of 1 inch thick, and 100 kilos (220.46 pounds) three-eighths of 1 inch thick. At the same time bids will be opened for 7,520 quarts of varnish, 7,800 kilos (17,196 pounds) of wire nails, 1,500 meters (4,921 feet) of leather belting, and 250 meters (820 feet) of camel's-hair belting. Many minor articles are also specified. In many cases samples, comparisons with the material in use, and personal knowledge of conditions are necessary before one could bid satisfactorily. The Government Railway will open bids on all electrical fixtures and spare parts for use in 1915 at the office of the material department, Alameda Station, Santiago, on July 30. There are many articles for telegraph and telephone and lighting.

WOOD-BLOCK PAVING IN CANADA.

[Consul Julius D. Dreher, Toronto, June 19.]

The Dominion Department of the Interior has established in connection with the Forestry Branch a forest products laboratory. This institution is constantly at work testing woods for paper making, building, furniture, etc. An investigation of the use of wood for block paving has just been completed and the results issued in a pamphlet entitled "Treated Wood-Block Paving." This gives the latest facts and figures in regard to wood paving in Europe and America and removes many misconceptions. It shows the points to be guarded to secure the best results. All citizens interested in wood-block paving may have a copy of this pamphlet sent free by writing to the Director of Forestry, Ottawa, Canada.

ADVANCE NEWS

Classified according to Location

APARTMENT HOUSES.

SAN FRANCISCO—Apartment house, 4 story and base, frame, \$35,000. Architects, O'Brien Bros., 240 Montgomery St., S. F. Owner's name withheld. The building will be erected at the northwest corner of Pierce and Golden Gate, having a frontage of 137½ feet on Pierce and 35 feet on Golden Gate avenue. Interior has been arranged to contain a total of 24 suites of two rooms and bath. Interior will be finished in hard pine, mahogany and white enamel. Hardwood floors will be used in the principal rooms. There will be steam heat, an automatic elevator and hot water system. All suites will have wall beds. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance lobby. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$15,000. Architect, Carl Geilfuss, 46 Kearny street, S. F. Owner, Mrs. Eichler. The building will be erected on Waller street, 100 feet west of Webster, and has been designed for twelve suites of three and four rooms. Interiors will be finished in pine with some elm panels and hardwood floors. There will be steam heat and a hot water system. All suites will have wall beds and private bath rooms. Tile floors and wainscot will be used in the baths. Marble and tile wainscot will be used in the entrance. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are being prepared.

SAN FRANCISCO—Apartment house, 4 story and base. Class C construction. Cost not stated. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. The building will be erected on the east side of Hyde street north of Sutter, and has been designed to contain nine suites of four rooms and bath. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the living rooms, dining rooms and entrance halls. There will be steam heat, an automatic elevator and hot water system. Bath rooms will have tile floors and wainscot. Marble and tile wainscot will be used in the lobby, together with ornamental plaster. Exterior of the building will be faced with pressed brick and terra cotta. Plans are complete.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$12,000. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owner, George W. Mensor. The building has been designed to contain six suites of four rooms and bath, and will be erected on the south side of Washington street east of Steiner. The building

will have a frontage of 25 feet and a depth of 127½ feet. Interior will be finished in pine, Philippine mahogany and white enamel. Hardwood floors will be used in the principal rooms. There will be steam heat and a hot water system. Exterior will be covered with asbestos stucco on metal lath. Plans are being prepared.

SAN FRANCISCO—Apartment house, 5 story and base. Class C construction. Cost not stated. Architects Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. The building will be erected on the north side of Post street between Taylor and Jones, and has been designed for two stores on the first floor besides a large and attractive entrance, lobby and dansant. Upper four floors will contain 27 apartments of two and three rooms. Each apartment will have a private bath and wall beds. Interior will be finished in southern gum, mahogany and white enamel. Hardwood floors will be used in the living and dining rooms. Bath rooms will be finished in tile. Marble and ornamental plaster will be used in the lobby. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and figures are being taken.

OAKLAND, CAL.—Apartment houses, 2, 2 story and base, frame, \$8,000 each. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Clyde Investment Co. The building will be erected on the east side of 3rd avenue east of 14th. Each building will contain six apartments of three rooms and bath. Interiors will be finished in pine with some elm panels and hardwood floors. Bath rooms will have tile wainscot. There will be automatic water heaters. Exteriors will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

OAKLAND, CAL.—Apartment house, 4 story and base, brick, \$65,000. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner, Edward Sommarstrom. The building will be erected on the east side of Alice north of 14th and has been designed to contain a number of two, three and four room suites. Interior finish will be of pine with some hardwood. Hardwood floors will be used in the living and dining rooms. Plans provide for steam heat, a hot water system and automatic elevator. Bath rooms will be finished in tile. Marble and tile wainscot will be used. All suites will have wall beds. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SEATTLE, WASH.—Apartment house, 3 story and base, brick or reinforced concrete, \$75,000. Architect, J. F. Everett, Boston Bldg., Seattle. Owner, West Wheeler, Colman Bldg., Se-

attle. The building will be erected at the southwest corner of 4th avenue and Marion street, covering an area of 60 by 120 feet. Apartments will be arranged in suites of two, three and four rooms. Interior will be finished in pine and hardwood veneer with some hardwood floors. Plans provide for steam heat, automatic elevator, vacuum cleaning and a hot water system. Bath rooms will be finished in tile. Marble wainscot will be used in the entrance. Exterior of the building will be faced with pressed brick or cement plaster. Plans are complete and figures will be called for at once.

Contracts Awarded

SEATTLE, WASH.—Apartment house, 3 story and base, brick veneer, \$65,000. Architect, J. A. Creutzler, New York Block, Seattle. Owner, F. F. Adams. Contractors, Johnson & Odin, Mutual Life Bldg., Seattle. Contract price, \$65,000.

BANKS

Contracts Awarded

VANCOUVER, B. C.—Bank and offices, 3 story and base, reinforced concrete, \$150,000. Architects, Somervell & Putman, White Bldg., Seattle, Wash. Owners, Merchants' Bank of Canada. Contractors, Prudy & Henderson, Henry Bldg., Seattle. Contract price, \$150,000.

BRIDGES AND DAMS

BERKELEY, ALAMEDA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. A resolution of intention providing for the construction of a reinforced concrete bridge 40 feet 4 inches wide and 106 feet 6 inches long, with retaining end and wing walls, two 12-inch by 18-inch inlets and 8-inch pipe connections, four metal one-light electroliers, fitted with 6-inch by 14-inch globes, together with electric conduit, outlet boxes and necessary wiring, all to be constructed in Walnut street from a point 80 feet north of Berryman street over Codornices Creek in the City of Berkeley, has been passed to print by the City Council. Bids will be called for shortly.

PIT RIVER, SHASTA CO., CAL.—Bridges, 5, reinforced concrete. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Plans have been completed and figures are now being taken for the construction of the Pit River bridge, a 395-foot structure, and four other small bridges to be erected along the right-of-way of the state highway in Shasta County. Bids for the work will be opened on July 19th. Plans and specifications can be secured from the office of the State Highway Commission.

RED BLUFF, TEHAMA CO., CAL.—Bridge, reinforced concrete and steel.

Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. When the Board of Supervisors met to open bids for the construction of three bridges across sand sloughs in Tehama County, District Attorney Gernon advised them they could not legally enter into contracts during this fiscal year for the work to be paid out of funds from taxes during the fiscal year 1915-16. The seven bids received were returned and new figures will be called for during July. The total cost of the three bridge will be about \$250,000. The contractors submitting bids on the work stated that the steel bridge with an 8-foot span will cost, complete, about \$200,000. A concrete girder type in the neighborhood of \$150,000, while a combination arch and girder will cost about \$170,000.

MARYSVILLE, YUBA CO., CAL.—Highway bridges, 3 reinforced concrete and steel. Cost not stated. Engineer, County Surveyor, Marysville. Owners, Yuba County. Plans have been completed and figures are now being called for the construction of three highway bridges in Yuba County. The Best Slough bridge will be 120 feet long, the Dry Creek bridge 200 feet, and the Grasshopper bridge 80 feet. Bids will be opened on July 14th. Plans and specifications can be secured from the County Clerk.

DUNSMUIR, SISKIYOU CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be opened on July 19th by the State Highway Commission for the construction of a large reinforced concrete bridge over the Sacramento River at Dunsmuir. The structure will be 532 feet long with a clear span of 180 feet. Plans and specifications can be secured from the State Highway Commission.

HEALDSBURG, SONOMA CO., CAL.—Dam, reinforced concrete. Cost not stated. Engineer, none. Owners, Sonoma County. A subscription list for funds with which to build a dam in the Russian River this summer is being circulated in Healdsburg and vicinity. The Northwestern Pacific Railroad Company has contributed together with many other concerns in favor of the proposition.

PETALUMA, SONOMA CO., CAL.—Wharf, timber construction. Cost not stated. Engineer, none. Owner, Dr. Macleay. Petaluma. Work has been started by William Call on the construction of a wharf for Dr. Macleay. The structure will 1,200 feet long, commencing at the Vosen warehouse and extending to the Steamer Gold landing. The piles for the work are now on the ground and the work will be rushed to completion.

NAPA, NAPA CO., CAL.—Bridge repairs, \$2,000. Engineer, City Engineer, Napa. Owners, City of Napa. At the last meeting of the Council the City Engineer was instructed to prepare plans and specifications for repairing the Third street bridge, which will cost in the neighborhood of \$1,000 and the electric road \$950. The plans will be presented at the next meeting of the Council, when a call for bids will be probably issued.

SEATTLE, WASH.—Dock addition, frame and concrete, \$50,000. Engineer,

Chief Engineer J. R. West, Seattle. Owners, City of Seattle. Plans are now being prepared for the construction of two additions of four stories each to the present dock building. Plans will be complete in about 30 days and figures will be called. Further mention will be made of the work.

PORTLAND, ORE.—Viaduct, reinforced concrete and steel. Cost not stated. Engineer, Commissioner of Public Docks, Worcester Bldg., Portland. Owners, City of Portland. Plans are being prepared for a viaduct 20 feet wide and 180 feet long to be erected over 17th street. Plans will be completed shortly when further mention will be made of the work.

FRESNO, FRESNO CO., CAL.—Bridge, reinforced concrete and steel. Cost not stated. Engineer, County Surveyor, Fresno. Owners, Fresno County. The Fresno County Supervisors have decided after long arguments by representatives of the Stinson-Burrell Reclamation District, to build a 110-foot concrete bridge over Fish Slough on the Elkhorn grade, instead of a 200-foot bridge as asked by the Reclamation District. Bids on this work will soon be called for.

VISALIA, TULARE CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Visalia. Owners, Tulare County. Plans are complete and bids are now being taken for the construction of a reinforced concrete bridge over Cameron Creek in the Second Road District. Bids will be opened on July 16th. Plans and specifications can be secured from the County Clerk at Visalia.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridge, steel and reinforced concrete. Cost not stated. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Bids opened by the City Council for the construction of the Carrillo bridge which will span the Mission Creek, are as follows: A and B denotes where wood and concrete piles are bid respectively. Munoz & Munoz, L. A. Mayberry & Parker plans, (b) \$17,771; city plans (b) \$18,973. Mann & Knox, M. & B. plans, (b) \$15,945; city (b) \$19,750. Flaherty, \$19,682; Leonard & Day, \$19,242. Boardman Construction Co., L. A., M. & P., (a) \$19,158; (b) \$18,958; city (a) \$21,276; (b) \$21,076; Flaherty \$19,658; L. & D., \$21,265. Mesmer & Rice, L. A. M. & P. plans (a) \$20,661; (b) \$21,273; city (a) \$25,079; (b) \$25,558. F. O. Engstrom Co., L. A., M. & P. plans (a) \$16,543; (b) \$16,652; city (a) \$19,043; (b) \$19,532. E. A. Carland, M. & P. plans (a) \$20,435; (b) \$20,625; city (a) \$21,700; (b) \$21,800. Mercereau Bridge and Construction Co., L. A., M. & P. plans (a) \$18,394; (b) \$18,967; city (a) \$22,421; (b) \$22,878; L. & D. plans, \$26,450. Putnam & Stone, Pasadena, M. & P. plans (a) \$22,400; (b) \$22,000; city (a) \$28,000; (b) \$27,100; Flaherty \$24,200. The bids have been referred to the City Engineer for report.

Contracts Awarded

RED BLUFF, TEHAMA CO., CAL.—Bridge, timber and concrete, \$1,226. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors, C. E. McCarthy and F. W. Haskell, Red Bluff. Contract price, \$1,226.

COLUSA, COLUSA CO., CAL.—Bridge repairs, steel and concrete, \$50,000. En-

gineer, County Surveyor, Colusa. Owners, Colusa County. Contractors, Missouri Valley Bridge and Iron Works, Leavenworth, Kans. Contract price, \$50,000. This contract is subject to the approval of the receivership of the Northern Electric Co.

MAYFIELD, WASH.—Bridge, steel and concrete, \$28,888. Engineer, City Engineer, Mayfield. Owners, City of Mayfield. Contractors, Beers Building Co., Portland. Contract price, \$28,888.

PORTLAND, ORE.—Dock construction, timber and concrete. Cost not stated. Engineer, Engineering Dept., Shell Oil Co., 343 Sansome street, S. F. Owners, Shell Oil Co. Contractors, J. A. McEachern Co., Coman Bldg., Portland. Contract price not stated.

LINN, LINN CO., ORE.—Bridge, steel, \$13,383. Engineer, County Surveyor, Linn. Owners, Linn County, Oregon. Contractors, Pacific Iron Works, Portland. Contract price, \$13,383.

SALINAS, MONTEREY CO., CAL.—Bridge, Steel and concrete, \$29,030. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, W. L. Gillham & Son, 112 West Santa Clara street, San Jose. Contract price, \$29,030.

BURLINGAME, SAN MATEO CO., CAL.—Bridges, 10, concrete, \$20,125.93. Engineer, City Engineer, Burlingame. Owners, City of Burlingame. Contractors, Eaton & Smith, S. F. Contract price, \$20,125.93.

BONDS

PETALUMA, SONOMA CO., CAL.—The N. W. Halsey Company has purchased the \$70,000 State Highway bonds of Sonoma County. The company bid \$67,212.50.

SAN JACINTO SCHOOL DISTRICT, RIVERSIDE CO., CAL.—An election will be held on July 10th to vote bonds of \$25,000 for school betterments.

VISALIA, TULARE CO., CAL.—Both Bond propositions carried at a special election called here. The proposition for bonds of \$65,000 for extending the sewer system carried by a large majority as did the bonds for the municipal auditorium, which is estimated to cost \$50,000.

ARBUCKLE, COLUSA CO., CAL.—Bonds of \$1,000 have been voted for school betterments.

DUNSMUIR, SISKIYOU CO., CAL.—Bonds of \$25,000 have been sold to a San Francisco firm, and the work of paving the streets that will form a link in the State Highway will soon be underway.

CUTLER SCHOOL DISTRICT, TULARE CO., CAL.—Bonds of \$8,500 have been sold by the Supervisors and a new school building will be erected for the Cutler School District.

BAKERSFIELD, KERN CO., CAL.—The Bakersfield Water Company has been authorized to issue \$25,000 second mortgage bonds, proceeds to be used in improving the system.

LOS ANGELES, CAL.—The Los Angeles City Council has purchased \$392,047.50 worth of power bonds from interest and sinking funds. The bonds were of the \$6,500,000 issue of May 8, 1913, which provide for the construction of power plants in San Francisco canyon, and the construction of

a high voltage power line from there to the city.

CALEXICO, IMPERIAL CO., CAL.—An election to vote bonds of \$74,000 to provide for the erection of new school buildings, repairing and the purchase of equipment, will be voted on July 21st by the voters of the Calexico School District.

SACRAMENTO, CAL.—George B. McDougall, State Architect, has submitted a report to Edward Hyatt, State Superintendent of Instruction, condemning the San Jacinto grammar school in Riverside County. The county authorities will take up the matter of building a new school at once, according to Hyatt.

SAN RAFAEL, MARIN CO., CAL.—A campaign has launched by the Central Marin Chamber of Commerce and the local City Council for the purpose of calling a \$25,000 bond election. If carried the amount will be added to the State appropriation of \$12,500 for the dredging and straightening of San Rafael canal. The expenditure has been recommended by the Congress Rivers and Harbors Committee.

NAPA, NAPA CO., CAL.—The Moose Lodge has appointed a committee, which has viewed sites in Vallejo and Napa with the intention of locating a home. The committee, composed of San Francisco members of the order, will submit a report to the Grand Lodge, who will render a decision as to the establishment of the proposed home.

RED BLUFF, TEHAMA CO., CAL.—The committee appointed to consult with the High School Trustees regarding additional accommodations for the local school met and adopted a resolution recommending that the Trustees call a special election to vote upon the proposition of bonding the Union High School District for the sum of \$90,000.

This recommendation was the substance of a report made by a subcommittee appointed to look into the details of the requirements for a new building.

Plans have already been submitted for an addition to the present building, that will cost, including furniture and gymnasium equipment, about \$86,000.

LIVE OAK, SUTTER CO., CAL.—Bonds of \$5,000 to provide for an addition to the present school building have been voted.

HARRY SCHOOL DISTRICT, SUTTER CO., CAL.—Bonds of \$5,000 have been voted for making additions to the present grammar school.

FORTUNA, HUMBOLDT CO., CAL.—The Board of School Trustees are advertising for bids for a site of not less than ten acres on which they will erect a new high school building. A bond issue will be called in the near future.

PINAL COUNTY, ARIZ.—By a vote of more than five to one the proposed \$150,000 bond issue to provide funds for the construction of a bridge across the Gila River at Kelvin and Winkelman has been approved by the taxpayers of the county.

DUNBAR, TULARE CO., CAL.—An effort is being made by residents in Dunbar to urge the school trustees in building a new high school. It is thought that bonds of \$10,000 or \$15,

000 will be voted to cover the cost of construction of the proposed building.

CALEXICO, IMPERIAL CO., CAL.—The voters of Calexico will be asked to vote on a bond issue to the amount of \$75,000 for two new grammar school buildings. One of the new buildings will replace the present grade school which was totally destroyed by earthquake; the other building contemplated is needed to care for the increasing population in the district. Architects Allison & Allison, Hibernian Bldg., Los Angeles, have been commissioned to prepare plans for the new buildings.

HUNTINGTON BEACH, ORANGE CO., CAL.—An election will be called soon at Huntington Beach to vote bonds of between \$75,000 and \$100,000 for a new high school building. Architect John C. Smith, 325 H. W. Hellman Bldg., Los Angeles is preparing sketches for the proposed structure.

BEAUMONT, RIVERSIDE CO., CAL.—The Beaumont School District has voted bonds in the sum of \$20,000 for the erection of a new school building at Beaumont.

EL CENTRO, IMPERIAL CO., CAL.—Arthur Shepard, chairman of the Board of Supervisors, is advocating the calling of a special election to vote bonds in the sum of \$250,000 for county improvements. It is desired to raise \$150,000 for the erection of a new county court house, \$35,000 for a new jail, and the remainder of the funds to be used in the construction of the bridges required on the State Highway.

MOORPARK, CAL.—The Moorpark Mutual Water Company will issue bonds of \$25,000 to provide funds for the extension of their water system.

LUNA COUNTY, N. MEX.—Petitions are being circulated in Luna County, N. Mex., praying the Board of County Commissioners to call an election for the purpose of voting a bond issue of \$100,000 for improvement of highways.

REDWOOD CITY, SAN MATEO CO., CAL.—The election held to vote bonds of \$7,500 to provide for an auto chemical engine and other apparatus carried by a vote of four to one.

COURT HOUSES.

CRESCENT CITY, DEL NORTE CO., CAL.—Court house addition, 2 story, frame and plaster, \$25,000. Architects, Ackerman & Reese, Eureka. Owners, Del Norte County. Plans have been approved for a two-story addition to the present county court house. The new portion of the building will contain a court room, judge's chambers, jury room, lavatory rooms and store room. Interior will be finished in pine. There will be a central heating system. Exterior of the building will be covered with cement plaster on metal lath. Plans are being prepared.

FIRE HOUSES AND JAILS.

CRESCENT CITY, DEL NORTE CO., CAL.—Jail, 1 story and base, reinforced concrete. Cost not stated. Architects, Ackerman & Reese, Eureka. Owners, Del Norte County. Preliminary plans are being prepared for a one-story jail building. Interior will be finished in pine. There will be special cell work, a steam heating system and hot water system. Exterior of the

building will be faced with cement plaster. Further mention will be made of the work when bids are called.

FACTORIES AND WAREHOUSES.

SAN FRANCISCO—Laundry, 1 story, frame, \$3,000. Architect, J. T. Quinn, 337 Noe street, S. F. Owner, E. B. Carr, 331 Noe street, S. F. The building will have a cement floor. Interior will be finished in pine. Considerable special machinery will be installed. The contract will also include alterations to a frame building in the rear of the property. Exterior will be covered with rustic and shiplap. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Bakery, 2 story and base, frame, \$15,000. Architects, Hutchinson & McLean, 470 13th street, Oakland. Owners, Robertson & Losh. The building will be erected at the corner of 25th and Broadway, and will cover a considerable ground area. Interior will be finished in pine. There will be special machinery and patent store fronts. Exterior of the building will be faced with pressed brick. Plans are complete and figures are now being taken.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Factory, 1 story, frame and corrugated iron. Cost not stated. Architect, none. Owners, Whl's Manufacturing Co., 565 Gough street, S. F. The building will cover a considerable ground area. No interior finish is specified. There will be a cement floor. Special machinery will be installed. Exterior of the building will be covered with corrugated iron. Plans are complete and in the hands of the owners who will do the work by Day Labor.

SANTA CLARA, SANTA CLARA CO., CAL.—Municipal gas works' storage tanks, etc. Cost not stated. Engineer, City Engineer, Santa Clara. Owners, City of Santa Clara. Thirteen bids were received by the City Trustees for six high pressure storage tanks, one single stage gas compressor and two high pressure gas radiators and strainers for the municipal gas works. All bids were taken under advisement until the next meeting.

STOCKTON, SAN JOAQUIN CO., CAL.—Warehouse, 1 story frame, \$2,000. Architect, Joseph Losekann, San Joaquin Bldg., Stockton. Owners, Pacific Tannery Co. The building will cover an area of 70 by 100 feet and will be erected on Fremont street between El Dorado and Hunter. No interior finish will be used. Exterior of the building will be covered with corrugated iron. Plans are complete and figures are being taken.

COLUSA, COLUSA CO., CAL.—Rice mill, 2 and 1 story, mill constructed, \$10,000. Architect's name not given. Owner, W. H. Packard, Colusa. It has been definitely decided to accept W. H. Packard's suggestion for the erection of a large rice mill in Colusa. It will take \$10,000 to build the proposed building and install the machinery. The money will be raised at once so as to have work on the structure start in the near future. According to information received the main building will be four stories high, while the freight

department and offices will be two stories of brick and mill construction.

PORTLAND, ORE.—Dock building, 1 story, reinforced concrete. Cost not stated. Engineer, Commissioner of Public Docks, Worcester Bldg., Portland. Owners, City of Portland. The building will be erected on property adjoining Municipal Dock No. 1. The dock building will be 320 feet long and 176 feet wide. Plans provide for a 4-ply asbestos roof and sprinkling system. The floors will be of concrete, as well as the piling and fire walls. Plans are being prepared.

Contracts Awarded

MARTINEZ, CONTRA COSTA CO., CAL.—Dephlegmator building, 3 story, steel frame. Cost not stated. Engineer, Engineering Dept. Shell Oil Co., 313 Sansome street, S. F. Owners, Shell Oil Co. Contractors, Guttleben Bros. New Call Bldg., S. F. Contract price not stated.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$8,500. Architect, E. E. Young, 251 Kearny street, S. F. Owner, Thomas Scoble, 363 14th avenue, S. F. The building will be erected at the southwest corner of Palm avenue and Euclid street, and has been designed to contain four modern flats of five rooms and bath. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the living and dining rooms and reception halls. There will be a central heating system and open fire places. Mantels will be of tile and brick. Bath rooms will have tile wainscot. Exterior of the building will be covered with shiplap and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

GARAGES

SAN FRANCISCO—Garage, 1 story, steel and concrete, \$2,500. Engineer, Engineering Dept. Shell Oil Co., 343 Sansome street, S. F. Owners, Shell Oil Co. The building will be erected on the company's property on Kentucky street between Army and Marin. There will be a cement floor. Exterior will be covered with corrugated iron. Plans are complete and figures are being taken.

GOVERNMENT WORK & SUPPLIES

Topock, Ariz., Steel Bridge.

The following bids were received by the Commissioner of Indian Affairs, Washington, D. C., for constructing a steel bridge over the Colorado River near Topock, Ariz.:

The Kansas City Structural Steel Co., Kansas City, Mo., \$61,950; time, 150 days.

The Ross Construction Co., Sacramento Cal., \$94,872; time, 150 days.

Security Construction Co., Los Angeles Cal., \$71,859; time 180 days.

The Graff Construction Co., Seattle, Wash., \$83,150; time 180 days.

S. B. Harding, Webster Building, Chicago, Ill., \$78,900; informal.

The Virginia Iron Co., Roanoke, Va., \$70,100; time, 200 days.

Missouri Valley Bridge and Iron Co.,

Leavenworth, Kans., \$71,000; time, 180 days.

Omaha Structural Steel Works, Omaha, Neb., \$85,334; time, 250 days.

California Construction Co., San Francisco, Cal., \$72,500; 200 days.

The Midland Bridge Co., Kansas City, Mo., \$73,900; 300 days.

Lighthouse Service, Cement.

The following bids were received by the lighthouse inspector, 16th district, Ketchikan, Alaska for 200 bbls cement for Cape St. Elias:

W. F. Jahn & Co., Seattle, Wash., \$300.

Gabraith, Bacon & Co., Seattle, Wash., \$768; accepted.

Fort Worden, Concrete Wharf.

The bid of John J. Stockland, \$795 in amount, has been accepted for the construction of a concrete wharf at Fort Worden, Wash.

San Francisco, Cal., Mint, Wiring System.

The contract for installing a conduit and wiring system in the U. S. mint, San Francisco, Cal., has been awarded to Possett & Wilhelm, Denver, Colo., at \$6,200; time, Sept. 13.

Fort Worden, Wash., Building.

The contract for the construction of a concrete militia storehouse at Fort Worden, Wash., has been awarded to H. A. Cotton at \$1,300.

HOSPITALS

CRESCENT CITY, DEL NORTE CO., CAL.—Hospital, 1½ story and base, frame. Cost not stated. Architects, Ackerman & Reese, Eureka. Owners, Del Norte County. The building has been designed to contain two wards and several private rooms. Interior will be finished in pine and redwood. Modern hospital plumbing and a central heating system will be installed. Exterior will be covered with shingles. Plans are being prepared and further mention will be made of the work.

Contracts Awarded

PORTLAND, ORE.—Hospital, 2 story and base, hollow tile, \$14,000. Architects, Tourtellotte & Hummell, Rothchild Bldg., Portland. Owners, Emanuel Hospital Association. Contractor, J. A. Blackstrand, Chamber of Commerce Bldg., Portland. Contract price, \$14,000.

HOTELS.

SEATTLE, WASH.—Hotel, 4 story and base, brick and steel. Cost not stated. Architect, J. P. Everett, Walker Bldg., Seattle. Owners, West & Wheeler. The building will be erected at the southwest corner of Marion and 4th avenue, covering an area of 55 by 120 feet. Foundations and walls have been designed for additional stories. The building will be arranged for a large number of single rooms and baths. Interior will be finished in pine with some hardwood veneer. There will be steam heat, an automatic elevator and hot water system. Bath rooms will have tile floors and wainscot. Exterior of the building will be faced with pressed brick. Plans are now being prepared.

MCCLOUD, SISKIYOU CO., CAL.—Hotel, 2 story and base, frame, \$25,000. Architects, Dooliver & Swain, Royal Insurance Bldg., S. F. Owners, McCloud River Lumber Co. The building has been designed to contain a total of 70 rooms, several baths, dining room and office. Interior will be finished in pine. There will be steam heat and a hot water system. Exterior of the building will be covered with rustic. Plans are complete and the work is being done by Day Labor.

LIBRARIES.

GRIDLEY, BUTTE CO., CAL.—Library, 1 story and base, brick and steel. Cost not stated. Architect, Chester Cole, Chico. Owners, Town of Gridley. The building will cover an area of 40 by 44 feet, and has been designed in the classic style. Interior will be finished in pine with maple floors. Some metal stacks will be installed. There will be a central heating system, probably warm air. Exterior will be faced with pressed brick. Plans are complete and figures are being taken.

SACRAMENTO, CAL.—Library, 2 story and base. Class A construction, \$100,000. Architect, Chief Building Inspector W. B. Rohl, Sacramento. Owners, City of Sacramento. Preliminary plans have been presented for approval for this building, which will be erected at the corner of 9th and I streets. Besides the usual rooms, the designer has provided for two large open air reading rooms. Details of construction cannot be given until the Library Trustees act on the plans. Further mention will be made of the work.

RAILROAD CONSTRUCTION AND EQUIPMENT.

SILVERTON, ORE.—Logging road, \$400,000. Engineer's name not given. Owners, Silver Falls Timber Co., Northwestern Bank Bldg., Portland. The Silver Falls Timber Co. has increased their capital stock \$40,000, which stock issue will be used in the construction of a logging railroad. The company has 30,000 acres of timber land near Silverton and has a 20 mile logging road in operation and the extension will be about 7 miles in a hilly country. Work on the road has been started.

Contracts Awarded

RICHMOND, CONTRA COSTA CO., CAL.—Spur track construction. Cost not stated. Engineer's name not given. Owners, Los Angeles Pressed Brick Co., J. H. Nicholl and John G. Gerlach. Contractors, Chadwick & Sykes, Crocker Bldg., S. F. Contract price not stated.

RESIDENCES.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architects, Foulkes & Hildebrand, Crocker Bldg., S. F. Owner, John H. Schroder. The dwelling will be erected at the northwest corner of Washington and Webster streets, and has been designed to contain six rooms and bath. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or

brick mantels. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residence, 1 story and base, frame, \$2,500. Architect, none. Owners, George F. and Lucy S. Cleese, 524 27th avenue, S. E. The dwelling will be erected on the east side of 36th avenue south of Anza, and has been designed for a five-room house with bath. Interior will be finished in pine and redwood. Some hardwood floors will be used. There will be a large open fire place in the living room. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are complete and in the hands of the owners who will do the work by Day Labor.

OAKLAND, CAL.—Residences, 2, 2 story and base, frame, \$4,000 each. Architect, none. Owner, C. M. MacGregor, 470 13th street, Oakland. These two houses will be erected on the north side of Mandana Boulevard west of Carlston, and each has been designed for a seven-room house with bath and sleeping porch. Interiors will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exterior will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$1,000. Architect, none. Owner, E. A. Hersam, 2368 Le Conte avenue, Berkeley. The dwelling has been designed for a seven room house with bath and sleeping porch, and will be erected on the Arden road. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the living and dining rooms and reception halls. There will be a hot water heating system and open fire places. Mantels will be of brick. Bath room will be finished in German-stone. Exterior of the house will be covered with shingles. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$6,000. Architect none. Owner, Dr. Dowell, 515 Bellevue, Berkeley. The dwelling will be erected in the Lake Merritt District and has been designed for an eight-room house with two baths and sleeping porch. Interior will be finished in pine and hardwood with white enamel in the bed rooms. There will be furnace heat and open fire places. Hardwood floors will be used in the living room, dining room and reception hall. Bath rooms will be finished in tile. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal

lath. Plans are now being prepared.

IRVINGHAME, SAN MATEO CO., CAL.—Residence, 2 story and base, frame, \$1,000. Architect, Carl Geiffuss, 16 Kearny street, S. F. Owner's name withheld. The dwelling has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living and dining rooms and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are being prepared.

SAN MATEO, SAN MATEO CO., CAL.—Residence, 2 story and base, frame, \$6,500. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. The dwelling will contain nine rooms, three baths and sleeping porch. Interior will be finished in pine and redwood with some white enamel in the bed rooms. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

COLUSA, COLUSA CO., CAL.—Residence, 2 story and base, frame, \$7,000. Architect, F. E. St. John, Berkeley. Owner J. H. Sherer Colusa. The dwelling will contain nine rooms bath and sleeping porches. Interior will be finished in pine and hardwood with some white enamel in the bed rooms. There will be hardwood floors. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are complete and the owner will take figures.

ROSS VALLEY, MARIN CO., CAL.—Residence, 1½ story and base, frame, \$1,000. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. The dwelling will contain seven rooms, bath and sleeping porch. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor under the direction of the architect.

STOCKTON, SAN JOAQUIN CO., CAL.—Residence, 2 story and base, frame, \$6,000. Architect, Joseph Losskann, San Joaquin Bldg., Stockton. Owner, Sheriff W. H. Riess. The dwelling will contain eight rooms and two baths. Interior will be finished in pine hardwoods and white enamel. Hardwood floors will be used in the

principal rooms. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and figures are being taken.

PORTLAND, ORE.—Residence, 2½ story and base, brick veneer, \$15,000. Architect, none. Owner, H. M. Boya-John, Panama Bldg., Portland. The dwelling will be erected on Fairview Boulevard, and has been designed to contain ten rooms and three baths. Interior will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room, library and reception hall. There will be a central heating system and open fire places. A hot water circulating system is also specified. Bath rooms will be finished in tile. Exterior of the dwelling will be covered with pressed brick veneer. Plans are complete and in the hands of the owner who will do the work by Day Labor.

Contracts Awarded.

PORTLAND, ORE.—Residence, 2½ story and base, brick and frame, \$30,000. Architect, Earle A. Roberts, Selling Bldg., Portland. Owner J. H. Henry. Contractors, Trenchell & Parelius, Portland. Contract price, \$30,000.

SEATTLE, WASH.—Residence, 2½ story and base, brick veneer, \$60,000. Architects, Cutler & Malmgren, Spokane. Owner, J. T. Heffernan, 103 Railroad avenue, South Sacramento, Cal. Contractor, J. N. Johnson, 4273 Whitman avenue, Seattle. Contract price, \$60,000.

SCHOOLS.

BERKELEY, ALAMEDA CO., CAL.—University dormitory, 4 story and University dormitory, 4 story and base. Class A construction, \$800,000. Architect, John Galen Howard, 601 Mission street, S. F. Owners, Regents of the University of California. Victor Henderson, Secretary to President Wheeler of the University of California, states that working drawings for the dormitory building to be known as the Benj. J. Wheeler Building on the University Campus, have been completed. The building will be a four-story structure of steel and granite, and will cost in the neighborhood of \$800,000. Bids will be called for at once, according to the secretary. The secretary also states that plans for other important work to be carried out under the \$1,500,000 bond issue at the University are nearly complete, and that the balance of the year will see many of the new buildings under construction.

BERKELEY, ALAMEDA CO., CAL.—University buildings, 2, 1 and 2 story. Class A construction, \$750,000. Architect, John Galen Howard, 601 Mission street, S. F. Owners, Regents of the University of California. Architect John Galen Howard will shortly start working drawings for three more new buildings to be erected at the University of California in Berkeley. The \$500,000 fund bequeathed by Ernest V. Cowell is now available. The buildings will consist of a gymnasium,

student infirmary and a stadium. Further mention will be made of the work.

SACRAMENTO, CAL.—School additions, frame and concrete, \$20,000. Architect's name not given. Owners, City at Sacramento. Superintendent of Schools O. C. Hughes reported to the City School Board that the desired improvements in the Lincoln and Marshall schools will cost \$9,200 and \$1,700 respectively. The Board voted to ask the County Treasurer to sell \$20,000 of school bonds so the work may be done and other improvements made. It is the plan to put in four more rooms at the Lincoln and two at the Marshall.

GALT, SACRAMENTO CO., CAL.—School, 1 story and base, hollow tile or frame. Cost not stated. Architect, Clarence C. Cluff, Ochser Bldg., Sacramento. The building has been designed to contain six class rooms and an auditorium. Interior will be finished in pine with maple floors in the class rooms. There will be a central heating system, probably steam heat and oil burning furnace. Slate blackboards will be used. Modern school plumbing is specified. Exterior of the building will be faced with cement plaster. Bids are now being taken for both frame and hollow tile construction, and on the work as a whole and with the heating and ventilating separate. Plans can be secured from the architect. Bids will be opened on July 17th.

MARICOPA, KERN CO., CAL.—School, 1 story and base, frame, \$15,000. Architects, Thomas B. Wiseman and Charles H. Biggar, Producers' National Bank Bldg., Bakersfield. Owners, Maricopa High School District. The building will cover an area of 50 by 90 feet and has been designed to contain class rooms, office and departments of domestic science and manual training. Interior will be finished in pine with some maple floors. There will be a central heating system and oil burning furnace. Modern school plumbing will be installed. Exterior of the building will be faced with cement plaster on metal lath. Plans are complete and figures are being taken.

SANTA CLARA, SANTA CLARA CO., CAL.—Convent, 2 story and base, reinforced concrete, \$100,000. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Carmelite Sisters. The building will be erected on property adjoining the Santa Clara College, and has been designed in the Spanish Colonial style. Interior will be arranged for a large chapel, living apartments and reception rooms. Pine and hardwood trim and hardwood floors will be used. There will be steam heat and oil burning furnace, vacuum cleaning and hot water system. Bath rooms will be finished in tile. Exterior of the building will be faced with cement plaster. A clay tile roof will be used. Plans are complete and figures are being taken.

Contracts Awarded

PETALUMA, SONOMA CO., CAL.—School clock system, \$1,300. Architects, Brainerd Jones, Petaluma. Owners, Petaluma School District. Contractors, Standard Electric Time Co., S. F. Contract price, \$11,300.

SEWERS, STREET WORK & WATER SYSTEMS.

SAN FRANCISCO—Boulevard construction, \$100,000. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. By resolution of the Board of Supervisors the Board of Public Works has authorized the City Engineer to prepare plans and specifications for the construction of the Ocean Beach Esplanade for which \$100,000 has been provided in the budget. This amount it is estimated will cover the cost of 100,000 feet of the proposed project southerly from the Cliff House.

CALIFORNIA—State Highway construction. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Plans and specifications have been approved and bids will be opened on July 26th for the following highway work: Colusa, 0.3 miles asphalt, 55 feet wide; Marin, 4 miles, graded; Monterey, 11.7 miles, Portland cement concrete; Santa Barbara, 11.4 miles, graded, and San Luis Obispo, 10 miles, Portland cement concrete. Plans and specifications can be secured from the State Highway Commission at Sacramento or from its branch offices in San Francisco and Los Angeles.

CALIFORNIA—Highway construction. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Plans have been completed and figures will be opened on July 19th for the construction of state highways in the following counties: Alameda, 5.8 miles, Portland cement concrete; Santa Clara, 8.9 miles, Portland cement concrete; Los Angeles, 4.9 miles, Portland cement concrete. Plans and specifications can be secured from the office of the Highway Commission in Sacramento or the branch offices in San Francisco and Los Angeles.

SAN JOSE, SANTA CLARA CO., CAL.—Road improvements. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications have been completed for the improvement of Union avenue and Foxworth road in District No. 5, for the improvement of Ford road in District No. 2, and for the improvement of the Tully, White and Felipe roads in District No. 3. Bids are being taken and will be opened on July 19th. Plans and specifications can be secured from the County Clerk.

SANTA CLARA, SANTA CLARA CO., CAL.—Highway completion and paving. Cost not stated. Engineer, City Engineer, Santa Clara. Owners, City of Santa Clara. The town trustees are again considering the proposition of completing the state highway in Santa Clara. Nearly two miles of the road is uncompleted here. The paving question will also be brought up at the meeting of the town trustees.

SALINAS, MONTEREY CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Salinas. Owners, Monterey County. Plans are complete and figures will be opened on July 15th for the improvement of the Monterey-Castroville road in the Alisal and Pajaro Road District. Plans can be secured from the County Clerk.

SAN JOSE, SANTA CLARA CO., CAL.—Furnishing cement. Cost not stated.

Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Bids will be opened on July 19th for furnishing and delivering 50,000 barrels of cement to be used in highway construction. Complete information can be secured from the County Clerk at San Jose.

MARTINEZ, CONTRA COSTA CO., CAL.—Pipe line construction. Cost not stated. Engineer, Engineering Dept., Valley Pipe Line Co., 343 Sansome street, S. F. Owners, Valley Pipe Line Co. A supplemental order has been issued by the Railroad Commission authorizing the Valley Pipe Line Company to issue 18,975 shares of stock to the Anglo-Saxon Petroleum Company. The proceeds of the sale of this stock will be used in the construction of a pipe line from the property of the California Oil Fields, Ltd., near Coalinga, Fresno County, to Martinez, Contra Costa County.

SAUSALITO, MARIN CO., CAL.—Street and sewer work. Cost not stated. Engineer, Town Engineer Hohl, Sausalito. Owners, Town of Sausalito. Plans and specifications for the local improvement district "F," submitted by Town Engineer Hohl, have been approved. Bids on the work will soon be called for.

SAUSALITO, MARIN CO., CAL.—Street electroliters. Cost not stated. Engineer, Town Engineer Hohl, Sausalito. Owners, Town of Sausalito. At the last meeting of the Town Trustees, Town Engineer Hohl submitted plans for an electroliter system on Water street and Caledonia street, and the board will take it up at the July meeting. There will be 65 lights, 150-feet apart on each side of the street, and it is estimated that the cost per front foot will be about 40 cents.

RICHMOND, CONTRA COSTA CO., CAL.—Street paving, etc. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. Plans have been completed and figures are now being taken for the improvement of 19th street from Barrett to Pennsylvania. Bids will be opened on July 1th. Complete information can be secured from the City Clerk.

WOODLAND, YOLO CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Woodland. Owners, City of Woodland. Plans and specifications having been approved, the City Trustees have passed resolutions of intention for the paving of Main, from Third street to the Southern Pacific depot; North College, from Main to Beamer street, and South Third, from Main to Pandegast.

STOCKTON, SAN JOAQUIN CO., CAL.—Pumping plant. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has rejected all bids submitted for the construction of the pumping plant for the new city park in the northwestern part of the city on account of the bids being too high. New bids will probably be called for.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewers and street work. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. Specifications have been approved by the City Council for the sewerage of Harrison, Worth, Anderson, Jefferson and Jackson streets, as provided under Resolution No. 516, were approved.

Two other resolutions were also adopted. Both call for street improvements.

CORNING, TEHAMA CO., CAL.—Water system extension. Cost not stated. Engineer, City Engineer, Corning. Owners, City of Corning. Plans are complete and figures are being taken for extensive water system extensions. The work may be let as a whole or divided into the following parts: Sewer extension and water extension. Bids will be opened on July 16th. Plans and specifications can be secured on application to the City Clerk.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer work. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans are complete for 4, 6 and 8 inch vitrified salt glazed iron stone pipe sewers in Harrison and Jackson streets. Bids will be opened for this work on July 13th. Plans and specifications can be secured from the City Clerk.

MODESTO, STANISLAUS CO., CAL.—Irrigation Flume. Cost not stated. Engineer, F. C. Hermann, Modesto. Owners, Modesto Irrigation District. Plans and specifications prepared by Engineer F. C. Hermann of the Modesto Irrigation Board for the last of the big flumes which the Modesto Irrigation District is preparing to put in, were submitted to the directors and were approved. Bids will probably be called for at the next meeting of the directors. The Dry Creek is the last of the big projects. It will be 730 feet long, and will be constructed of reinforced concrete. The flume will be supported by concrete pillars. The width of the flume will be 18 feet and depth 9½ feet. The greatest elevation will be 40 feet. A sand box at the upper end of the flume will stop the sand which at present clogs the lower stretches of the main canal and costs the district about \$2,000 annually for removal. A spillway will be arranged as an outlet to Dry Creek. The approximate cost of the structure is \$75,000.

OAKDALE, STANISLAUS CO., CAL.—Irrigation tunnel, \$50,000. Engineer, Burton Smith, Oakdale. Owners, Oakdale Irrigation District. Plans are being prepared by the Oakdale Irrigation District for an 8,000-foot tunnel to be bored through Cape Horn and water all the north side of the irrigation district. By the construction of the tunnel Chief Engineer Burton Smith figures that the district can do away with the maintenance of eight miles of ditches and flumes.

MONO LAKE, MONO CO., CAL.—Irrigation dam, reinforced concrete, \$250,000. Engineer's name not given. Owners, private capital. Duncanson-Harrelson Co., Chronicle Bldg., S. F., has been awarded the contract for the construction of the big reinforced concrete irrigation dam, which is to be erected in Mono County near Mono Lake. Private individuals are developing, what is to be one of the largest irrigation projects in California, and this dam in the first of a number of large construction enterprises to be undertaken. The dam will cost about \$250,000, and work will be started at once.

Contracts Awarded

SAN JOSE, SANTA CLARA CO., CAL.—Redwood tanks, 15, 3,000-gallon,

\$161.25 each. Engineer, County Surveyor, San Jose. Owners, Santa Clara County, Contractor, Alphonse Lorentz, 201 West Julian avenue, San Jose. Contract price, \$461.25 each.

SAN JOSE, SANTA CLARA CO., CAL.—Furnishing 1-inch galvanized iron pipe, \$2,307.83. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, Mark-Lally Co., S. F. Contract price, \$2,307.83 for 22,000 feet.

SAN JOSE, SANTA CLARA CO., CAL.—Crushed rock, \$5,688.75. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, Stanfield & Knowles, San Jose. 5,125 cubic feet at \$5,688.75.

BURLINGAME, SAN MATEO CO., CAL.—Paving, grading and curbs. Cost not stated. Engineer, City Engineer, Burlingame. Owners, City of Burlingame. Contractors, Ralisch Improvement Co., S. F. Contract price not stated.

SACRAMENTO, MARIN CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Sausalito. Owners, City of Sausalito. Contractors, Austin-De Camp Co., 14 Montgomery street, S. F. Contract price not stated.

CONCORD, CONTRA COSTA CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer, Concord. Owners, Town of Concord. Contractors, Municipal Improvement Co., Richmond. Contract price not stated.

VACAVILLE, SOLANO CO., CAL.—Retaining wall, concrete, \$898. Engineer, none. Owners, Town of Vacaville. Contractor, George Nash, Vacaville. Contract price, \$898.

NEWCASTLE, PLACER CO., CAL.—Sewers, etc., \$2,368. Engineer, Town Engineer, Newcastle. Owners, Town of Newcastle. Contractors, Leach & De Camp, 14 Montgomery street, S. F. Contract price, \$2,368.

SEALED PROPOSALS

PROPOSALS FOR BUILDING.

ADDITION TO BRICK ASSEMBLY HALL—Department of the Interior, Office of Indian Affairs, Washington, D. C.—Sealed proposals plainly marked on the outside of the sealed envelope "Proposals for Addition to Brick Assembly Hall, Salem School, Oregon," and addressed to the Commissioner of Indian Affairs, Washington, D. C., will be received at the Indian Office until 2 o'clock p. m. of July 21, 1915, for furnishing materials and labor for the construction of an addition to the brick assembly hall, in strict accordance with the plans, specifications and instructions to bidders, which may be examined at the United States Indian Affairs Office at Chicago, Ill., and St. Louis, Mo., and Builders' Exchange, St. Paul, Minn., and at the office of the superintendent of the Salem Indian School, Chemawa, Ore. For further information apply to the superintendent of the Salem Indian School. **CATO SELLS, Commissioner.**

PROPOSALS FOR EXCAVATING.

EXCAVATION, ETC.—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the U. S. Reclamation Service, Provo, Utah, until 2 p. m. July 15, 1915, for the construction, involving about 50,000 cubic yards of canal excavation, 8,000 cubic yards of rolled embankment, 3,000 cubic yards of excavation for structures, 950 cubic yards of reinforced concrete and 325 square feet of canal lining. The work is located near Goshen, Utah, on the Tintic Branch of the Denver and Rio Grande Railroad.

For particulars address the U. S. Reclamation Service, Provo, Utah, or Washington, D. C.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 939—Proposals for Steel Doors for Locks on Pier No. 7, Cristobal, and Pier No. 188, Balboa. Scaled proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. July 13, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 939) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 941—Proposals for Pig Iron, Track Spikes, Track Bolts, Toe Calks, Expansion Bolts, Electric Motors, Lavatories, Brass Siphons, Shower Heads, Cocks, Valves, Brass Cleanouts, Flue Pipe, Slip Joint Ells, "S" Traps, Brass Chain, Rubber Valves, Rock Salt, Sal Soda, Litharge, Coal Tar Pitch, Drop Black, Lampblack, Lamp Oil, Black, Asphaltum Varnish, Cab Enamel, Paints, White Maple Lumber and Mahogany Lumber—Scaled proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. July 9, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 941) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

STATE OF CALIFORNIA. DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock p. m. on July 26, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:

Colusa County, through Arbuckle (H-Col-7-A), about 0.3 miles in length, to be surfaced with asphalt 5½ feet wide.

Marin County, between Burdell and St. Vincent (V-Mrin-1-A), about 4 miles in length, to be graded.

Monterey County, from Cienfuegos to Camphora (V-Mon-2-D), about 11.7 miles in length, to be paved with Portland cement concrete.

Santa Barbara County, from Caylton Pass to Zaca Station (V-S-B-2-D), about 11.4 miles in length, to be graded.

San Luis Obispo County, from Atascadero Creek to Paso Robles (V-S-L-O-2-B), about 10 miles in length, to be paved with Portland cement concrete.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the project is situated. The Division Engineers' offices are located at Willets, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The specifications and of prospective bidders is called to the "Notice to Contractors" annexed to the

blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES B. STECK,
California Highway Commission.
AUSTIN B. FLETCHER,
Highway Engineer.
WILSON R. ELLIS,
Secretary. (*)

Dated: June 29, 1915.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 938—Proposals for Twelve Electric Towing Locomotives for Canal Locks.—Sealed proposals will be received at the office of the General Purchasing Officer, the Panama Canal, Washington, D. C., until 10:30 a. m. August 16, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 938) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, Major, Corps of Engineers, U. S. Army, General Purchasing Officer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 939 — Steel Doors for Sheds on Pier 7 at Cristobal and Pier 18 at Balboa.—Sealed proposals will be received at the office of the General Purchasing Officer, the Panama Canal, Washington, D. C., until 10:30 a. m. August 16, 1915, at which time they will be opened in public, for furnishing and erecting the above mentioned articles. Blanks and general information relating to this circular (No. 939) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, Major, Corps of Engineers, U. S. Army, General Purchasing Officer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 937.—Proposals for Structural Steel and Accessory Parts for Shed on Pier No. 7.—Sealed proposals will be received at the office of the General Purchasing Officer, the Panama Canal, Washington, D. C., until 10:30 a. m. July 12, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 937) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, Major, Corps of Engineers, U. S. Army, General Purchasing Officer.

PROPOSALS FOR SUBMARINES.

SUBMARINES—Proposals for constructing by contract sixteen submarine boats, Nos. 62-77, will be received at the Navy Department until 12 o'clock noon August 2, 1915, when they will be publicly opened. Circulars for the information of bidders and general specifications for the construction of said vessels are ready for distribution among prospective bidders. Forms of proposal and contract may be had on application to the department. FRANKLIN D. ROOSEVELT, Acting Secretary of the Navy.

PROPOSALS FOR SHAFTS AND CHAIN.

SHAFTS AND CHAIN—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the U. S. Reclamation Service, Washington, D. C., until 2 o'clock p. m. July

12, 1915, for furnishing chain shafts and chains for the rolling crest of Grand River diversion dam, Grand Valley project, Colo., consisting of one safety chain, one chain shaft, one operating chain, and one guard chain, all for the 60-foot roller, and of six safety chains, six chain shafts, six operating chains, and six guard chains for the six 70-foot rollers. For particulars address the U. S. Reclamation Service, Washington, D. C. MORRIS BIEN, Acting Director.

PROPOSALS FOR RECLAMATION WORK.

RECLAMATION WORK—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Provo, Utah, until 2 o'clock p. m. July 15, 1915, for construction, involving about 4,000 cubic yards of canal excavation, 8,000 cubic yards of rolled embankment, 3,000 cubic yards of excavation for structures, 950 cubic yards of reinforced concrete, and 525,000 square feet of canal lining. The work is located near Goshen, Utah, on the Tintic Branch of the Denver and Rio Grande Railroad. For particulars address the United States Reclamation Service, Provo, Utah, or Washington, D. C. MORRIS BIEN, Acting Director.

PROPOSALS FOR VESSEL.

VESSEL—Sealed proposals will be received at the office of the superintendent, Coast and Geodetic Survey, Department of Commerce, Washington, D. C., until August 10, 1915, and then opened, and also on the same date at the office of the inspector, Coast and Geodetic Survey, Room 310, Custom House, San Francisco, Cal., for the construction and equipment of the Coast and Geodetic Survey steamer "Surveyor," of about 1,000 tons displacement. Particulars may be obtained upon application to the superintendent, Coast and Geodetic Survey, Washington, D. C.

PROPOSALS FOR DREDGING.

1915, and then and there publicly opened for dredging 72,000 cubic yards. DREDGING—Sealed proposals, endorsed "Proposals for Dredging," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. July 31, more or less, at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, Chief of Bureau.

PROPOSALS FOR BUILDING.

BUILDING — Sealed proposals endorsed "Proposals for Seven Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. July 24, 1915, and then and there publicly opened, for one power house, one operating building and one storeroom of stuccoed brick and steel frames, one pump house, one quarters for commanding officer, one double quarters for chief operator and one operators' quarters of stuccoed wood frame construction at the naval radio station, San Diego, Cal. Plans and specifications may be obtained on application to the bureau or to the officer in charge, naval radio station, San Diego, Cal. H. R. STANFORD, Chief of Bureau.

LONGEST FLAGSTAFF.

The longest flagstaff produced in British Columbia will be forwarded soon to Great Britain as a present from the provincial government, and will be placed in the Kew Botanical Gardens, a few miles out from London. The tree from which it was made was a perfect specimen of fir pine, and the staff, which is 216 feet in length,

is without flaw or defect. In its original state the stick was 5 feet in diameter at the butt and 14 inches in diameter at the top, and perfectly straight.

WELLS MORE THAN A MILE DEEP.

The deepest well in the world is in Upper Silesia, in the German Empire. It is a diamond-drill hole in a coal field and is 7,350 feet deep. A well in the United States which may go deeper, according to the United States Geological Survey, is 4 miles northwest of McDonald, Pa., and about 15 miles west of Pittsburgh. This well, which is being sunk to the Medina sandstone—a bed that elsewhere contains oil and gas—is now 7,174 feet deep. Some gas and oil were struck in the upper part of the well. Between the depths of 6,820 and 7,100 feet rocks bearing rock salt and salt water were encountered. These are regarded as of Salina age, the same as those carrying rock salt in western New York. The temperature in this well at the depth of 6,775 feet, as recently determined with great accuracy, is 145.8 degrees F.

At Derrick City, McKean County, Pa., near Bradford, there is a well 5,820 feet deep, which is probably the second deepest well in the United States. Another deep well is on Slaughter Creek, Kanawha County, W. V.; it is 5,595 feet deep. It penetrated a sandstone at 5,030 to 5,050 feet, and from this depth to the bottom, a distance of 545 feet, the well is in limestone. Near West Elizabeth, Pa., there is another well 5,575 feet beneath the surface, penetrating into a black shale. Another deep well is being drilled at Gaines, Pa. This has already reached a depth of 5,500 feet. Deep-well drillers in this country of course employ the most improved and effective rigs, but one of the most remarkable of wells, reaching a depth of 3,600 feet, was drilled for petroleum in western China by means of such crude appliances as a cable made of twisted strands of rattan.

CARBIDE SLIME AS BUILDING MATERIAL.

[Frankfurter Zeitung, May 16.] In the manufacture of acetylene gas (from calcium carbide and water) considerable quantities of so-called carbide slime are always left in the apparatus. The slime is a waste product, no means of utilizing it having been known heretofore. In view of the large increase in the consumption of acetylene since the outbreak of the war, the report of R. Schumann on the possible utilization of carbide slime, published in the Chemiker-Zeitung, will be of special interest. The material could not be used as fertilizer, salts of phosphorus being absent, but might be used as water purifier when of a certain composition. The experiments with the employment of carbide slime as building material yielded the best results. When mixed with 40 per cent building sand, the carbide slime formed a usable mortar which set well and bound the bricks firmly. This new building material will be thoroughly tested by further experiments.

ADVANCE NEWS

Classified according to Character of Work



Devoted to the Architectural, Engineering, Building and Industrial Activities of the Pacific Coast.

Circulates among the leading Architects, Engineers, Surveyors, Contractors and Municipal Authorities on the Pacific Coast.

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SAN FRANCISCO.

APARTMENT HOUSE—3 story and base, frame, \$35,000. San Francisco. Architects, O'Brien Bros., 240 Montgomery St., S. F. Owner's name withheld. The building will be erected at the northwest corner of Pierce and Golden Gate, having a frontage of 137½ feet on Pierce and 35 feet on Golden Gate avenue. Interior has been arranged to contain a total of 24 suites of two rooms and bath. Interior will be finished in hard pine, mahogany and white enamel. Hardwood floors will be used in the principal rooms. There will be steam heat, an automatic elevator and hot water system. All suites will have wall beds. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance lobby. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

APARTMENT HOUSE—3 story and base, frame, \$15,000. San Francisco. Architect, Carl Geilfuss, 46 Kearny street, S. F. Owner, Mrs. Eichler. The building will be erected on Waller street, 100 feet west of Webster, and has been designed for twelve suites of three and four rooms. Interiors will be finished in pine with some elm panels and hardwood floors. There will be steam heat and a hot water system. All suites will have wall beds and private bath rooms. Tile floors and wainscot will be used in the baths. Marble and tile wainscot will be used in the entrance. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are being prepared.

APARTMENT HOUSE—4 story and base, Class C construction. Cost not stated. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. The building will be erected on the east side of Hyde street north of Sutter, and has been designed to contain nine suites of four rooms and bath. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the living rooms, dining rooms and entrance halls. There will be steam heat, an automatic elevator and hot water system. Bath rooms will have tile floors and wainscot. Marble and tile wainscot will be used in the lobby, together with ornamental plaster. Exterior of the building will be faced with pressed brick and terra cotta. Plans are complete.

APARTMENT HOUSE—3 story and base, frame, \$12,000. San Francisco. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owner, George W. Mensor. The building has been designed to contain six suites of four rooms and bath, and will be erected on the south side of Washington street east of Stelner. The building will have a frontage of 25 feet and a depth

of 127½ feet. Interior will be finished in pine, Philippine mahogany and white enamel. Hardwood floors will be used in the principal rooms. There will be steam heat and a hot water system. Exterior will be covered with asbestos stucco on metal lath. Plans are being prepared.

APARTMENT HOUSE—5 story and base, Class C construction. Cost not stated. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. The building will be erected on the north side of Post street between Taylor and Jones, and has been designed for two stores on the first floor besides a large and attractive entrance, lobby and dansant. Upper four floors will contain 27 apartments of two and three rooms. Each apartment will have private bath and wall beds. Interior will be finished in southern gum, mahogany and white enamel. Hardwood floors will be used in the living and dining rooms. Bath rooms will be finished in tile. Marble and tile and ornamental plaster will be used in the lobby. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and figures are being taken.

LAUNDRY—1 story, frame, \$3,000. San Francisco. Architect, J. T. Quinn, 247 Noe street, S. F. Owner, E. B. Carr, 321 Noe street, S. F. The building will have a cement floor. Interior will be finished in pine. Considerable special machinery will be installed. The contract will also include alterations to a frame building in the rear of the property. Exterior will be covered with rustic and shiplap. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

GARAGE—1 story, steel and concrete, \$2,500. San Francisco. Engineer, Engineering Dept. Shell Oil Co., 343 Sansome street, S. F. Owners, Shell Oil Co. The building will be erected on the company's property on Kentucky street between Army and Marin. There will be a cement floor. Exterior will be covered with corrugated iron. Plans are complete and figures are being taken.

FLATS—2 story and base, frame, \$8,500. San Francisco. Architect, E. E. Young, 251 Kearny street, S. F. Owner, Thomas Seoble, 363 14th avenue, S. F. The building will be erected at the southwest corner of Palm avenue and Euclid street, and has been designed to contain four modern flats of five rooms and bath. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the living and dining rooms and reception halls. There will be a central heating system and open fire places. Mantels will be of tile and brick. Bath rooms will have tile wainscot. Exterior of the building will be covered with shiplap

and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE — 2 story and base, frame, \$3,000. San Francisco. Architects, Foulkes & Hildebrand, Crocker Bldg., S. F. Owner, John H. Schroder. The dwelling will be erected at the northwest corner of Washington and Webster streets, and has been designed to contain six rooms and bath. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

RESIDENCE — 1 story and base, frame, \$2,500. San Francisco. Architect, none. Owners, George F. and Lucy S. Cleese, 524 25th avenue, S. F. The dwelling will be erected on the east side of 36th avenue south of Anza, and has been designed for a five-room house with bath. Interior will be finished in pine and redwood. Some hardwood floors will be used. There will be a large open fire place in the living room. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are complete and in the hands of the owners who will do the work by Day Labor.

BOULEVARD CONSTRUCTION — \$100,000. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. By resolution of the Board of Supervisors the Board of Public Works has authorized the City Engineer to prepare plans and specifications for the construction of the Ocean Beach Esplanade for which \$100,000 has been provided for in the budget. This amount it is estimated will cover the cost of 1,000 feet of the proposed project southerly from the Cliff House.

Building Contracts Awarded

No.	Owner.	Contractor	Amt.
1875	Rosenberg	Cahen	20000
1876	Gassner	Gassner	500
1877	Hemberger	Hemberger	2500
1878	Hildebrand	Owner	600
1879	Basso	Basso	1700
1880	Welsh	Welsh	3000
1882	Kelly	Bessett	2900
1883	Zanetti	Lindelli	1600
1884	Pike	Dreyfus	2500
1885	Bouchon	Ostero	2400
1886	May	Meyer	1800
1887	Bursotti	Petersen	2245
1888	Cantrowitz	Old	2000
1889	Ratto	Carraro	2940
1890	Cath. Archb.	Lynch	6670
1891	Same	Central Iron	1913
1892	Josue	Hock	6485
1893	Biltmore	U S Metal	1500
1894	Same	Hicks	1384
1895	Michels	Wallen	3700
1896	Weil	Smith	1250
1897	Bursotti	Petersen	2300
1898	Roche	Schutte	900
1899	Panario	Panario	1000
1900	Wolf	Wolf	9000
1901	Baxter	Goodman	1000
1902	Levin	Abrahams	1000
1903	Shell Co.	Shell Co	2400
1904	Shell Co.	Shell Co	2400
1905	Spreckels	Swenson	400

1906	Strickland	Strickland	500
1907	Fisher	Brumfield	400
1915	Des Roches	Des Roches	450
1909	Farrell	Jansen	400
1910	Holden	Allen	2750
1911	Stolte	Tarrant	1873
1912	Domeniconi	Petri	1250
1913	Ratto	Carraro	2940
1914	Heneseth	S F Elev	1740
1915	Keneseth	Glaze	12964
1916	Cavagnaro	Cavagnaro	700
1917	Scott	Scott	600
1918	Fouere	Davidson	400
1919	Danzig	Danzig	550
1920	Saven	Saven	750
1921	Utah	Utah	400
1922	Carr	Carr	1600
1923	Carr	Carr	3000
1924	Welsh	Welsh	4000
1925	Keller	Hamill	2550

CLASS "C" APARTMENTS

(1875) N BUSH 77-6 W Powell. Four-story and basement Class "C" (15) apartments.

Owner.....I. Rosenberg & Jos Cahen, 45 Kearny, San Francisco.

Architect...None. COST, \$20,000

Day's work. NOTE:—Job started, Up to 2nd floor line.

ALTERATIONS

(1876) E STOCKTON 81-8 S Clay. Change partition in hotel.

Owner.....Louis Gassner, 112 Geary, San Francisco.

Architect...D. J. Patterson, 57 Post, San Francisco.

Day's work. COST, \$500

FRAME DWELLING

(1877) E SEVENTEENTH AVE 100 N Anza. Two-story and basement frame dwelling.

Owner.....Albert J. Hemberger, 146 9th Ave., San Francisco.

Architect...None. COST, \$2500

Day's work.

FRAME DWELLING

(1878) W TWENTY-NINTH AVE 150 N Vincente. One-story and basement frame dwelling.

Owner.....Henry Hildebrand, 151 Lower Terrace, S. F.

Architect...None.

Contractor...D. A. Hildebrand, 151 Lower Terrace, S. F.

COST, \$600

FRAME DWELLING

(1879) SW QUESADA 112-6 SW Jennings. One-story and basement frame dwelling.

Owner.....David Basso, 884 Greenwich, San Francisco.

Architect...None. COST, \$1700

Day's work.

FRAME DWELLING

(1880) W EIGHTEENTH AVE 250 S Anza. Two-story and basement frame dwelling.

Owner.....James Welsh, 244 20th Ave San Francisco.

Architect...None. COST, \$3000

Day's work.

FRAME RESIDENCE

(1881) E EIGHTEENTH AVE 300 S Geary S 25x E 120 O L 267. All work for two-story six-room frame residence.

Owner.....John Gray, 2252 Clement, San Francisco.

Architect...None.

Contractor...Thomas Hamill, 268 25th Ave., San Francisco.

Filed June 26, '15. Dated June 24, '15. Frame up\$687.50.

Brown coat mortar on..... 687
Completed and accepted..... 687
Usual 35 days..... 687

TOTAL COST, \$2750
Bond, limit, forfeit, none. Plans a specifications filed.

FRAME DWELLING

(1882) E TWENTY-NINTH AVE 200 Ulloa. Two-story and basement frame dwelling.

Owner.....Mrs. Fannie Kelly, Divisadero, San Francisco.

Architect...None.

Contractor...C. H. Bessett, 343 21 Ave., San Francisco. COST, \$25

FRAME DWELLING

(1883) SW ELEVENTH AVE 11 Phelos. One-story and basement frame dwelling.

Owner.....A. Zanetti, 1741 Kirkwood, San Francisco.

Architect...None.

Contractor...A. Lindelli, 19 Carr, S. I. COST, \$10

ALTERATIONS

(1884) NW BUCHANAN & PACIFIC AVE. Plaster exterior of press dwelling, remove old and place new partitions.

Owner.....R. W. Pike, Premises.

Architect...Ward & Blohme, Alas Commercial Bldg., S. F.

Contractor...Dreyfus Bros., 324 California, San Francisco. COST, \$25

FRAME DWELLING

(1885) E EGBERT 250 S Hawes. Two-story and basement frame dwelling.

Owner.....R. Bouchon, 190 Quesada Ave., San Francisco.

Architect...None.

Contractor...M. Ostero, 1837 Pal Ave., San Francisco. COST, \$25

FRAME DWELLING

(1886) N GENEVA 150 E Paris. C and one-half-story and basement frame dwelling.

Owner.....Thos. M. May, 203 Pal Ave., San Francisco.

Architect...None.

Contractor...Henry Meyer, 53 Walt Ave., San Francisco. COST, \$10

FRAME DWELLING

(1887) W NINTH AVE 100 S Norel. Two-story and basement frame dwelling.

Owner.....Jas. Bursotti, Relief Hospital, San Francisco.

Architect...None.

Contractor...Antone Petersen, Guerrero, San Francisco. COST, \$2

FRAME DWELLING

(1888) E FORTY-FIRST AVE 225 Lincoln Way. One-story and basement frame dwelling.

Owner.....L. Cantrowitz, 1113 Tu Ave., San Francisco.

Architect...G. H. Old, 745 Kirkwood, San Francisco.

Contractor...Old Bros., 745 Kirkwood, San Francisco. COST, \$2

FRAME FLATS

(1889) N BERNARD 92-6 E Joz

Two-story and basement frame (2) flats.
Owner.....Pietro Ratto, 30½ Bernard, San Francisco.
Architect...None.
Contractor...G. Carraro, 750 Felton, San Francisco.
COST, \$2940

GRADING, ETC.

(1890) NW TWENTY-THIRD AVE & Geary. Grading, concrete, reinforcements, dampproofing, etc., for concrete basement for St. Monica's Church.
Owner.....Roman Catholic Archbishop of S. F., 1100 Franklin, San Francisco.
Architect...Frank T. Shea and Jno. O. Lofquist, 742 Market, S. F.
Contractor...A. Lynch.
Filed June 28, '15. Dated June 18, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$6670
Bond, none. Limit, 70 days. Forfeit, \$10. Plans and specifications filed.

(1891) STRUCTURAL STEEL, CAST iron work, etc. on above.

Contractor...Central Iron Works, 651 Florida, San Francisco.
Filed June 28, '15. Dated June 18, '15.
Completed and accepted.....\$1433
Usual 35 days..... 480
TOTAL COST, \$1913
Bond, none. Limit, 20 days after arrival of material. Forfeit, \$10. Specifications only filed.

BRICK ADDITION

(1892) W SECOND AND SILVER NW 76xSW 90. All work for one-story brick addition to make a three-story brick building into a warehouse.
Owner.....Clara Mentzel and Bertha C Josue, 1464 5th Ave., S. F.
Architect...H. Gelfuss & Son, 46 Kearny, San Francisco.
Contractor...Chas. Hock, 180 Jessie, San Francisco
Filed June 28, '15. Dated June 21, '15.
Ready for roof.....\$2430
Completed and accepted..... 2430
Usual 35 days..... 1625
TOTAL COST, \$6485
Bond, \$3243. Sureties, Agatha A. Hock and D. J. Sullivan. Limit, 45 days. Forfeit, \$25. Plans and specifications filed.

SHEET METAL WORK

(1893) W TAYLOR 137-6 N Sutter N 28-9xW 137-6. Sheet metal work for five-story building.
Owner.....Biltmore Realty Co.
Architect...Edward T. Foulkes, Crocker Bldg., San Francisco.
Contractor...United States Metal Products Co., 525 Market, S. F.
Filed June 28, '15. Dated June 19, '15.
10 days after 1st of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$1500
Bond, \$750. Surety, New England Casualty Co. Limit, due diligence. Forfeit, none. Plans and specifications filed.

(1894) ELECTRIC WORK ON ABOVE

Contractor...Hicks-Folte Corporation, 320 Market, San Francisco.
Filed June 28, '15. Dated June 17, '15.
Payments same as above.....
TOTAL COST, \$1381
Bond, \$700. Sureties, W. W. Hicks and G. J. O'Folte. Limit, due diligence.

Forfeit, none. Plans and specifications filed.

CLASS "C" MARKET BUILDING

(1895) W GOUGH 90 N O'Farrell N 30 xW 137-6. All work for one-story "Class C" market building.
Owner.....S. D. Michels, 930 Franklin San Francisco.
Architect...O'Brien Bros., Inc., 240 Montgomery, S. F.
Contractor...A. M. Wallen, 251 Kearny, San Francisco.
Filed June 29, '15. Dated June 28, '15.
Ready for ceiling joists.....\$925
Building roofed, floored and rough plumbing in..... 925
Completed and accepted..... 925
Usual 35 days..... 925
TOTAL COST, \$3700
Bond, none. Limit, 40 days. Forfeit, \$100. Plans and specifications filed.

ALTERATIONS AND ADDITIONS

(1896) NW DIVISADERO & JACKSON Painting and finishing for alterations and additions to residence.
Owner.....Florence G. Weil.
Architect...J. G. Albert Lansburgh, 709 Mission, San Francisco.
Contractor...J. S. Smith, 1137 Divisadero, San Francisco.
Filed June 29, '15. Dated June 25, '15.
When cleaned and primed..... 30%
On completion..... 45%
Usual 35 days.....Balance
TOTAL COST, \$1250
Bond, \$625. Surety, Pacific Coast Casualty Co. Limit, forfeit, none. Specifications only filed.

FRAME COTTAGE

(1897) W NINTH AVE 100 S Noriega S 25x120. All work for one and one-half-story frame cottage.
Owner.....Jas. Bursotti, Relief Home, San Francisco.
Architect...None.
Contractor...Antone Petersen, 844 Guerrero, San Francisco.
Filed June 29, '15. Dated June 25, '15
Frame up.....\$430
Brown coated..... 430
Standing finish on..... 430
Completed and accepted..... 430
Usual 35 days..... 550
TOTAL COST, \$2300
Bond none. Limit, 90 days after June 26. Forfeit, none. Plans and specifications filed.
NOTE—1st report June 29, No. 1887.

ALTERATIONS

(1898) NOS 1659-61 MISSION. Alter for garage.
Owner.....M. Roche, Care German Hospital, San Francisco.
Architect...None.
Contractor...Carl Schutte, 842 Baker, San Francisco.
COST \$900

ALTERATIONS

(1899) E ELEVENTH 137-6 S Market. Alter garage.
Owner.....Ernst & Panario, 214 Kearny, San Francisco.
Architect...None.
Day's work.....
COST, \$1000

FRAME STORE

(1900) NOS. 165-167 SAGAMORE. One story frame store.
Owner.....Wolf Bros., 1 Plymouth,

San Francisco.
Architect...None.
Day's work.....
COST, \$900

ADDITION

(1901) NO. 3460 CLAY. Add reinforced concrete addition to garage.
Owner.....J. H. Baxter, Premises.
Architect...None.
Contractor...Geo. Goodman, 62 Post, San Francisco.
COST, \$1600

FRAME WAREHOUSE

(1902) NO. 1662 FOLSOM. Two-story and basement frame warehouse.
Owner.....M. Levin, Premises.
Architect...None.
Contractor...H. Abrahams, 134 Hale, S. F.
COST, \$1000

PLATFORM

(1903) ARMY, MARIN, ILLINOIS & Kentucky. Drum filling platform.
Owner.....Shell Oil Co. of California, 343 Sansome, S. F.
Architect...None.
Day's work.....
COST, \$900

CONCRETE GARAGE

(1904) E KENTUCKY bet. Army and Marin. One-story steel and concrete private garage.
Owner.....Shell Oil Co. of California, 343 Sansome, S. F.
Architect...None.
Day's work.....
COST, \$2400

ALTERATIONS

(1905) NW GOUGH AND PACIFIC Ave. Alter for garage.
Owner.....Rudolph Spreckels, Prem.
Architect...J. R. Miller, 213 Lick Bldg., San Francisco.
Contractor...Swenson & Franzen, 145 Natoma, San Francisco.
COST, \$400

FRAME DWELLING

(1906) E RHODE ISLAND 25 N 19th. One-story frame dwelling.
Owner.....Wm. Strickland, Prem.
Architect...None.
Day's work.....
COST, \$500

ELECTRIC SIGN

(1907) NE EDDY AND JONES. Electric sign.
Owner.....M. Fisher, Premises.
Architect...None.
Contractor...Brunfield Elec. Sign Co., 18 7th, San Francisco.
COST, \$100

ADDITION

(1908) NO. 1731 FITZGERALD. Raise and add to dwelling.
Owner.....Pauline Des Roches, 1323 Woolsey, San Francisco.
Architect...None.
Day's work.....
COST, \$450

ALTERATIONS

(1909) NO. 1251 SIXTH AVE. Alter basement for garage.
Owner.....J. L. Farrell Premises.
Engineer...E. Jansen, 1279 6th Ave., San Francisco.
Day's work.....
COST, \$400

FRAME RESIDENCE

(1910) W TWENTY-SEVENTH AVE 100 N Balboa N 25xW 75. All work for two-story frame residence.
Owner.....Betsy A. Holden, 520 Crocker Bldg., S. F.

Architect...None.

Contractor...L. L. Allen & C. L. Knight,
4525 Mission, S. F.

Filed June 30, '15. Dated June 30, '15.
Frame up and enclosed.....\$687.50
Brown coated.....687.50
Completed and accepted.....687.50
Usual 35 days.....687.50

TOTAL COST, \$2750.00

Bond \$1400. Sureties, Jane K. Allen,
Charlotte D. Allen and E. G. Knight.
Limit, 60 days. Forfeit, none. Plans
and specifications filed.

ALTERATIONS

(1911) NO. 351 THIRD AVE. Altera-
tions and additions to two-story and
basement frame building.

Owner.....G. A. Stolte, Premises.

Architect...H. C. Baumann, Chronicle
Bldg., San Francisco.

Contractor...R. L. Tarrant, 559 6th
Ave., San Francisco

Filed June 30, '15. Dated June 25, '15.
On 1st and 15th of each month 75%
Usual 35 days.....25%

TOTAL COST, \$1870

Bond \$935. Surety, Nettie M. Tarrant.
Limit, 60 days. Forfeit, none. Plans
and specifications filed.

ADDITION

(1912) NO. 42 BERNARD N line 20x60
All work except plumbing for one-
story addition to one-story and base-
ment building.

Owner.....Antone Domeniconi Prem.

Architect...N. T. Giacomini, 3340 San
Bruno Ave., San Francisco.

Contractor...Farnocchia Petri & Co.,
1654 San Jose Ave., S. F.

Filed June 30, '15. Dated June 23, '15.
Frame up.....\$312.50
Roofed.....312.50
Completed.....312.50
Usual 35 days.....312.50

TOTAL COST, \$1250.00

Bond, none Limit 44 days. Forfeit,
none. Plans and specifications filed.

FRAME RESIDENCE

(1913) N BERNARD 92-6 W Jones 21x
60. All work for two-story and
basement frame residence.

Owner.....Pietro and Madeline Ratto,
30 1/2 Bernard, S. F.

Architect...None.

Contractor...G. P. Carraro, 750 Felton,
San Francisco.

Filed June 30, '15. Dated June 22, '15.
Frame up.....\$735
Brown mortar on.....735
Completed and accepted.....735
Usual 35 days.....735

TOTAL COST, \$2940

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

NOTE:—1st report June 29, No. 1889.

ELEVATOR WORK

(1914) NW BUSH AND ST. GEORGE
Alley. Elevator work for building.

Owner.....Charles F. Hanlon, Phelan
Bldg., San Francisco.

Architect...None.

Contractor...San Francisco Elevator
Co. 860 Polson, S. F.

Filed June 30, '15. Dated June 17, '15
Guides up and sheaths in place.....\$135
On 15th of each month, 30 days
after last payment.....435
On 15th of each month, 30 days
after last payment.....435
On 15th of each month, 30 days
after last payment.....435
On 15th of each month, 30 days
after last payment.....435
TOTAL COST \$1740

Bond, none Limit, July 30. Forfeit,
none. Specifications only filed.

FRAME SYNAGOGUE

(1915) W WEBSTER 85 N McAllister
W 137-6xN 52-6. All work except
painting, sheet metal, glazing, light-
ing fixtures, shades and benches for
two-story frame synagogue

Owner.....Congregation Keneseth
Israel, 1725 Oak, S. F.

Architect...Samuel Arnold & E. A.
Neumarkel, 521 Sharon
Bldg., San Francisco.

Contractor...R. Glaze, Humboldt Bank
Bldg., San Francisco.

Filed June 30, '15. Dated June 29, '15.
Main floor joists laid.....\$2400
Ready for plaster.....2400
Plastering and standing finish
on.....2400
Completed and accepted.....2514
Usual 35 days.....3250

TOTAL COST, \$12,964

Bond, \$6482. Surety, Pacific Coast
Casualty Co. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

ALTERATIONS

(1916) S WATER 131 W Mason. Alter
stable.

Owner.....L. Cavanaugh, 542-A Lom-
bard, San Francisco.

Architect...None.

Day's work COST, \$700

ALTERATIONS

(1917) E GETZ at junction of Harold
Concrete foundation and alter dwlg.

Owner.....Mary E. Scott.

Architect...None.

Day's work COST, \$600

ALTERATIONS

(1918) NO. 11 BRODERICK. Alter
flats.

Owner.....Mrs. Fouere, Premises.

Architect...None.

Contractor...John C. Davidson, 240
Dolores, San Francisco.

COST, \$400

ALTERATIONS

(1919) NW SANCHEZ & TWENTY-
Fourth. Alter front and interior of
store.

Owner.....P. Danzig, 3838 24th, S. F.

Architect...C. S. McNally, 57 Post,
San Francisco.

Day's work COST, \$850

FRAME DWELLING

(1920) N LELAND 150 W Elliot. One
story and basement frame dwelling.

Owner.....H. Saven, 1208 Buchanan,
San Francisco.

Architect...None.

Day's work COST, \$750

ALTERATIONS

(1921) NO. 420 GRANT AVE. Alter
store and extend balcony.

Owner.....M. Utoh.

Architect...None.

Day's work COST, \$400

ALTERATIONS

(1922) NO. 329 NOE. Alter laundry.

Owner.....E. B. Carr, 329 Noe, S. F.

Architect...J. T. Quinn, 347 Noe, S. F.

Day's work COST, \$1600

FRAME LAUNDRY

(1923) E NOE bet 16th and 17th. One
story frame laundry.

Owner.....E. B. Carr, 331 Noe, S. F.

Architect...J. T. Quinn, 347 Noe, S. F.
Contractor...E. B. Carr, 331 Noe, S. F.
COST, \$3000

FRAME RESIDENCE

(1924) W EIGHTEENTH AVE 250 S
Anza S 25xW 120. All work for two-
story frame residence.

Owner.....Jas. Welsh, 244 20th Ave.
Architect...None.

Contractor...James Welsh & Co.

Filed July 2, '15. Dated July 1, '15.
Rafters on.....\$100

Brown coated.....100

Accepted.....100

Usual 35 days.....100

TOTAL COST, \$400

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications, none.

FRAME STORE

(1925) S CLEMENT 57-6 E 17th Ave
E 25xS 73 O L 197. All work for one-
story frame store.

Owner.....Michael S. and Hannah
Keller, 1825 Clement, S. F.

Architect...None.

Contractor...Thos. Hamill, 268 25th Ave.
San Francisco.

Filed July 2, '15. Dated June 30, '15.
Rough frame & roof sheathed.....\$712.50

Rough plaster on.....712.50

Completed and accepted.....712.50

Usual 35 days.....712.50

TOTAL COST, \$2850.00

Bond, \$1425. Surety, Aetna Accident &
Liability Co. Limit, 70 days. Forfeit,
\$5. Plans and specifications filed.

COMPLETION NOTICES

San Francisco

June 25, 1915—E TWENTY-FOURTH
Ave 150 S Anza E 25xN 120. Wil-
liam B Tibbals to whom it may

concern.....June 21, 1915

June 25, 1915—LOT 47 BLK 56 Reis
Tract. Carl N Noehl to whom it
may concern.....May 20, 1915

June 25, 1915—S BUSH 137-6 W Mont-
gomery W 70xS 137-6. Shields Est
Co to Spencer Elevator Co.....

.....June 24, 1915

June 25, 1915—S POST 120 W Larkin
W 25xS 120. Eisenbach Co to

Sjogren Bros.....June 25, 1915

June 25, 1915—NO. 665 FELL near
Webster. Gabrielle Sandersfeld to

Schachtel & Erz.....June 17, 1915

June 25, 1915—NE CAIN & LAKE
View Ave E 25xN 100. T W Copnik

to whom it may concern.....June 25, 1915

June 28, 1915—E FLORIDA 29-9% N
Army N 30xN 75. Emil and Wife

Elsie Nelson to whom it may con-
cern.....June 26, 1915

June 28, 1915—E LARKIN 117-6 S
Pacific S 20xN 68-9. Margaret Mc-

Cartland to G H & S Walker.....

.....June 5, 1915

June 29, 1915—E TWELFTH AVE 150
N Balboa. C A Hall to whom it

may concern.....June 25, 1915

June 29, 1915—SW CALIFORNIA &
Stockton S 68-9xW 117-6. Deimar

S Clinton to Alexander Coleman.....

.....June 25, 1915

June 29, 1915—S CALIFORNIA 110 E
Broderick E 27-6xS 137-6. J P Hart

to J Pasqualetti.....June 25, 1915

June 29, 1915—EXPOSITION SITE.
Panama-Pacific International Ex-

position Co to David Graham.....

.....June 28, 1915

June 29, 1915—E TWENTIETH AVE

150 N Clement N 25xE 120. J M Peters to whom it may concern..... June 28, 1915
 Ave 30, 1915—S BUSH 137-6 W Montgomery W 70xS 137-6. Sheils Estate Co to S Petersen & Son..... June 28, 1915
 Ave E 25xN 100 Jno J Pratt to whom it may concern. June 25, 1915
 Ave 30, 1915—NO. 1335 FILLMORE. Marion Leventritt to F J Fernhoff..... June 29, 1915
 Ave 30, 1915—E NEVADA 450 N Jarboe N 25xE 70. Arthur Lindberg to whom it may concern..... June 30, 1915
 Ave 30, 1915—E EIGHTH AVE 106 N Lawton N 25xE 120. A S Gunn and Esther Gunn to SE Brown..... June 30, 1915
 Ave 30, 1915—SW GEARY AND Taylor S 137-6xW 137-6. Edward Barron Estate Co to Vincent J Donovan..... June 30, 1915
 Ave 30, 1915—S BUSH 137-6 W Montgomery W 70xS 137-6. Shields Est Co to Ira W Coburn, Inc..... June 30, 1915
 July 1, 1915—S FELL 100 E Steiner E 37-6xS 137-6. Isabella J or Isabel J Murray to Herbert C Cameron..... June 21, 1915
 July 1, 1915—N ELLIS 55 W Jones N 120xW 52-6. The Peter Windeler Co to Schrader Iron Works..... June 25, 1915
 July 1, 1915—W SCOTT 37-8x4 S Sacramento S 60xW 87-6. John V Campbell to whom it may concern..... July 1, 1915
 July 1, 1915—W TWELFTH AVE 200 N Anza N 25xW 120. Jos C Kirby to whom it may concern..... July 1, 1915
 July 1, 1915—E NEVADA 425 N Jarboe N 25xE 70. Arthur Lindberg to whom it may concern. June 30, '15

LIENS FILED

SAN FRANCISCO COUNTY.

Ave 26, 1915—W POWELL 91-3 N Post N 46-1xW 80. Peerless Agencies Co vs J Sokolov.....\$289.20
 Ave 26, 1915—EXPOSITION SITE. Dunnivant-Houghton-Van Sant, Inc. vs Exposition Players Corp fmly Grauman Feature Players cpn, Panama-Pacific International Exposition Co, Lucius K Wilmerding and Henry W Payne.....\$5680
 Ave 26, 1915—EXPOSITION SITE. Olson Mahony Lumber Co vs Steere.....\$312.22
 Italian Government Co and J E Ottava E 50 S 137-6 W 25 N 50 W 25 N 87-6. Empire Planing Mill vs Amabile Porta and Giacomo Almar.....\$256.20
 Ave 28, 1915—W POWELL, bet. Post and Sutter. Pneuletrick Co vs J Sokolov.....\$282.50
 Ave 28, 1915—W POWELL 91-3 N Post 46-5x4 on Powell x 80. E H Bellows (as Pacific Wall Bed Co) vs J Sokolov.....\$453
 Ave 28, 1915—N SUTTER 81 W Taylor N 127-6xW 56-6. General Elec Constr Co vs Clara M Clayton, Josephine L Struve, George W Livingston, Edward P Gaffney and Willetta H Hendrickson.....\$610

June 28, 1915—W POWELL 91-3 N Post N 46-1xW 80. C J Hillard Co vs Joseph or J Sokolov.....\$660
 June 28, 1915—W POWELL 91-3 N Post N 46-1xW 80. Hardwood Interior Co vs J Sokolov.....\$145
 June 29, 1915—W POWELL 91-3 N Post N 46-1xW 80. Rudgegar Merle Co, \$190; American Marble & Mosaic Co, \$287 vs J Sokolov.....
 June 29, 1915—SE ELLIS & FRANKLIN. Pope & Talbot vs L T Turner, Gustave Schultz and Jas J Morrison.....\$261.28
 June 29, 1915—W POWELL 91-3 N Post 46-1x80. Arden Plaster Co vs J Sokolov.....\$166.78
 June 29, 1915—E JONES 67-6 S Pine S 30xE 87-6. Frank J Lane vs John R Schroeder.....\$81.25
 June 30, 1915—E THIRD AVE 200 N Balboa N 25xE 120. J C Dowling vs Carine and Thomas McDonald or MacDonald.....\$157
 June 30, 1915—W POWELL 91-3 N Post N 46-1xW 80. Pacific Portland Cement Co, Consolidated vs Joseph Sokolov.....\$32.78
 June 30, 1915—W POWELL 91-3 N Post N 46xW 80. Progressive Painting Co vs J Sokolov.....\$170.55
 June 30, 1915—SW MOULTON AVE and Fillmore W 137-6xS 60 Herbert I Lauder vs Geo L Streshly, Gus Pates, Thos R Crowley, Mary Crowley, Augustus Regoli, Francis De Belli, Jas P Sweeney and J S Howell.....\$383.50
 July 1, 1915—SW FILLMORE AND Moulton S 60xW 137-6. Pacific Bldg Materials Co vs George L Streshly, Gustave J Pates, Jno S Howell, Augustus Regoli, Francis D Belli, Thos P Crowley, Mary Crowley and J P Sweeney.....\$99.60
 July 1, 1915—N OAK 157-6 W Van Ness Ave W 89-9 N 120 E 68-7 — 40 E 21 S 80. United Materials Co vs The Young Mens Institute Hall Association and Fennell & Wand.....\$456.05
 July 1, 1915—E CORBETT AVE 28-2 SW Mono SW 28-2 E 132 N 22-7 W 128. Mission Lumber Co vs James J Flaherty and H Kesler.....\$447.29
 July 2, 1915—SE CORBETT AVE 28-2 SW Mono SW 28-2 E 132 N 22-7xW 128. Eureka Sash, Door & Moulding Mills vs James J Flaherty and H Kesler.....\$115.95

RELEASE OF LIENS

June 29, 1915—E POWELL 137-6 N California N 68-6xE 137-6. W P Fuller & Co to A W Wilson and Joseph Martin.....
 June 25, 1915—SW EDDY & MASON W 137-6xS 137-6. Victor Eng Co, Ware Hodgkins Lumber Co, W P Fuller & Co, Donald Mowat, Thos Mannix, Earl B Scott, Stanquist & Forbes, Harry T Johnson, Porderer Cornice Works, Fiberstone & Roofing Co, Simulex Window Co, Monarch Iron Works, Bill & Jacobsen, Van Emon Elevator Co, Metropolitan Constr Co, A E Brooke Ridley and Achille G Disl to Down Town Realty Co, James K Prior, Jr, Lester F Prior, Leland S Prior, Mary Prior, Malinda Andrews, Margaret Delger & Josephine Metzner

NOTICE OF NON-RESPONSIBILITY.

July 1, 1915—W THURD 145 N Mission N 70 W 60 N 60 W 47 S 130 E 107. Heyman Bros Co as to improvements on leased property....
 June 28, 1915—E STOCKTON 52-6 N Union N 45xE 75. Catherine Dunne Co as to improvements on leased property.....
 June 26, 1915—S MOULTON 80 W Fillmore W 28-9xS 60. Frances De Belli and Augusto Regoli as to improvements on leased property....
 June 26, 1915—E FILLMORE 25 S Sutter S 30xE 65. Leillie Malich as to improvements on leased property.....

INCORPORATIONS

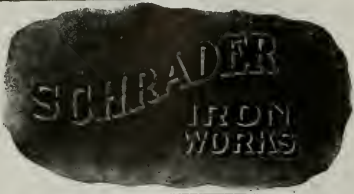
Shadow Creek Mining Co. Capital Stock, \$20,000; subscribed, \$50; shares, \$1 each. Directors—A. Knowles, R. C. Andrus, G. L. Carleton, H. F. Keon, Jr., V. E. Bernhard, 10 shares each. Place of business, San Francisco.
 Palace Hardware Co. (Certified). Capital Stock, \$100,000; subscribed, \$100,000; shares, \$100 each. Directors—L. T. Lewis, 333 shares; F. H. Ellis, 200 shares; E. S. Gray, 160 shares; M. Greenwood, 167 shares; F. M. Greenwood, 100 shares; T. J. Shackelford, 100 shares. Place of business, S. F.
 Oak Creek Land and Water Co. Capital Stock, \$25,000; subscribed, \$3; shares, \$1 each. Directors—G. W. Hawkins, H. G. Worthington, C. M. Steffen, 1 share each. Place of business, San Francisco.
 Kertz Wagner Co. Capital Stock, \$10,000; subscribed, \$30; shares \$10 each Directors—C. F. Wagner, C. F. Wagner, L. W. Kertz, 1 share each. Place of business, San Francisco.

LEASE.

June 26, 1915—S CHESTNUT 137-6 E Pierce E 68-9xS 137-6. T W McClenahan and J W Clark to A Mittelman. Ptn. of receipts.

OAKLAND AND ALAMEDA COUNTY

APARTMENT HOUSES—2, 2 story and base, frame, \$8,000 each. Oakland, Cal. Architects, Rousseau & Rousseau, 114 Sutter street, S. F. Owners, Clyde Investment Co. The building will be erected on the east side of 3rd avenue east of 14th. Each building will contain six apartments of three rooms and bath. Interiors will be finished in pine with some elm panels and hardwood floors. Bath rooms will have tile wainscot. There will be automatic water heaters. Exteriors will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.
 APARTMENT HOUSE—1 story and base, brick, \$65,000. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner, Edward Sommerstrom. The building will be erected on the east side of Alice north of 14th, and has been designed to contain a number of two, three and four room suites. Interior finish will be of pine with some hardwood. Hardwood floors will be used in the living and dining rooms. Plans provide for steam heat, a hot water system and an automatic elevator. Bath rooms will



**Structural Steel
Contractors**

**Works at
HARRISON ST.,
bet. 8th & 9th
San Francisco**

Telephone Market 337

be finished in tile. Marble and tile wainscot will be used. All suites will have wall beds. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and in the hands of the owner who will do the work by Day Labor.

BRIDGE—Reinforced concrete. Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. A resolution of intention providing for the construction of a reinforced concrete bridge 10 feet 4 inches wide and 106 feet 6 inches long with retaining end and wing walls, two 12 inch by 18 inch inlets and 8 inch pipe connections, 4 metal one light electrolites, fitted with 6 inch by 14 inch globes, together with electric conduit, outlet boxes and necessary wiring, all to be constructed in Walnut street from a point 80 feet north of Derryman street over Codornices Creek in the city of Berkeley, has been passed to print by the City Council. Bids will be called for shortly.

BAKERY—2 story and base, frame, \$15,000. Oakland, Cal. Architects, Hutchinson & McLeon, 470 13th street, Oakland. Owners, Robertson & Losh. The building will be erected at the corner of 25th and Broadway, and will cover a considerable ground area. Interior will be finished in pine. There will be special machinery and patent store fronts. Exterior of the building will be faced with pressed brick. Plans are complete and figures are now being taken.

RESIDENCES—2, 2 story and base, frame, \$4,000 each. Oakland, Cal. Architect, none. Owner, C. M. MacGregor, 470 13th street, Oakland. The two houses will be erected on the north side of Mandana Boulevard west of Carlston and each has been designed for a seven-room house with bath and sleeping porch. Interiors will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exteriors will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$4,000. Berkeley, Alameda Co., Cal. Architect, none. Owner, E. A. Hersam, 2568 Le Conte avenue, Berkeley. The dwelling has been designed for a seven-room house with bath and sleeping porch, and will be erected on the Arden road. Interior will be fin-

ished in pine and hardwood with some white enamel. Hardwood floors will be used in the living and dining rooms and reception hall. There will be hot water heating system and open fire places. Mantels will be of brick. Bath room will be finished in Germanstone. Exterior of the house will be covered with shingles. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$6,000. Oakland, Cal. Architect, none. Owner, Dr. Dowell, 515 Bellevue, Berkeley. The dwelling will be erected in the Lake Merritt District, and has been designed for an eight-room house with two baths and sleeping porch. Interior will be finished in pineand hardwood with white enamel in the bed rooms. There will be furnace heat and open fire places. Hardwood floors will be used in the living room, lining room and reception hall. Bath rooms will be finished in tile. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are now being prepared.

UNIVERSITY DORMITORY—4 story and base. Class A construction, \$800,000. Berkeley, Alameda Co., Cal. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. Victor Henderson, Secretary to President Wheeler of the University of California, states that working drawings for the dormitory building to be known as the Benj. I. Wheeler Building on the University Campus, have been completed. The building will be a four-story structure of steel and granite, and will cost in the neighborhood of \$800,000. Bids will be called for at once, according to the secretary. The secretary also states that plans for other important work to be carried out under the \$1,800,000 bond issue at the University are nearly complete, and that the balance of the year will see many of the new buildings under construction.

UNIVERSITY BUILDINGS—3, 1 and 2 story. Class A construction, \$750,000. Berkeley, Alameda Co., Cal. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. Architect John Galen Howard will shortly start working drawings for three more new buildings to be erected at the University of California in Berkeley. The \$750,000 fund bequeathed by Ernest V. Cowell is now available. The buildings will consist of a gymnasium, student infirmary and a stadium. Further mention will be made of the work

Building Contracts Awarded

Oakland

No.	Owner	Contractor	Am't.
1222	Reichold	Owner	1600
1223	1st Trust	Schnebley	2500
1224	Avilla	Brown	1800
1225	Graff	Graff	500
1226	Holloway	Jarvis	400
1227	Sassoe	Campomenosi	3820
1228	Stewart	Stewart	2450
1230	Kohler	Langtry	450
1231	Siegrist	Crow	2300
1232	MacGregor	Owner	3850
1233	Same	Same	3850
1234	Stewart	Stewart	2450
1235	Stewart	Stewart	2450
1238	Salinger	Rodehaver	400
1239	Hill	Hart	1250
1240	Hill	Hart	1200
1241	Harrison	Francis	500
1242	Penton	Parker	400
1243	Walter	Harris	450
1244	Morgensen	Owner	1800
1245	Morse	Morse	1500
1248	German Theat	Zwicker	3600
1249	Forrest	Peterson	8458
1250	Lytgens	Anthony	2020
1253	Gelder	Gelder	1000
1256	Taylor	Laing	500
1257	MacGregor	Owner	4250
1258	MacGregor	Owner	4250
1266	Shaw	Riddell	4250
1267	Anslын	Brown	4500
1268	Anderson	Anderson	1800
1269	Ellison	Taylor	500
1270	Smith	Nichols	5000

DWELLING

(1178) S SIXTY-THIRD 230 W Colby, Oakland. One-story six-room dwlg. Owner...W. S. Young, 533 63rd, Okd. Architect...None. COST, \$1800

DWELLING

(1222) E EIGHTY-THIRD AVE 240 N Holly, Oakland. One-story 5-room dwelling. Owner.....Otto Reichold, 709 Lincoln Ave., Oakland. Architect...O. E. Evans & Co., 2861 Mission, San Francisco. Day's work. COST, \$1600

ALTERATIONS

(1223) SW SEVENTH AND HENRY, Oakland. Alterations (bank fixtures, etc.) Owner.....1st Trust & Savings Bank, 16th and San Pablo, Okd. Architect...None. Contractor...Schnebley, Hostrawser & Pedgrift, 6th and Jackson, Oakland. * COST, \$2500

DWELLING

(1224) N E-TWENTY-THIRD 300 E 21st Ave., Oakland. One-story five-room dwelling. Owner.....F. M. Avilla, 2118 E-21st, Oakland. Architect...None. Contractor...Joe Brown, 1847 E-14th, Oakland. COST, \$1800

ALTERATIONS

(1225) NO. 2329 E-SIXTEENTH, Oakland. Alterations. Owner.....R. E. Graff, Premises. Architect...None. Day's work. COST, \$500

SHED

(1226) E FORTY-SEVENTH AVE on S. P. right-of-way, Oakland. Shed. Owner.....K. K. Holloway, 737 Market, Oakland. Architect...None. Contractor...Walter Jarvis, 242 Oakland Ave., Oakland. COST, \$400

FLATS AND GARAGE
 (227) E CLAREMONT AVE 300 N
 Forest N 50xE 123, Oakland. All
 work for two-story 10-room flats and
 garage.
 Owner.....Paul Sassoe, 424 Cavour,
 Oakland.
 Architect...None.
 Contractor...Eugene Campomenosi, 5174
 Miles Ave., Oakland.
 Filed June 26, '15. Dated June 25, '15.
 Frame up\$ 820
 Plastered 1000
 Completed 1000
 30 days after 1000
TOTAL COST, \$3820
 Bond, none. Limit, 70 days from July
 Forfeit, \$2. Plans and specifications
 filed.

DWELLING
 (1228) E ADELNE 105 S 56th, Oak-
 land. One-story 5-room dwelling.
 Owner.....Ruebeling Stewart, 8 Fair-
 view Ave., Piedmont.
 Architect...None.
 Contractor...B. A. Stewart.
COST, \$2450

ALTERATIONS
 (1230) NO. 1478 SEVENTH, Oakland.
 Alterations.
 Owner.....Miss May Kohler, 1403
 Grove, Oakland.
 Architect...None.
 Contractor...J. R. Langtry, 789 22nd,
 Oakland.
COST, \$450

DWELLING
 (1231) W MILES AVE 220 S Cavour,
 Oakland. One and one-half-story 6-
 room dwelling.
 Owner.....Louis Siegrist, 5182 Miles
 Ave., Oakland.
 Architect...None.
 Contractor...J. W. Crow, 511 56th, Okd.
COST, \$2300

DWELLING
 (1232) N MANDANA BLVD. 200 W
 Carlston, Oakland. Two-story 6-room
 dwelling.
 Owner.....C. M. MacGregor, 170 13th,
 Oakland.
 Architect...None.
 Day's work. **COST, \$3550**

DWELLING
 (1233) N MANDANA BLVD. 250 W
 Carlston, Oakland. Two-story 6-room
 dwelling.
 Owner.....C. M. MacGregor, 470 13th,
 Oakland.
 Architect...None.
 Day's work. **COST, \$3550**

DWELLING
 (1234) E ADELNE 140 S 56th, Oak-
 land. One-story 5-room dwelling.
 Owner.....Ruebeling Stewart, 8 Fair-
 view Ave., Piedmont.
 Architect...None.
 Contractor...B. A. Stewart.
COST, \$2450

DWELLING
 (1235) E ADELNE 70 S 56th, Oak-
 land. One-story 5-room dwelling.
 Owner.....Ruebeling Stewart, 8 Fair-
 view Ave., Piedmont.
 Architect...None.
 Contractor...B. A. Stewart.
COST, \$2450

ADDITION
 (1237) N THIRTEENTH 60 W Grove
 W 120xN 100, Oakland. All work for
 addition to frame lodge building.
 Owner.....Knights of Columbus Hall
 Ass'n of Oakland, 660 13th,
 Oakland.
 Architect...Schirmer, Bugbee & Co.,
 Dalziel Bldg., Oakland.
 Contractor...P. G. Macintyre, 335 34th,
 Oakland.
 Filed June 28, '15. Dated June 28, '15.
 Frame up\$724
 Brown coated and exterior work
 done 721
 Completed and accepted 724
 Usual 35 days 725
TOTAL COST, \$2897
 Bond, \$1500. Sureties, J. W. Realy and
 L. De Lucchi. Limit, 30 days. Forfeit,
 none. Plans and specifications filed.

ADDITION
 (1238) NO. 2336 FRUITVALE AVE.,
 Oakland. Addition.
 Owner.....A. M. Salinger, Broadway
 near 12th, Oakland.
 Architect...None.
 Contractor...E. Rodehaver, 2332 Fruit-
 vale Ave., Oakland.
COST, \$169

DWELLING
 (1239) SE SIXTIETH & STANFORD
 Ave., Oakland. One-story 5-room
 dwelling.
 Owner.....Geo. Hill, 1629 45th Ave.,
 Oakland.
 Architect...None.
 Contractor...N. H. and J. G. Hart, 2131
 E-16th, Oakland.
COST, \$1250

DWELLING
 (1240) NW SIXTIETH & STANFORD
 Ave., Oakland. One-story 4-room
 dwelling.
 Owner.....Geo. Hill, 1629 45th Ave.,
 Oakland.
 Architect...None.
 Contractor...N. H. and J. G. Hart, 2131
 E-16th, Oakland.
COST, \$1200

ALTERATIONS
 (1211) NE HIGH AND E-12th, Oak-
 land. Alterations.
 Owner.....Chas. Harrison, Clay Ten
 Hotel, Oakland.
 Architect...None.
 Contractor...C. O. Francis, 4315 E-12th,
 Oakland.
COST, \$500

ADDITION
 (1212) NO. 1719 FORTY-FIRST AVE.,
 Oakland. Addition.
 Owner.....Dr. S. J. Fenton, Oakland.
 Architect...None.
 Contractor...J. T. Parker, Premises.
COST, \$100

ADDITION
 (1213) NO. 430 STATEN AVE., Oak-
 land. Addition.
 Owner.....C. N. Walter, Premises.
 Architect...None.
 Contractor...D. F. Harris, 1303 Carrison,
 Berkeley.
COST, \$150

DWELLING
 (1211) S ARLINGTON AVE 121 E
 Gaskell, Oakland. One-story 5-room
 dwelling.

Owner.....Morgensen Bros., 554 63rd,
 Oakland.
 Architect...None.
 Day's work. **COST, \$1500**

APARTMENTS
 (1247) E ALICE 231 N 14th, Oakland.
 Four-story brick apartments.
 Owner.....Edward Sommarstrom, 292
 E-12th, Oakland.
 Architect...Richardson & Burrell, Al-
 bany Block, Oakland
 Day's work. **COST, \$65,000**

RETAINING WALL
 (1248) W BOUNDARY LINE LOTS 6 &
 7, Cameron Trct, Oakland. All work
 for reinforced concrete retaining
 wall.
 Owner.....German Old Peoples Home.
 Architect...Adolph Wegner, 678 62nd,
 Oakland.
 Contractor...Julius G. Zwicker.
 Filed June 29, '15. Dated June 12, '15.
 1st and 15th of each month..... 75%
 Usual 35 days 25%
TOTAL COST, \$3600
 Bond, \$1800. Sureties, Karl Otto Ley-
 decker and Paul Goeber. Limit, Aug. 15.
 Forfeit, none. Plans and specifications
 filed.

FRAME DWELLING
 (1249) PTN LOT 68, which lies W line
 parallel W boundary line said Lot
 and distant at L 20 E therefrom; Lot
 69 and ptn Lot 70 lies E line parallel
 E boundary line said Lot 70 and
 distant at L 15 W therefrom Map
 Crocker Highlands, Oakland. All
 work for two-story and basement
 frame dwelling.
 Owner.....Thomas W. Forrest, Okd.
 Architect...Schirmer, Bugbee & Co.,
 Dalziel Bldg., Oakland.
 Contractor...Alfred Peterson, 1201 19th,
 Oakland.

Filed June 29, '15. Dated June 29, '15.
 Frame up and sub roofing on \$1889.50
 Brown coated 2189.50
 Completed and accepted 2189.50
 Usual 35 days 2190.00
TOTAL COST, \$8458.50
 Bond, none. Limit, 100 days. Forfeit,
 none. Plans and specifications filed.

DWELLING
 (1250) SE TAFT AVE 79.44 SW Broad-
 way SW 10 SE 70 NE 28.65 N to pt
 which would be intersected by line
 drawn SE from pt beg and at L to
 Taft Ave NW to pt beg, Oakland. All
 work for one-story 5-room dwelling.
 Owner.....Annie A. Lytgens.
 Architect...None.

Contractor...Mark W. Anthony and
 Chas. W. Heyer Jr. Dalziel
 Bldg., Oakland.
 Filed June 30, '15. Dated June 29, '15.
 Frame up 1/4
 Brown coated 1/4
 Completed 1/4
 30 days after 1/4
TOTAL COST, \$2030

Bond, none. Limit, 60 days. Forfeit,
 none. Plans and specifications filed.

DWELLING
 (1253) N SIXTY-FIRST 300 E San
 Pablo Ave., Oakland. One-story 4-
 room dwelling.
 Owner.....John Gelder, 1131 53rd,
 Oakland
 Architect...None.
 Day's work. **COST, \$1000**

ALTERATIONS

(1256) NO. 1413 FORTY-SIXTH AVE., Oakland. Alterations.
Owner.....John Taylor, Premises.
Architect...None.
Contractor..P. M. Laing, 4506 Melrose Ave., Oakland.
COST, \$300

DWELLING

(1257) N MANDANA BLVD 300 W Carleton, Oakland. Two-story 8-room dwelling.
Owner.....C. M. MacGregor, 470 13th, Oakland.
Architect...None.
Day's work. COST, \$4250

DWELLING

(1258) N MANDANA BLVD 150 W Carleton, Oakland. Two-story 8-room dwelling.
Owner.....C. M. MacGregor, 470 13th, Oakland.
Architect...None.
Day's work. COST, \$4250

FRAME DWELLING

(1266) LOT 12 BLK 1 Map Thousand Oaks Court, Oakland Tp. All work for two-story 8-room frame dwlg.
Owner.....Walter A. Shaw.
Architect...None.
Contractor..Riddell Bldg. Service Corporation.

Filed July 1, '15. Dated June 23, '15.
Frame up ¼
Brown coated ¼
Completed and accepted ¼
Usual 35 days ¼
TOTAL COST, \$4250
Bond, none. Limit, 90 days Forfeit, plans and specifications, none.

FRAME FLATS

(1267) LOTS 7 AND 8 BLK "J," being on E College Ave near Bryant Ave, Oakland. All work for two-story frame flats.
Owner.....Mynard and Eva Ansllyn, 1474 7th, Oakland.
Architect...M. L. Newsom, 1748 Broadway, Oakland.
Contractor..W. C. Brown, 1624 64th Ave., Oakland.

Filed July 1, '15. Dated June 30, '15.
Frame up, Lot at SE Cor. 56th and Adeline, being Lot 6 and N 1818 Lot 5 Blk "E," Oakland.....
Brown coated, 3000 Syndicate Sixes Completed and accepted, Lot "E" College Ave and Bryant, being Lots 5 and 6 Blk "J" — Tract, Oakland
Usual 35 days.....Cash \$1500
TOTAL COST, \$4500

Bond, none. Limit, 90 days. Forfeit, \$5 per day. Plans and specifications filed.

DWELLING

(1268) SW AGUA VISTA 175 E 38th, Oakland. One-story 5-room dwelling
Owner.....F. F. Anderson, 2102 26th Ave., Oakland.
Architect...None.
Contractor..J. P. Anderson, 672 41st, Oakland.
COST, \$1800

REPAIRS

(1269) NO. 1721 BRIDGE AVE., Oakland. Fire repairs.
Owner.....Frank Ellison, Premises.
Architect...None.

Contractor..Guy Taylor, 138 Walsworth Ave., Oakland.
COST, \$500

DWELLING

(1270) NW WELLINGTON & EDGEWOOD AVE., Oakland. Two-story 9-room dwelling.
Owner.....Mary F. Smith, 608 12th, Oakland.
Architect...None.
Contractor..G. Ellis Nichols, 764 Lydia, Oakland.
COST, \$5000

Building Contracts Awarded

Berkeley.

1229	Broad	Broad	2800
1236	Seaborn	Bixbey	10000
1246	Berkeley	Field	43000
1247	Sommarsstrom	Owner	65000
1254	Heitman	Sealed	4000
1255	Peake	Peake	2125
1259	Wingate	Brodrick	2565
1260	Peake	Engelsen	400
1261	Hearton	Blithroad	1780
1262	Peake	Engelsen	3800
1263	Berkeley	Mason	4000
1264	Heron	Warren	6155
1265	Jackson	Junk	6495
1271	Schneider	Carlson	694
1272	Cal Fruit	Decker	1862

APARTMENTS

(1229) S BANCROFT WAY 190 W Shattuck Ave., Berkeley. Two-story 8-room apartments.
Owner.....Mrs. J. M. Broad, 2117 Kittredge, Berkeley.
Architect...None.
Contractor..A. H. Broad, 2117 Kittredge, Berkeley.
COST, \$2800

ALTERATIONS

(1236) SE HASTE AND DANA, Berkeley. Alter dwelling into apartments.
Owner.....J. Seaborn, Cor. Haste and Dana, Berkeley.
Architect...None.
Contractor..R. B. Dixbey, 2447½ Webster, Berkeley.
COST, \$10,000

DWELLING

(1215) E MATTHEWS 35 S Ward, Berkeley. One-story 4-room dwelling
Owner.....S. E. Morse, 918 Mono, Berkeley.
Architect...None.
Contractor..T. O. Morse, 3040 Hilcyon, Berkeley.
COST, \$1500

FRAME SCHOOL

(1246) S UNIVERSITY AVE. bet. Bonar and Bruce, Berkeley. One-story and basement frame school.
Owner.....City of Berkeley.
Architect...Walter D. Reed, Oakland Bank of Savings Bldg., Okd
Contractor..Fred H. Field, 4317 Gilbert, Oakland.
COST, \$43,000

FRAME DWELLING

(1254) LOT 17 BLK 6 Map Claremont, Berkeley All work for two-story frame dwelling.
Owner.....Hubert Heitman, 5566 Lawton Ave, Oakland.
Architect...M. I. Diggs, 2444 Bowditch Berkeley.
Contractor..H. H. Welder, 829 E-19th,

Oakland.

Filed June 30, '15. Dated June 23, '15.
2nd floor joists in place.....\$920
Ready for plaster..... 920
Plastered 920
Completed and accepted..... 920
Usual 35 days..... 920

TOTAL COST, \$1400

Bond, \$2000. Surety, Mary J. Patterson. Limit, 90 days after June 29. Forfeit, \$5. Plans and specifications filed.

DWELLING

(1255) N COLUSA AVE 70 N Posen, Berkeley. One-story 5-room dwlg.
Owner.....F. R. Peake Co., 2127 University Ave., Berkeley.
Architect...None.
Day's work. COST, \$2125

DWELLING

(1259) E JOSEPHINE 229 S Hopkins, Berkeley. One-story 6-room dwlg.
Owner.....Chas. B. Wingate.
Architect...None.
Contractor..W. L. Brodrick, 1201 Colusa Ave., Berkeley.
COST, \$2565

GARAGE

(1260) W CLAREMONT AVE 100 S Alcatraz, Berkeley. Garage.
Owner.....F. R. Peake Co., 2127 University Ave., Berkeley.
Architect...None.
Contractor..Chris. Engelsen, 562 39th, Oakland. COST, \$400

DWELLING

(1261) W CALIFORNIA 80 S Lincoln, Berkeley. One-story 5-room dwlg.
Owner.....Mrs. H. Hearton, 1726 California, Berkeley.
Architect...None.
Contractor..D. T. Blithroad, 1732 Milvia, Berkeley.
COST, \$1780

DWELLING

(1262) W CLAREMONT AVE 100 S Alcatraz Ave., Berkeley. Two-story 8-room dwelling.
Owner.....F. R. Peake Co., 2127 University Ave., Berkeley.
Architect...None.
Contractor..Chris. Engelsen, 562 39th, Oakland. COST, \$3800

DWELLING

(1263) W MENDOCINO 323.45 S Indian Rock Path, Berkeley. Two-story 7-room dwelling.
Owner.....Berkeley Development Co. & Cora E. L. Fuller, Shattuck and Addison, Ekly.
Architect...H. H. Gutterson, 80 Post, San Francisco.
Contractor..Mason-McDuffie Co., Addison and Shattuck, Ekly.
COST, \$4000

BRICK STORES

(1264) LOT 13 and ptn Lots 12 and 14 Terminal Tract, Berkeley. All work for one-story brick stores.
Owner.....E. A. Heron, 607 Thomson Bldg., Oakland.
Architect...John Hudson Thomas, 1st National Bank Bldg., Ekly.
Contractor..C. H. Warren, 2200 Atherton, Berkeley.
Filed July 1, '15. Dated June 17, '15.
Side walks up.....\$1231.10
Ready for plaster..... 1231.10

Plastered	1231.10
Accepted	1231.10
Usual 35 days	1231.10
TOTAL COST, \$6155.55	
Bond, none. Limit, 50 days. Forfeit, none. Plans and specifications filed	

FRAME DWELLING

(1265) PTN LOT 10 and ptn Lot — "Atalaya" Map University Terrace, Berkeley. All work for two-story 7-room frame dwelling.
Owner.....H. F. Jackson, 1631 Euclid Ave., Berkeley.
Architect...None.
Contractor...Junk - Riddell Investment Co., 2247 Telegraph Ave., Berkeley.

Filed July 1, '15. Dated June 8, '15.	
Frame up	\$1500
Brown coated	1500
Completed and accepted	1500
Usual 35 days	1995
TOTAL COST, \$6495	
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications, none.	

ALTERATIONS

(1271) UNDERNEATH SHATTUCK Hotel on Shattuck Ave. frontage, Berkeley. Alterations to store.
Owner.....G. L. Schneider, 2219 Shattuck Ave., Berkeley.
Architect...John Hudson Thomas, 1st National Bank Bldg., Bkly.
Contractor...Herman Carlson, 1627 Parker, Berkeley.

Filed July 2, '15. Dated July 1, '15.	
Accepted	\$520.00
Usual 35 days	174.70
TOTAL COST, \$694.70	
Bond, none. Limit, 15 days. Forfeit, none. Plans and specifications filed.	

ELECTRIC WORK

(1272) BLK 12 TRACT "B" Berkeley L. T. I. Ass'n, being Blk bounded by Second, Gilman, Third and Harrison Streets, Berkeley. Electric work for alterations to 2-story frame factory.
Owner.....California Cured Fruit Exchange, 417 Market, S. F.
Architect...Washington J. Miller, 45 Kearny, San Francisco.
Contractor...Decker Elec. Constr. Co., 111 New Montgomery, S. F.
Filed July 2, '15. Dated June 28, '15.
On 1st and 15th of each month 75%
Usual 35 days 25% || TOTAL COST, \$1862 plus 10% Bond, \$950. Surety, New England Casualty Co. Limit, 35 days. Forfeit, \$25 per day. Plans and specifications filed. | |

Building Contracts Awarded

ALAMEDA COUNTY.

No.	Owner.	Contractor	Amt.
1251	Dennison	Arada	500
1252	Brandt	Culbertson	1550

REPAIRS

(1251) NO. 2150 SANTA CLARA, Alameda. Repairs.
Owner.....W. E. Dennison, Prem.
Architect...None.
Contractor...Thos. Arada, 861 Oak, Ala.
COST, \$500

DWELLING

(1252) NO. 836 TAYLOR AVE., Alameda. One-story 3-room dwelling.
Owner.....Mrs. F. Brandt, 834 Taylor Ave., Alameda.
Architect...None.

Contractor...D. E. Culbertson, 1623 21st Ave., Oakland.

COST, \$1550

COMPLETION NOTICES.

ALAMEDA COUNTY

June 25, 1915—S FIFTIETH 131.85 E Shafter Ave, being E 33 Lot 23 Map Lawton Ave Tract, Oakland. Charles McArthur to whom it may concern.....June 24, 1915

June 25, 1915—LOT 14 Oakvale Claremont, Bkly. W H Sellander to Oscar Sairanen.....June 22, 1915

June 25, 1915—W LE ROY AVE 75 N Virginia, Bkly. Jennie Kinghorn Jones to Gustaf Johanson.....June 21, '15

June 25, 1915—NE TAFT & COLLEGE Aves N 38.67 E 129 S 35 th 143.12 to pt beg, Okd. Hugh and Mrs Hugh O'Keane to W S Simpson & Co.....June 24, 1915

June 29, 1915—BROADWAY NO 1444, Oakland. Realty Syndicate Co to C L Cummins.....June 16, 1915

June 29, 1915—SW CENTRAL AND Park Aves S 120xW 80, Ala. E E Littlefield to Fletter & Winlund.....June 23, 1915

June 29, 1915—PTN LOT 7 BLK "A" Claremont Ave Tract, Okd. P Schnoor to C O Bradhoff.....June 24, '15

June 29, 1915—PRINCE NO. 2327, Bkly. George A Crawfis to George W Patton.....June 28, 1915

June 30, 1915—SE FOURTH AND J Sts., Livermore. Chas M Nissen to Wm Norlensen.....June 24, 1915

June 30, 1915—LOT 25 BLK "U" Map Reshdv'n Ptn Blk "U" Vernon Park, Okd. Emma Sperry to C Texdahl.....June 30, 1915

July 1, 1915—NE 11.94 LOT 24 and SW 28.12 Lot 25 Map McMillan Tract, Okd. George W Nunes to whom it may concern.....June 30, 1915

July 1, 1915—NO. 156 HILLCREST Road, being Lot 9 Blk 10, Claremont Tract, Bkly. Alice Powell Alvord to H F Wrampelmeier.....June 10, 1915

July 1, 1915—LOT 117 Map Woodlawn Park, Okd. John E Murphy to whom it may concern.....June 30, 1915

July 1, 1915—PTN LOTS 14, 15 AND 16 Blk "T" Map Sheridan Tract, Okd. Mary E Greenwood to C A Doss.....June 26, 1915

July 2, 1915—NE 10 LOT 32 and SW 30 Lot 33 Map Kelly Tract ptn Watson 100 acres, Okd. S G Rankin to whom it may concern.....June 30, 1915

July 2, 1915—W 30 LOT 26 and E 40.01 Lot 24 Blk 2 Map Rock Ridge Place, Okd. David Hadden to H F Wrampelmeier.....July 1, 1915

July 2, 1915—LOT 9 BLK "T" Map Kenwood Park, Okd. Lewis & Mitchell, Inc to R B Litton.....July 1, 1915

July 2, 1915—NO. 1612 SPRUCE, Bkly. Frank Dutra by James W Plachek to Frank Button.....June 24, 1915

July 2, 1915—NO. 754 SANTA RAY Ave, being Lot 2 Blk "O" East Piedmont Heights, Okd. Sara M Gillespie to Erle Saxton.....June 23, '15

LIENS FILED

ALAMEDA COUNTY.

June 25, 1915—SE CHANNING WAY and San Pablo Ave S 80xE 100, Bkly. Hodge & Collins Lumber Co to Delilah M and O W Fowler, Oakland Bank of Savings and Realty Syndicate\$204.16

June 29 1915—SE KEITH AVE at Intersection N boundary line City of Berkeley; S and E along Keith Ave and Shasta to land Wickham Havens, Inc; N 200 W to pt beg, Bkly. F W Foss Co vs L Marburg\$51.69

July 2, 1915—SW LYON AVE 711.45 E 38th Ave E 40.04 SW 157.11, Okd. Eureka Mill & Lumber Co vs William M Sheldon & W C Tait.....\$17.55

RELEASE OF LIENS

ALAMEDA COUNTY.

June 26, 1915—LOTE 1 AND 2 Map Higgins Tract, Bkly. Hodge & Collins Lumber Co to Delilah M and O W Fowler and Oakland Bank of Savings\$204.16

June 30, 1915—E PIEDMONT AVE 166-6 N Dwight Way E 109xS 50, Bkly. Wallace J Biddle to Isabella Gillett\$305

July 2, 1915—LOT 37, Jeanette Van Ah Tract, Okd. Dolan Bros to H A Biglow and K M Sheridan.....\$275

SAN JOSE AND THE SANTA CLARA VALLEY

FACTORY—1 story, frame and corrugated iron. Cost not stated. South San Francisco, San Mateo Co., Cal. Architect, none. Owners Wihl's Manufacturing Co., 505 Gough street, S. F. The building will cover a considerable ground area. No interior finish is specified. There will be a cement floor. Special machinery will be installed. Exterior of the building will be covered with corrugated iron. Plans are complete and in the hands of the owners who will do the work by Day Labor.

MUNICIPAL GAS WORKS' STORAGE TANKS, ETC.—Cost not stated. Santa Clara, Santa Clara Co., Cal. Engineer, City Engineer, Santa Clara. Owners, City of Santa Clara. Thirteen bids were received by the City Trustees for six high pressure storage tanks, one single stage gas compressor and two high pressure gas radiators and strainers for the municipal gas works. All bids were taken under advisement until the next meeting.

RESIDENCE — 2 story and base, frame, 4,000, Burlingame, San Mateo Co., Cal. Architect, Carl Geiffuss, 46 Kearny street, S. F. Owner's name withheld. The dwelling has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living and dining rooms and reception hall. There will be furnace heat and open fire places. Bath-tubs will be of tile or brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement

plaster on metal lath. Plans are being prepared.

RESIDENCE—2 story and base, frame, \$8,500. San Mateo, San Mateo Co., Cal. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. The dwelling will contain nine rooms, three baths and sleeping porch. Interior will be finished in pine and redwood with some white enamel in the bed rooms. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

CONVENT—2 story and base, reinforced concrete, \$100,000. Santa Clara, Santa Clara Co., Cal. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Carmelite Sisters. The building will be erected on property adjoining the Santa Clara College ground, and has been designed in the Spanish Colonial style. Interior will be arranged for a large chapel, living apartments and recreation rooms. Pine and hardwood trim and hardwood floors will be used. There will be steam heat and oil burning furnace, vacuum cleaning and hot water system. Bath rooms will be finished in tile. Exterior of the building will be faced with cement plaster. A clay tile roof will be used. Plans are complete and figures are being taken.

ROAD IMPROVEMENTS—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications have been completed for the improvement of Union avenue and Foxworth road in District No. 5, for the improvement of the Ford road in District No. 2, and for the improvement of the Tully, White and Felipe roads in District No. 3. Bids are being taken and will be opened on July 19th. Plans and specifications can be secured from the County Clerk.

HIGHWAY COMPLETION AND PAVING. Cost not stated. Santa Clara, Santa Clara Co., Cal. Engineer, City Engineer, Santa Clara. Owners, City of Santa Clara. The Town Trustees are again considering the proposition of completing the state highway in Santa Clara. Nearly two miles of the road is uncompleted here. The paving question will also be brought up at the meeting of the Town Trustees.

ROAD IMPROVEMENT—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Plans are complete and figures will be opened on July 15th for the improvement of the Monterey-Castroville road in the Alisal and Pajaro Road District. Plans can be secured from the County Clerk.

FURNISHING CEMENT—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Bids will be opened on July 19th for furnishing and delivering 50,000 barrels of cement to be used in highway construction. Complete information can be secured from the County Clerk at San Jose.

Contracts Awarded.

BRIDGES—Steel and concrete, \$29,030. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, W. L. Gillham & Son, 113 West Santa Clara street, San Jose. Contract price, \$29,030.

BRIDGES—10, concrete, \$20,125.93. Burlingame, San Mateo Co., Cal. Engineer, City Engineer, Burlingame. Owners, City of Burlingame. Contractors, Eaton & Smith, S. F. Contract price, \$20,125.93.

REDWOOD TANKS—15, 3,000-gallon, \$461.25 each. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, Alphonse Lorentz, 201 West Julian avenue, San Jose. Contract price, \$461.25 each.

FURNISHING 1-INCH GALVANIZED IRON PIPE—\$2,307.83. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, Mark-Lally Co., S. F. Contract price, \$2,307.83 for 29,000 feet.

CRUSHED ROCK—\$5,688.75. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, Stanfield & Knowles, San Jose. 5,125 cubic yard at \$5,688.75.

PAVING, GRADING AND CURES—Cost not stated. Burlingame, San Mateo Co., Cal. Engineer, City Engineer, Burlingame. Owners, City of Burlingame. Contractors, Raish Improvement Co., S. F. Contract price not stated.

BUILDING CONTRACTS.

SANTA CLARA COUNTY.

FRAME BUNGALOW, ETC.

SOUTH SIDE OF QUIMBY ROAD, San Jose. All work for frame bungalow and tank house.

Owner.....H. Dabel, San Jose.

Architect.....None.

Contractor.....J. G. Laebben, \$97 Delmas Ave., San Jose.

Filed June 22, '15. Dated June 19, '15.

Tank house completed.....\$266.00

House frame up.....500.50

1st coat plaster on.....500.50

House completed.....500.50

Usual 35 days.....500.50

TOTAL COST, \$2366.00

Bond, none. Limit, 120 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

UNIVERSITY AVE near High St., Palo Alto.

Alterations to store building.

Owner.....Madison-Thoits Co., Inc., Palo Alto, Cal.

Architect.....H. Shermund, Mills Bldg., San Francisco.

Contractor.....C. A. Brady, San Mateo.

Filed June 28, '15. Dated June 25, '15.

Work completed.....\$1028.75

Usual 35 days.....1028.75

TOTAL COST, \$2077.50

Bond, limit, forfeit, none. Plans and specifications filed.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

DAM—Reinforced concrete. Cost not stated. Healdsburg, Sonoma Co., Cal. Engineer, none. Owners, Sonoma County. A subscription list for funds with which to build a dam in

the Russian River this summer is being circulated in Healdsburg and vicinity. The Northwestern Pacific Railroad Company has contributed together with many other concerns in favor of the proposition.

WHARF—Timber construction. Cost not stated. Petaluma, Sonoma Co., Cal. Engineer, none. Owner, Dr. Macleay, Petaluma. Work has been started by William Call on the construction of a wharf for Dr. Macleay. The structure will be 1200 feet long, commencing at the Vosen warehouse extending to the Steamer Gold landing. The piles for the work are now on the ground and the work will be rushed to completion.

BRIDGE REPAIRS—\$2,000. Napa, Napa Co., Cal. Engineer, City Engineer, Napa. Owners, City of Napa.

At the last meeting of the Council the City Engineer was instructed to prepare the plans and specifications for repairing the Third street bridge, which will cost in the neighborhood of \$1,000 and the electric road \$950. The plans will be presented at the next meeting of the Council when a call for bids will probably be issued.

DEPHLEGMATOR BUILDING—3 story, steel frame. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, Engineering Dept. Shell Oil Co., 343 Sansome street, S. F. Owners, Shell Oil Co. Contractors, Guttie-ben Bros., New Cal. Bldg. S. F. Contract price not stated.

RESIDENCE—1½ story and base, frame, \$4,000. Ross Valley, Marin Co., Cal. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. The dwelling will contain seven rooms, bath and sleeping porch. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor under the direction of the architect.

PIPE LINE CONSTRUCTION—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, Engineering Dept. Valley Pipe Line Co., 343 Sansome street, S. F. Owners, Valley Pipe Line Co. A supplemental order has been issued by the Railroad Commission authorizing the Valley Pipe Line Company to issue 18,975 shares of stock to the Anglo-Saxon Petroleum Company. The proceeds of the sale of this stock will be used in the construction of a pipe line from the property of the California Oil Fields, Ltd., near Coalinga, Fresno County, to Martinez, Contra Costa County.

STREET AND SEWER WORK—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer Hohl, Sausalito. Owners, Town of Sausalito. Plans and specifications for the local improvement district "F," submitted by Town Engineer Hohl, have been approved. Bids on the Work will soon be called for.

STREET ELECTROLIERS—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer Hohl, Sausalito. Owners, Town of Sausalito. At

the last meeting of the Town Trustees, Town Engineer Hohl submitted plans for the electrolyser system on Water street and Caledonia street, and the board will take it up at the July meeting. There will be 65 lights, 150 feet apart on each side of the street, and it is estimated that the cost per front foot will be about 40 cents.

STREET PAVING, ETC.—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Plans have been completed and figures are now being taken for the improvement of 10th street from Barrett to Pennsylvania. Bids will be opened on July 12th. Complete information can be secured from the City Clerk.

Contracts Awarded

SEWER CONSTRUCTION—Cost not stated. Sausalito, Marin Co., Cal. Engineer, City Engineer, Sausalito. Owners, City of Sausalito. Contractors, Austin-De Camp Co., 14 Montgomery street, S. F. Contract price not stated.

STREET PAVING—Cost not stated. Concord, Contra Costa Co., Cal. Engineer, Town Engineer, Concord. Owners, Town of Concord. Contractors, Municipal Improvement Co., Richmond. Contract price not stated.

RETAINING WALL—Concrete, \$898. Vacaville, Solano Co., Cal. Engineer, none. Owners, Town of Vacaville. Contractor, George Nash, Vacaville. Contract price, \$898.

SPUR TRACK CONSTRUCTION—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer's name not given. Owners, Los Angeles Pressed Brick Co., J. H. Nicholl & John G. Gerlach. Contractors, Chadwick & Sykes, Crocker Bldg., S. F. Contract price not stated.

SCHOOL CLOCK SYSTEM—\$1,300. Petaluma, Sonoma Co., Cal. Architect, Brainard Jones, Petaluma. Owners, Petaluma School District. Contractors, Standard Electric Time Co., S. F. Contract price \$1,300.

BUILDING CONTRACTS

MARIN COUNTY.

FRAME DWELLING

MILL VALLEY. All work including excavating, grading, carpenter work, etc., for one-story and basement frame dwelling.

Owner.....Lucille Quedens, San Francisco.

Architect...Falch & Knoll, Hearst Bldg., San Francisco.

Contractor...Myrl R. Crane, 74 Miramar Ave., San Francisco.

Filed June 26, '15. Dated June 23, '15.
Floor joists on.....\$275
Brown coated.....875
When completed.....875
Usual 35 days.....875

TOTAL COST, \$3,500

Bond, \$1,750. Surety, Pacific Coast Casualty Co. Limit, 70 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

ROSS. Excavating, carpenter work, etc., for one and one-half-story frame residence.

Owner.....Caroline D Moore, Ross.

Architect...W. Garden Mitchell and Chas. E. Hodges, Bankers' Investment Bldg., S. F.

Contractor...Collman & Collman Co., Sharon Bldg., S. F.

Filed June 26, '15. Dated June 21, '15.
Frame up.....\$2185
Roof on.....2185
When completed.....2185
Usual 35 days.....2185

TOTAL COST, \$8750

Bond, \$4370. Surety, Fidelity & Deposit Co. of Maryland. Limit, 80 working days. Forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

BOILERS, ETC.

AT REFINERIES PLANT AT AVON. All work for one battery of two Class "E" No. 17 Stirling boilers with Peabody Oil Furnace and one steam still including brick stack and flue.

Owner.....Associated Oil Co.

Engineer...A. F. L. Bell, Sharon Bldg., San Francisco.

Contractor...J. I. Thorpe & Son, 521 Anza, San Francisco.

Filed June 23, '15. Dated June 11, '15.
Payments of.....75%
Usual 35 days.....25%
TOTAL COST, \$1692

Bond, \$850. Surety, Pacific Coast Casualty Co. Limit, forfeit, none. Plans and specifications filed

GRANDSTAND AND BLEACHERS

BLKS 889 AND 94 as shown in official Map of City of Pittsburg. All work for erection of grandstand and bleachers and work designed by architect.

Owner.....Pittsburg Athletic Association, Pittsburg, Cal.

Architect...C. C. Peppin, Hotel Melrose, Pittsburg, Cal.

Contractor...G. W. Nickell and R. H. Old, Pittsburg, Cal.

Filed June 23, '15. Dated June 22, '15.
Grandstand frame up.....\$350.50
All frame work up.....350.50
When grandstand and bleachers accepted.....350.50
Usual 35 days.....350.50

TOTAL COST, \$1,402.00

Bond, \$800. Sureties, W. J. Buchanan and A. V. McFaul. Limit, 16 days from agreement. Forfeit, none. Plans and specifications filed.

DWELLING

LOT 33 BLK 35 in Nicholl MacDonald Avenue Civic Center, Richmond, Cal. All work for one-story 6-room dwelling with excavated basement.

Owner.....B. V. Fene, San Jose, Cal.

Architect...None.

Contractor...John & James Sullivan, Richmond, Cal.

Filed June 23, '15 Dated June 16, '15.
Basement completed.....\$500
Enclosed and rough plaster on...500
Completed, ready for acceptance...500
Usual 35 days.....500

TOTAL COST, \$2,000

Bond, \$1,000. Sureties, H. Kueffer and M. A. Hays. Limit, 75 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

CONTRA COSTA COUNTY.

RECORDED ACCEPTED
June 21, 1915—LOTS 23 AND 24 BLK 1, Nicholl MacDonald Ave Civic Center, Richmond. Annie A Fiddes to Sullivan Bros.....June 9, 1915

LIENS FILED.

CONTRA COSTA COUNTY.

RECORDED AMOUNT
June 22, 1915—LOT NO. 12 BLK 4, City of Pittsburg. Salvatore Aiella De Concittina vs Salvatore Luna...\$322.50

COMPLETION NOTICES

MARIN COUNTY.

RECORDED ACCEPTED
June 26, 1915—SAN RAFAEL. Frank W Joesten to J E Warner.....June 22, 1915

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

BRIDGE—Reinforced concrete and steel. Cost not stated. Fresno, Fresno Co., Cal. Engineer, County Surveyor, Fresno. Owners, Fresno County. The Fresno County Supervisors have decided after long arguments by representatives of the Stimson-Burrell Reclamation District, to build a 110-foot concrete bridge over Fish Slough on the Elkhorn grade, instead of a 200-foot bridge as asked by the Reclamation District. Bids on this work will soon be called for.

BRIDGE—Reinforced concrete. Cost not stated. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. Plans are complete and bids are now being taken for the construction of a reinforced concrete bridge over Cameron Creek in the Second Road District. Bids will be opened on July 16th. Plans and specifications can be secured from the County Clerk at Visalia.

SCHOOL—1 story and base, frame, \$15,000. Maricopa, Kern Co., Cal. Architects, Thomas B. Wiseman and Charles H. Biggar, Producers' National Bank Bldg., Bakersfield. Owners, Maricopa High School District. The building will cover an area of 50 by 90 feet, and has been designed to contain class rooms, office and departments of domestic science and manual training. Interior will be finished in pine with some maple floors. There will be a central heating system and oil burning furnace. Modern school plumbing will be installed. Exterior of the building will be faced with cement plaster on metal lath. Plans are complete and figures are being taken.

IRRIGATION FLUME—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, F. C. Hermann, Modesto. Owners, Modesto Irrigation District. Plans and specifications prepared by Engineer F. C. Hermann of the Modesto Irrigation Board for the last of the big flumes which the Modesto Irrigation District is preparing to put in, were submitted to the directors and were approved. Bids will probably be called for at the next meeting of the

plaster on metal lath. Plans are being prepared.

RESIDENCE—2 story and base, frame, \$3,500. San Mateo, San Mateo Co., Cal. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. The dwelling will contain nine rooms, three baths and sleeping porch. Interior will be finished in pine and redwood with some white enamel in the bed rooms. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

CONVENT—2 story and base, reinforced concrete, \$100,000. Santa Clara, Santa Clara Co., Cal. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Carmelite Sisters. The building will be erected on property adjoining the Santa Clara College ground, and has been designed in the Spanish Colonial style. Interior will be arranged for a large chapel, living apartments and recreation rooms. Pine and hardwood trim and hardwood floors will be used. There will be steam heat and oil burning furnace, vacuum cleaning and hot water system. Bath rooms will be finished in tile. Exterior of the building will be faced with cement plaster. A clay tile roof will be used. Plans are complete and figures are being taken.

ROAD IMPROVEMENTS—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications have been completed for the improvement of Union avenue and Foxworth road in District No. 5, for the improvement of the Ford road in District No. 2, and for the improvement of the Tully, White and Felipe roads in District No. 3. Bids are being taken and will be opened on July 19th. Plans and specifications can be secured from the County Clerk.

HIGHWAY COMPLETION AND PAVING. Cost not stated. Santa Clara, Santa Clara Co., Cal. Engineer, City Engineer, Santa Clara. Owners, City of Santa Clara. The Town Trustees are again considering the proposition of completing the state highway in Santa Clara. Nearly two miles of the road is uncompleted here. The paving question will also be brought up at the meeting of the Town Trustees.

ROAD IMPROVEMENT—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Plans are complete and figures will be opened on July 15th for the improvement of the Monterey-Castroville road in the Alisal and Pajaro Road District. Plans can be secured from the County Clerk.

FURNISHING CEMENT—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Bids will be opened on July 19th for furnishing and delivering 50,000 barrels of cement to be used in highway construction. Complete information can be secured from the County Clerk at San Jose.

Contracts Awarded.

BRIDGE—Steel and concrete, \$29,030. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, W. L. Gillham & Son, 113 West Santa Clara street, San Jose. Contract price, \$29,030.

BRIDGES—10, concrete, \$20,125.93. Burlingame, San Mateo Co., Cal. Engineer, City Engineer, Burlingame. Owners, City of Burlingame. Contractors, Eaton & Smith, S. F. Contract price, \$20,125.93.

REDWOOD TANKS—15, 3,000-gallon, \$461.25 each. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, Alphonse Lorentz, 201 West Julian avenue, San Jose. Contract price, \$461.25 each.

FURNISHING 1-INCH GALVANIZED IRON PIPE—\$2,307.83. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, Mark-Lally Co., S. F. Contract price, \$2,307.83 for 29,000 feet.

CRUSHED ROCK—\$5,688.75. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, Stanfield & Knowles, San Jose. 5,125 cubic yard at \$5,688.75.

PAVING, GRADING AND CURBS—Cost not stated. Burlingame, San Mateo Co., Cal. Engineer, City Engineer, Burlingame. Owners, City of Burlingame. Contractors, Raich Improvement Co., S. F. Contract price not stated.

BUILDING CONTRACTS.

SANTA CLARA COUNTY.

FRAME BUNGALOW, ETC.
SOUTH SIDE OF QUIMBY ROAD, San Jose. All work for frame bungalow and tank house.

Owner.....H. Dabel, San Jose.
Architect...None.
Contractor, J. G. Luebben, 997 Delmas Ave., San Jose.

Filed June 22, '15. Dated June 19, '15.
Tank house completed.....\$260.00
House frame up.....500.50
1st coat plaster on.....500.50
House completed.....500.50
Usual 35 days.....500.50
TOTAL COST, \$2363.00

Bond, none. Limit, 120 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

UNIVERSITY AVE near High St., Palo Alto. Alterations to store building.
Owner.....Madison-Thoits Co., Inc., Palo Alto, Cal.
Architect...H. Shermund, Mills Bldg., San Francisco.

Contractor...C. A. Brady, San Mateo.
Filed June 28, '15. Dated June 25, '15.
Work completed.....\$1038.75
Usual 35 days.....1038.75
TOTAL COST, \$2077.50

Bond, limit, forfeit, none. Plans and specifications filed.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

DAM—Reinforced concrete. Cost not stated. Healdsburg, Sonoma Co., Cal. Engineer, none. Owners, Sonoma County. A subscription list for funds with which to build a dam in

the Russian River this summer is being circulated in Healdsburg and vicinity. The Northwestern Pacific Railroad Company has contributed together with many other concerns in favor of the proposition.

WHARF—Timber construction. Cost not stated. Petaluma, Sonoma Co., Cal. Engineer, none. Owner, Dr. Macleay, Petaluma. Work has been started by William Call on the construction of a wharf for Dr. Macleay. The structure will be 1200 feet long, commencing at the Vosen warehouse extending to the Steamer Gold landing. The piles for the work are now on the ground and the work will be rushed to completion.

BRIDGE REPAIRS—\$2,000. Napa, Napa Co., Cal. Engineer, City Engineer, Napa. Owners, City of Napa.

At the last meeting of the Council the City Engineer was instructed to prepare the plans and specifications for repairing the Third street bridge, which will cost in the neighborhood of \$1,000 and the electric road \$950. The plans will be presented at the next meeting of the Council when a call for bids will probably be issued.

DEPILEGMATOR BUILDING—3 story, steel frame. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, Engineering Dept. Shell Oil Co., 343 Sansome street, S. F. Owners, Shell Oil Co. Contractors, Guttie-ben Bros., New Call Bldg., S. F. Contract price not stated.

RESIDENCE—1½ story and base, frame, \$4,000. Ross Valley, Marin Co., Cal. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. The dwelling will contain seven rooms, bath and sleeping porch. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor under the direction of the architect.

PIPE LINE CONSTRUCTION—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, Engineering Dept. Valley Pipe Line Co., 343 Sansome street, S. F. Owners, Valley Pipe Line Co. A supplemental order has been issued by the Railroad Commission authorizing the Valley Pipe Line Company to issue 18,975 shares of stock to the Anglo-Saxon Petroleum Company. The proceeds of the sale of this stock will be used in the construction of a pipe line from the property of the California Oil Fields, Ltd., near Coalinga, Fresno County, to Martinez, Contra Costa County.

STREET AND SEWER WORK—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer Hohl, Sausalito. Owners, Town of Sausalito. Plans and specifications for the local improvement district "F," submitted by Town Engineer Hohl, have been approved. Bids on the Work will soon be called for.

STREET ELECTROLIERS—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer Hohl, Sausalito. Owners, Town of Sausalito. At

the last meeting of the Town Trustees, Town Engineer Hohl submitted plans for the electroliser system on Water street and Caledonia street, and the board will take it up at the July meeting. There will be 65 lights, 150 feet apart on each side of the street, and it is estimated that the cost per front foot will be about 40 cents.

STREET PAVING, ETC.—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Plans have been completed and figures are now being taken for the improvement of 10th street from Barrett to Pennsylvania. Bids will be opened on July 12th. Complete information can be secured from the City Clerk.

Contracts Awarded

SEWER CONSTRUCTION—Cost not stated. Sausalito, Marin Co., Cal. Engineer, City Engineer, Sausalito. Owners, City of Sausalito. Contractors, Austin-De Camp Co., 14 Montgomery street, S. F. Contract price not stated.

STREET PAVING—Cost not stated. Concord, Contra Costa Co., Cal. Engineer, Town Engineer, Concord. Owners, Town of Concord. Contractors, Municipal Improvement Co., Richmond. Contract price not stated.

RETAINING WALL—Concrete, \$898. Vacaville, Solano Co., Cal. Engineer, none. Owners, Town of Vacaville. Contractor, George Nash, Vacaville. Contract price, \$898.

SPUR TRACK CONSTRUCTION—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer's name not given. Owners, Los Angeles Pressed Brick Co., J. H. Nicholl & John G. Gerlach. Contractors, Chadwick & Sykes, Crocker Bldg., S. F. Contract price not stated.

SCHOOL CLOCK SYSTEM—\$1,300. Petaluma, Sonoma Co., Cal. Architect, Brainard Jones, Petaluma. Owners, Petaluma School District. Contractors, Standard Electric Time Co., S. F. Contract price \$1,300.

BUILDING CONTRACTS

MARIN COUNTY.

FRAME DWELLING

MILL VALLEY. All work including excavating, grading, carpenter work, etc., for one-story and basement frame dwelling.

Owner.....Lucille Quedens, San Francisco.

Architect...Falch & Knoll, Hearst Bldg., San Francisco.

Contractor...Myrl R. Crane, 74 Miramar Ave., San Francisco.

Filed June 26, '15. Dated June 23, '15.
Floor joists on.....\$875
Brown coated.....875
When completed.....875
Usual 35 days.....875

TOTAL COST, \$3,500

Bond, \$1750. Surety, Pacific Coast Casualty Co. Limit, 70 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

ROSS. Excavating, carpenter work, etc., for one and one-half-story frame residence.

Owner.....Caroline D Moore, Ross.

Architect...W. Garden Mitchell and Chas. E. Hodges, Bankers' Investment Bldg., S. F.

Contractor...Collman & Collman Co., Sharon Bldg., S. F.

Filed June 26, '15. Dated June 21, '15.
Frame up.....\$2185
Roof on.....2185
When completed.....2185
Usual 35 days.....2185

TOTAL COST, \$8750

Bond, \$4370. Surety, Fidelity & Deposit Co. of Maryland. Limit, 80 working days. Forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

BOILERS, ETC.

AT REFINERIES PLANT AT AVON. All work for one battery of two Class "E" No. 17 Stirling boilers with Peabody Oil Furnace and one steam still including brick stack and flue.

Owner.....Associated Oil Co.

Engineer...A. F. L. Bell, Sharon Bldg., San Francisco.

Contractor...J. I. Thorpe & Son, 521 Anza, San Francisco.

Filed June 23, '15. Dated June 11, '15.
Payments of.....75%
Usual 35 days.....25%

TOTAL COST, \$1692

Bond, \$850. Surety, Pacific Coast Casualty Co. Limit, forfeit, none. Plans and specifications filed

GRANDSTAND AND BLEACHERS

BLKS 889 AND 94 as shown in official Map of City of Pittsburg. All work for erection of grandstand and bleachers and work designed by architect.

Owner.....Pittsburg Athletic Association, Pittsburg, Cal.

Architect...C. C. Peppin, Hotel Melrose, Pittsburg, Cal.

Contractor...G. W. Nickell and R. H. Old, Pittsburg, Cal.

Filed June 25, '15. Dated June 22, '15.
Grandstand frame up.....\$350.50
All frame work up.....350.50
When grandstand and bleachers accepted.....350.50
Usual 35 days.....350.50

TOTAL COST, \$1402.00

Bond, \$800. Sureties, W. J. Buchanan and A. V. McFaul. Limit, 16 days from agreement. Forfeit, none. Plans and specifications filed.

DWELLING

LOT 33 BLK 35 in Nicholl MacDonald Avenue Civic Center, Richmond, Cal. All work for one-story 6-room dwelling with excavated basement.

Owner.....B. V. Fene, San Jose, Cal.

Architect...None.

Contractor...John & James Sullivan, Richmond, Cal.

Filed June 29, '15 Dated June 16, '15.
Basement completed.....\$500
Enclosed and rough plaster on.....500
Completed, ready for acceptance.....500
Usual 35 days.....500

TOTAL COST, \$2000

Bond, \$1000. Sureties, H. Kueffer and M. A. Hays. Limit, 75 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

CONTRA COSTA COUNTY.

RECORDED ACCEPTED
June 21, 1915—LOTS 23 AND 24 BLK
1, Nicholl MacDonald Ave Civic
Center, Richmond. Annie A Fiddes
to Sullivan Bros.....June 9, 1915

LIXES FILED.

CONTRA COSTA COUNTY.

RECORDED AMOUNT
June 22, 1915—LOT NO. 12 BLK 4,
City of Pittsburg. Salvatore Ajella
De Concittina vs Salvatore Iuna...
.....\$332.50

COMPLETION NOTICES

MARIN COUNTY.

RECORDED ACCEPTED
June 26, 1915—SAN RAFAEL. Frank
W Joesten to J E Warner.....
.....June 22, 1915

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

BRIDGE—Reinforced concrete and steel. Cost not stated. Fresno, Fresno Co., Cal. Engineer, County Surveyor, Fresno. Owners, Fresno County. The Fresno County Supervisors have decided after long arguments by representatives of the Stimson-Burrell Reclamation District, to build a 110-foot concrete bridge over Fish Slough on the Elkhorn grade, instead of a 200-foot bridge as asked by the Reclamation District. Bids on this work will soon be called for.

BRIDGE—Reinforced concrete. Cost not stated. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. Plans are complete and bids are now being taken for the construction of a reinforced concrete bridge over Cameron Creek in the Second Road District. Bids will be opened on July 16th. Plans and specifications can be secured from the County Clerk at Visalia.

SCHOOL—1 story and base, frame, \$15,000. Maricopa, Kern Co., Cal. Architects, Thomas B. Wiseman and Charles H. Diggars, Producers' National Bank Bldg., Bakersfield. Owners, Maricopa High School District. The building will cover an area of 50 by 90 feet, and has been designed to contain class rooms, office and departments of domestic science and manual training. Interior will be finished in pine with some maple floors. There will be a central heating system and oil burning furnace. Modern school plumbing will be installed. Exterior of the building will be faced with cement plaster on metal lath. Plans are complete and figures are being taken.

IRRIGATION FLUME—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, F. C. Hermann, Modesto. Owners, Modesto Irrigation District. Plans and specifications prepared by Engineer F. C. Hermann of the Modesto Irrigation Board for the last of the big flumes which the Modesto Irrigation District is preparing to put in, were submitted to the directors and were approved. Bids will probably be called for at the next meeting of the



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directors. The Dry Creek is the last of the big projects. It will be 730 feet long, and will be constructed of reinforced concrete. The flume will be supported by concrete pillars. The width of the flume will be 18 feet and depth 9½ feet. The greatest elevation will be 40 feet. A sand box at the upper end of the flume will stop the sand which at present clogs the lower stretches of the main canal and costs the district about \$2,000 annually for removal. A spillway will be arranged as an outlet to Dry Creek. The approximate cost of the structure is \$75,000.

IRRIGATION TUNNEL — \$50,000. Oakdale, Stanislaus Co., Cal. Engineer, Burton Smith, Oakdale. Owners, Oakdale Irrigation District. Plans are being prepared by the Oakdale Irrigation District for an 8,000-foot tunnel to be bored through Cape Horn to water all the north side of the irrigation district. By the construction of the tunnel, Chief Engineer Smith figures that the district can do away with the maintenance of eight miles of ditches and flumes.

STATE HIGHWAY CONSTRUCTION — Cost not stated. California. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Plans and specifications have been approved and bids will be opened on July 26th for the following highway work: Colusa, 0.3 miles asphalt, 55 feet wide; Marin, 4 miles, graded; Monterey, 11.7 miles, Portland cement concrete; Santa Barbara, 11.4 miles, graded, and San Luis Obispo, 10 miles, Portland cement concrete. Plans and specifications can be secured from the State Highway Commission at Sacramento or from its branch offices in San Francisco and Los Angeles.

HIGHWAY CONSTRUCTION — Cost not stated. California. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Plans have been completed and figures will be opened on July 19th for the construction of state highways in the following counties: Alameda, 5.8 miles, Portland cement concrete; Santa Clara, 8.9 miles, Portland cement concrete; Los Angeles, 4.9 miles, Portland cement concrete. Plans and specifications can be secured from the office of the Highway Commission in Sacramento or the branch office in San Francisco and Los Angeles.

BUILDING CONTRACTS

FRESNO COUNTY.

DWELLING

NO. 2063 WASHINGTON AVE., Fresno. Erect dwelling.

Owner.....E. I. Harris, 1816 Fresno St., Fresno.

Architect...None.

Contractor...W. T. Turner.

COST, \$2500

DWELLING

LOTS 40 AND 41 Hazelton Addition, Fresno. Erect dwelling.

Owner.....H. E. Tipton, 1137 K St., Fresno.

Architect...None.

Contractor...J. B. Cobhey, 689 Callish St., Fresno.

COST, \$1250

DWELLING

LOTS 11 AND 12 BLK 40, Arlington Heights Tract, Fresno. Erect dwlg.

Owner.....W. S. Johnson.

Architect...None.

Contractor...Lee R. Duncan, 1102 Franklin St., Fresno.

COST, \$1000

DWELLING

LOTS 23 AND 24 BLK 24, Fresno. Erect dwelling.

Owner.....L. Occhionero.

Architect...None.

Contractor...J. Soranno, 1520 Calaveras St., Fresno.

COST, \$900

ADDITION

NO. 3251 ILLINOIS ST., Fresno. Addition.

Owner.....O. N. Leathers, Premises.

Architect...None.

Day's work.

COST, \$1000

NOTICE OF NON-RESPONSIBILITY.

FRESNO COUNTY.

June 20, 1915—LOTS 5 AND 6, California Ave Heights, Fresno. A W Gearhart as to improvements on leased property

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED

June 24, 1915—W ½ OF S ½ SEC 26 13-20, Fresno. Geo I Helm to whom it may concern.....June 21, 1915

ACCEPTED

E. H. Williams

Chalmer Munday

Munday & Williams

Attorneys-at-Law

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June 25, 1915—LOTS 42 AND 43 Van Ness Heights, Fresno. H D Thornton to whom it may concern.....June 10, 1915
June 26, 1915—LOTS 19, 20 AND 21 Blk 11, Fresno Heights, Fresno. Jas C and Elmer R Morris to whom it may concern.....June 21, 1915
June 29, 1915—LOTS 3 AND 4 BLK 3, Claremont Park, Fresno. L F Higinbotham to whom it may concern.....June 24, 1915
June 29, 1915—LOTS 11 AND 12 E 10 feet Lot 10 Blk 5, College Add'n., Fresno. Geo S Smith to whom it may concern.....June 25, 1915

LIENS FILED

FRESNO COUNTY.

RECORDED	AMOUNT
June 24, 1915—PTN LOT 32 BLK 1, Bloomington Park Tract, Fresno.	
Ward Henry vs H A Allen and F J Craycroft	\$78
June 24, 1915—LOTS 5 AND 6 California Ave Heights, Fresno. Fas-	

sett Lumber Co vs Matherly & Nielson, Clarence Harris and A W Gearhart\$119
 June 27, 1915—NE ¼ SEC 33, 13-15,
 Fresno. S A Greene vs Arthur R
 Briggs Estate and M Bowers.....\$165

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA.

BRIDGES—5, reinforced concrete. Cost not stated. Pitt River, Shasta Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Plans have been completed and figures are now being taken for the construction of the Pitt River bridge, a 395-foot structure, and four other small bridges to be erected along the right-of-way of the state highway in Shasta County. Bids for the work will be opened on July 19th. Plans and specifications can be secured from the office of the State Highway Commission.

BRIDGES—Reinforced concrete and steel. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. When the Board of Supervisors met to open bids for the construction of three bridges across sand sloughs in Tehama County, District Attorney Gernon advised them they could not legally enter into contracts during this fiscal year for the work to be paid out of funds from taxes during the fiscal year 1915-16. The seven bids received were returned and new figures will be called for during July. The total cost of the three bridges will be about \$200,000. The contractors submitting bids on the work stated that the steel bridges with an 8-foot span will cost, complete, about \$200,000. A concrete girder type in the neighborhood of \$150,000, which a combination arch and girder will cost about \$170,000.

HIGHWAY BRIDGES—3, reinforced concrete and steel. Cost not stated. Marysville, Yuba Co., Cal. Engineer, County Surveyor, Marysville. Owners, Yuba County. Plans have been completed and figures are now being called for the construction of three highway bridges in Yuba County. The Best Slough bridge will be 120 feet long, the Dry Creek bridge 200 feet and the Grasshopper bridge 80 feet. Bids will be opened on July 14th. Plans and specifications can be secured from the County Clerk.

BRIDGE—Reinforced concrete. Cost not stated. Dunsmuir, Siskiyou Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be opened on July 19th by the State Highway Commission for the construction of a large reinforced concrete bridge over the Sacramento River at Dunsmuir. The structure will be 332 feet long with a clear span of 180 feet. Plans and specifications can be secured from the State Highway Commission.

WAREHOUSE—1 story, frame, \$2,000. Stockton, San Joaquin Co., Cal. Architect, Joseph Losekann, San Joaquin Bldg., Stockton. Owners, Pacific Tannery Co. The building will cover an area of 70 by 100 feet, and will be erected on Fremont street between El Bando and Hunter. No interior finish will be used. Exterior of the

building will be covered with corrugated iron. Plans are complete and figures are being taken.

RICE MILL—2 and 4 story, mill constructed, \$40,000. Colusa, Colusa Co., Cal. Architect's name not given. Owner, W. H. Packard, Colusa. It has been definitely decided to accept W. H. Packard's suggestion of the erection of a large rice mill in Colusa. It will take \$40,000 to build the proposed building and install the machinery. The money will be raised at once so as to have work on the structure start in the near future. According to information received the main building will be four stories high while the freight department and offices will be two stories of brick and mill construction.

HOTEL—2 story and base, frame, \$25,000. McCloud, Siskiyou Co., Cal. Architects, Dolliver & Swain, Royal Insurance Bldg., S. F. Owners, McCloud River Lumber Co. The building has been designed to contain a total of 70 rooms, several baths, dining room and office. Interior will be finished in pine. There will be steam heat and a hot water system. Exterior of the building will be covered with rustic. Plans are complete and the work is now being done by Day Labor.

HOSPITAL—1½ story and base, frame. Cost not stated. Crescent City, Del Norte Co., Cal. Architects, Ackerman & Reese, Eureka. Owners, Del Norte County. The building will be designed to contain two wards and several private rooms. Interior will be finished in pine and redwood. Modern hospital plumbing and a central heating system will be installed. Exterior will be covered with shingles. Plans are being prepared and further mention will be made of the work.

JAIL—1 story and base, reinforced concrete. Cost not stated. Crescent City, Del Norte Co., Cal. Architects, Ackerman & Reese, Eureka. Owners, Del Norte County. Preliminary plans are being prepared for a one-story jail building. Interior will be finished in pine. There will be special cell work, a steam heating system and hot water system. Exterior of the building will be faced with cement plaster. Further mention will be made of the work when bids are called.

COURT HOUSE ADDITION—2 story, frame and plaster, \$25,000. Crescent City, Del Norte Co., Cal. Architects, Ackerman & Reese, Eureka. Owners, Del Norte County. Plans have been approved for a two-story addition to the recent county court house. The new portion of the building will contain a court room, judges' chambers, jury room, lavatory and store room. Interior will be finished in pine. There will be a central heating system. Exterior of the building will be covered with cement plaster on metal lath. Plans are being prepared.

LIBRARY—1 story and base, brick and steel. Cost not stated. Gridley, Butte Co., Cal. Architect, Chester Cole, Chico. Owners, Town of Gridley. The building will cover an area of 40 by 44 feet, and has been designed in the classic style. Interior will be finished in pine with maple floors. Some metal stacks will be installed. There will be a central heating system.

probably warm air. Exterior will be faced with pressed brick. Plans are complete and figures are being taken.

LIBRARY—2 story and base. Class A construction, \$100,000. Sacramento, Cal. Architect, Chief Building Inspector W. B. Kohn, Sacramento. Owners, City of Sacramento. Preliminary plans have been presented for approval for this building, which will be erected at the corner of 9th and I streets. Besides the usual rooms, the designer has provided for two large open air reading rooms. Details of construction cannot be given until the Library Trustees act on the plans. Further mention will be made of the work.

RESIDENCE—2 story and base, frame, \$7,000. Colusa, Colusa Co., Cal. Architect, F. E. St. John, Berkeley. Owner, J. H. Sherer, Colusa. The dwelling will contain nine rooms, bath and sleeping porches. Interior will be finished in pine and hardwood with some white enamel in the bed rooms. There will be hardwood floors. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are complete and the owner will take figures.

RESIDENCE—2 story and base, frame, \$6,000. Stockton, San Joaquin Co., Cal. Architect, Joseph Losekann, San Joaquin Bldg., Stockton. Owner, Sheriff W. H. Ricks. The dwelling will contain eight rooms and two baths. Interior will be finished in pine, hardwoods and white enamel. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and figures are being taken.

SCHOOL ADDITIONS—Frame and concrete, \$20,000. Sacramento, Cal. Architect's name not given. Owners, City of Sacramento. Superintendent of Schools O. C. Hughes reported to the City School Board that the desired improvements in the Lincoln and Marshall schools will cost \$9,200 and \$1,700 respectively. The board voted to ask the County Treasurer to sell \$20,000 of school bonds so the work may be done and other improvements made. It is the plan to put in four more rooms at the Lincoln and two at the Marshall.

SCHOOL—1 story and base, hollow tile or frame. Cost not stated. Galt, Sacramento Co., Cal. Architect, Clarence C. Cuff, Gehsner Bldg., Sacramento. The building has been designed to contain six class rooms and an auditorium. Interior will be finished in pine with maple floors in the class rooms. There will be a central heating system, probably steam heat and oil burning furnace. Slate black boards will be used. Modern school plumbing is specified. Exterior of the building will be faced with cement plaster. Bids are now being taken for both frame and hollow tile construction and on the work as a whole, and with the heating and ventilating sep-

arate. Plans can be secured from the architect. Bids will be opened on July 17th.

STREET PAVING—Cost not stated. Woodland, Yolo Co., Cal. Engineer, City Engineer, Woodland. Owners, City of Woodland. Plans and specifications having been approved, the City Trustees have passed resolutions of intention for the paving of Main, from Third street to the Southern Pacific depot; North College, from Main to Becamel street, and South Third, from Main to Pandegast.

PUMPING PLANT—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has rejected all bids submitted for the construction of the pumping plant for the new park in the northwestern part of the city on account of the bids being too high. New bids will probably be called for.

SEWERS AND STREET WORK—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Specifications have been approved by the City Council for the sewer of Harrison, Worth, Anderson, Jefferson and Jackson streets, as provided under Resolution No. 516, were approved. Two other resolutions were also adopted. Both call for street improvements.

WATER SYSTEM EXTENSION—Cost not stated. Corning, Tehama Co., Cal. Engineer, City Engineer, Corning. Owners, City of Corning. Plans are complete and figures are being taken for extensive water system extensions. The work may be let as a whole or divided into the following parts: Sewer extension and water extension. Bids will be opened on July 16th. Plans and specifications can be secured on application to the City Clerk.

SEWER WORK—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans are complete for four 6 and 8 inch vitrified Harrison and Jackson streets. Bids salt glazed iron stone pipe sewers in will be opened for this work on July 13th. Plans and specifications can be secured from the City Clerk.

IRRIGATION DAM—Reinforced concrete, \$250,000. Mono Lake, Mono Co., Cal. Engineer's name not given. Owners, private capital. Duncanson-Harrelson Co., Chronicle Bldg., S. F., has been awarded the contract for the construction of the big reinforced concrete irrigation dam, which is to be erected in Mono County near Mono Lake. Private individuals are developing what is to be one of the largest irrigation projects in California, and this dam is the first of a number of large construction enterprises to be undertaken. The dam will cost about \$250,000 and work will be started at once.

Contracts Awarded

SEWERS, ETC.—\$2,368. Newcastle, Placer Co., Cal. Engineer, Town Engineer, Newcastle. Owners, Town of Newcastle. Contractors, Leach & De Camp, 14 Montgomery street, S. F. Contract price, \$2,368.

BRIDGE—Timber and concrete, \$1,226. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors,

C. E. McCarthy and F. W. Haskell, Red Bluff. Contract price, \$1,226.

BRIDGE REPAIRS—Steel and concrete, \$50,000. Colusa, Colusa Co., Cal. Engineer, County Surveyor, Colusa. Owners, Colusa County. Contractors, Missouri Valley Bridge and Iron Works, Leavenworth, Kans. Contract price, \$50,000. This contract is subject to the approval of the receivership of the Northern Electric Co.

BUILDING CONTRACTS

SACRAMENTO COUNTY.

ALTERATIONS

N 40 OF S 60 FEET LOT 4 BLK 14, M. 3rd and 4th, Sacramento. Finish and remodel three-story frame lodging house.

Owner.....M. Cecchetti and R. Fujita, 1210 4th St., Sacramento.

Architect...None.
Contractor...Chas Vanina, 2022 M St., Sacramento.

COST, \$600

RAISE AND FINISH DWELLING

W 20 FEET OF LOT 6 BLK J, K, 21st and 22nd, Sacramento. Raise and finish first story of dwelling.

Owner.....W. A. Green, 2117 K St., Sacramento.

Architect...None.
Contractor...G. E. Harvie, 2212 T St., Sacramento.

COST, \$1100

REMODEL FRONT

W 20 FEET N 1/2 LOT 3 BLK I, J, 3rd and 4th, Sacramento. Remodel front and interior of brick store building.

Owner.....Mary Ellen Smith.
Architect...None.
Lessee....Sal Beck Lee, 316 I St., Sacramento.

Contractor...Lee M., 228 I St., Sacramento.

COST, \$500

ADDITION

NO. 3219 MALDRONE AVE.; Lot 12 Blk 29 South Sacramento. Addition to residence.

Owner.....G. E. Harvie, 2212 T St., Sacramento.

Architect...None.

Day's work. COST, \$750

REMODEL

NO. 1012 TENTH ST., Sacramento. Remodel store front and interior.

Owner.....Moehr & Yoerk, 11th & K Sts., Sacramento.

Architect...None.
Lessee.....Eastern Outfitting Co., 1024 J St., Sacramento.

Contractor...Chas. Vanina, 2022 M St., Sacramento.

COST, \$500

FRAME BAKERY

NO. 1912 FOURTH ST., Sacramento. Two-story frame bakery and 5-room dwelling.

Owner.....A. F. Terra, 1908 3rd St., Sacramento.

Architect...None.
Contractor...M. F. Terra, 2515 9th St., Sacramento.

COST, \$2200

ALTERATIONS

K ST., bet. 4th and 5th Lots 1 and 2, K, L, 4th and 5th Sts., Sacramento.

Alterations to basement of store.
Owner.....Weinstock Lubin & Co.,
Premises.

Architect...None.
Contractor...Chas. Vanina, 2022 M St.,
Sacramento.

COST, \$1436

REPAIRS

NO. 1826 V ST., W 1/2 Lot 4 Blk V, W, 18th and 19th Sts., Sacramento. Repair fire damage to residence.

Owner.....Wm. H. Rickard, 1224 O St., Sacramento.

Architect...None.
Contractor...M. F. McKenzie, 1126 T St.,
Sacramento.

COST, \$1015

TANK, ETC.

NOS. 1321, 1325 H ST., Sacramento. Place 1500 gallon tank in sidewalk space and install oil burners.

Owner.....C. W. & H. C. Johnson,
1323 H St., Sacramento.

Architect...None.
Contractor...Latourette-Fical Co., 55th
and Sacramento Aves.,
Sacramento.

COST, \$1000

FRAME DWELLING

NO. 2205 G ST., Lot 270 Boulevard Park, Sacramento. Two-story frame dwlg.

Owner.....Rose A. Lindner, 2311 H St., Sacramento.

Architect...None.
Contractor...John M. E. Morrill, 1009
Yale St., Sacramento.

Filed June 29, '15. Dated June 23, '15.
COST, \$4363

COMPLETION NOTICES

SACRAMENTO COUNTY.

RECORDED ACCEPTED
June 29, 1915—LOT 38 East Sacramento. G C Snider to whom it may concern.....June 28, 1915

LOS ANGELES AND SOUTHERN CALIFORNIA.

BRIDGE—Steel and reinforced concrete. Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Bids opened by the City Council for the construction of the Carrillo bridge, which will span the Mission Creek, are as follows: A and B denotes where wood and concrete piles are bid respectively. Munoz & Munoz, L. A., Mayberry & Parker plans, (h) \$17,771; city plans (b) \$18,973. Mann & Knox, M. & B. plans, (h) \$15,945; city (h) \$19,750. Flaherty, \$19,682; Leonard & Day, \$19,242. Boardman Construction Co., L. A., M. & P., (a) \$19,158; (h) \$18,958; city (a) \$21,276; (b) \$21,076; Flaherty \$19,658; L. & D. \$21,105. Mesmer & Rice, L. A., M. & P. plans (a) \$20,661; (b) \$21,273; city (a) \$25,079; (b) \$25,588. P. O. Engstrom Co., L. A., M. & P. plans (a) \$16,543; (b) \$166,652; city (a) \$19,043; (h) \$19,152. E. A. Carland, M. & P. plans (a) \$20,435; (b) \$20,625; city (a) \$21,700; (b) \$21,800. Mercereau Bridge and Construction Co., L. A., M. & P. plans (a) \$18,391; (b) \$18,967; city (a) \$22,127; (b) \$22,878; L. & D. plans, \$26,150. Putnam & Stone, Pasadena, M. &

PORTLAND AND OREGON

VIADUCT—Reinforced concrete and steel. Cost not stated. Portland, Ore. Engineer, Commissioner of Public Docks, Worcester Bldg., Portland. Owners, City of Portland. Plans are being prepared for a viaduct 20 feet wide and 150 feet long to be erected over 17th street. Plans will be completed shortly when further mention will be made of the work.

DOCK CONSTRUCTION—Timber and concrete. Cost not stated. Portland, Ore. Engineer, Engineering Dept. Shell Oil Co., 313 Sansome street, San Francisco. Owners, Shell Oil Co. Contractors, J. A. Eachern Co., Conlan Bldg., Portland. Contract price not stated.

DOCK BUILDING—1 story, reinforced concrete. Cost not stated. Portland, Ore. Engineer, Commissioner of Public Docks, Worcester Bldg., Portland. Owners, City of Portland. The building will be erected on property adjoining Municipal Dock No. 1. The dock building will be 330 feet long and 176 feet wide. Plans provide for a 4-ply asbestos roof and sprinkling system. The floors will be of concrete, as well as the piling and fire walls. Plans are being prepared.

LOGGING ROAD—\$400,000. Silverton, Ore. Engineer's name not given. Owners, Silver Falls Timber Co., Northwestern Bank Bldg., Portland. The Silver Falls Timber Co. has increased its capital stock \$400,000, which stock issue will be used in the construction of a logging railroad. The company has 30,000 acres of timber land near Silverton and has a 20-mile logging road in operation, and the extension will be about 7 miles in a hilly country. Work on the road has been started.

RESIDENCE—2½ story and base, brick veneer, \$15,000. Portland, Ore. Architect, none. Owner, H. M. Boyajohn, Panama Bldg., Portland. The dwelling will be erected on Fairview Boulevard, and has been designed to contain ten rooms and three baths. Interior will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room, library and reception hall. There will be a central heating system and open fire places. A hot water circulating system is also specified. Bath rooms will be finished in tile. Exterior of the dwelling will be covered with pressed brick veneer. Plans are complete and in the hands of the owner who will do the work by Day Labor.

Contracts Awarded

RESIDENCE—2½ story and base, brick and frame, \$30,000. Portland, Ore. Architect, Earle A. Roberts, Selma Bldg., Portland. Owner, J. H. Henry, Contractors, Trenchell & Parsons, Portland. Contract price, \$30,000.

PRIDGEE—Steel, \$13,383. Linn, Linn Co., Ore. Engineer, County Surveyor, Linn. Owners, Linn County Contractors, Pacific Iron Works, Portland. Contract price, \$13,383.

HOSPITAL—1 story and base, hollow tile, \$11,000. Portland, Ore. Architects, Tourtelotte & Hummel

Rothchild Bldg., Portland. Owners, Emanuel Hospital Association. Contractor, J. A. Blackstrand, Chamber of Commerce Bldg., Portland. Contract price, \$14,000.

ENCOURAGING COMMENTS ON AMERICAN COMMERCE.

[Commercial Attaché A. H. Baldwin, London.]

In a study of relative commercial conditions in the United States and in the United Kingdom there is found much to encourage confidence in the ability of American business firms to compete with success for a share of the world's trade. Attention has often been called to the alleged defects in our methods of handling export commerce, and such delinquencies as poor packing, brusque forms of correspondence, indifference to customers' instructions, inadequate postage, and similar matters have received ample publicity. It is therefore reassuring to find that some of our most active competitors pay sincere tribute to certain excellent characteristics of American trade.

A report just issued by the British Royal Commission on the natural resources, trade, and legislation of certain portions of His Majesty's dominions contains the minutes of evidence taken in Newfoundland in 1914, in which it appears that witnesses before the commission often compared the trade, products, and methods of the United States with those of Great Britain to the advantage of our own country.

For example, Mr. Frederick William Ayre (director of Ayre & Sons (Ltd.), general merchants and importers, representing the Board of Trade of St. John's Newfoundland), commenting on the trade of the colony in boots and shoes, attributed the ascendancy of the United States in this field to the fact that "leading makers (in the United States) have carefully studied the local requirements and have been and are prepared to meet all demands as to shapes, styles, etc., in contrast to British makers, whose loss of trade was largely due to conservatively refusing to meet the demands of the market."

Reference was made to the growing circulation of magazines and newspapers from the United States as stimulating trade with that country. "These advertisements are very interesting to read," it was significantly added.

The intrinsic value of the British article is claimed to be usually superior to that of the American product, but the Americans are said to gain through the article being slightly and more attractive to the eye. Patriotism in the colony of Newfoundland would tend to divert the trade to Great Britain wherever possible.

Other comments of interest to our manufacturers follow:

It was alleged that the dyeing of American cotton goods was inferior to the English in resisting washing and the effects of the sun.

Another witness, the manager of a boot-and-shoe factory, spoke of the "much better-looking footwear from America, even if not so durable as the British." This charge of inferior durability of the American shoe is also often heard in Great Britain.

SEATTLE AND WASHINGTON

APARTMENT HOUSE—3 story and base, brick or reinforced concrete, \$75,000. Seattle, Wash. Architect, J. P. Everett, Boston Bldg., Seattle. Owner, West Wheeler, Colman Bldg., Seattle. The building will be erected at the southwest corner of 4th avenue and Marion street, covering an area of 60 by 120 feet. Apartments will be arranged in suites of two, three and four rooms. Interior will be finished in pine and hardwood veneer with some hardwood floors. Plans provide for steam heat, automatic elevator, vacuum cleaning and a hot water system. Bath rooms will be finished in tile. Marble wainscot will be used in the entrance. Exterior of the building will be faced with pressed brick or cement plaster. Plans are complete and figures will be called for at once.

DOCK ADDITION—Frame and concrete, \$50,000. Seattle, Wash. Engineer, Chief Engineer J. R. West, Seattle. Owners, City of Seattle. Plans are now being prepared for the construction of two additions of four stories each to the present dock building. Plans will be complete in about 30 days and figures will be called. Further mention will be made of the work.

HOTEL—4 story and base, brick and steel. Cost not stated. Seattle, Wash. Architect, J. P. Everett, Walker Bldg., Seattle. Owners, West & Wheeler. The building will be erected at the southwest corner of Marion and 4th avenue, covering an area of 55 by 120 feet. Foundations and walls have been designed for additional stories. The building will be arranged for a large number of single rooms and baths. Interior will be finished in pine with some hardwood veneer. There will be steam heat, an automatic elevator and hot water system. Bath rooms will have tile floors and wainscot. Exterior of the building will be faced with pressed brick. Plans are now being prepared.

Contracts Awarded.

BIRIDGE—Steel and concrete, \$28,888. Mayfield, Wash. Engineer, City Engineer, Mayfield. Owners, City of Mayfield.

RESIDENCE—2½ story and base, brick veneer, \$60,000. Seattle, Wash. Architects, Cutter & Malmgren, Spokane. Owner, J. T. Heffernan, 108 Railroad avenue, South Sacramento, Cal. Contractor, J. N. Johnson, 1273 Whitman avenue, Seattle. Contract price, \$60,000.

BANK AND OFFICES—3 story and base, reinforced concrete, \$150,000. Vancouver, B. C. Architects, Somervell & Putnam, White Bldg., Seattle, Wash. Owners, Merchants' Bank of Canada. Contractors, Prudy & Henderson, Henry Bldg., Seattle. Contract price, \$150,000.

APARTMENT HOUSE—3 story and base, brick veneer, \$65,000. Seattle, Wash. Architect, J. A. Crenzler, New York Bldg., Seattle. Owner, F. F. Adams. Contractors, Johnson & Odum, Mutual Life Bldg. Seattle. Contract price, \$65,000.

HALF OF ALL FOREST FIRES ARE PREVENTABLE.

Analysis of Reports Shows That More Than 50 Per Cent of Great Annual Loss of Life and Property Is Due to Avoidable Causes.

WASHINGTON, D. C.—With the opening of the season of fire danger on most of the national forests, the forest service is sending broadcast a warning that more than half of the forest fires in the United States are due to carelessness or other preventable causes, starting from campers, railroad locomotives, brush burning, incendiaries, and sawmills.

This statement is based on an analysis of statistics compiled from the forest fire records of the last season, when more than 7,000 fires were reported on national forests alone and approximately 10,000 on state and private holdings in the eighteen states which received federal co-operation in fire protection under the Weeks law, namely, Maine, New Hampshire, Vermont, Massachusetts, Connecticut, New York, New Jersey, Maryland, West Virginia, Kentucky, Michigan, Wisconsin, Minnesota, South Dakota, Montana, Idaho, Washington and Oregon.

Forest fires destroy millions of dollars' worth of timber and other property every year, and in some years cause considerable loss of life. It has been estimated from the best information obtainable that forest fires last year burned over an area of approximately 6,000,000 acres with a total loss of at least \$9,500,000.

JUNE BUILDING TOTALS.

According to the records of the Bureau of Building Inspection of the Board of Public Works the building permits issued for the month of June amounted to \$391,007, this amount being for 618 permits.

During the month there were no permits issued for Class "A" or Class "1" structures. Included in the Bureau's report is a building being erected by the Harbor Commissioners costing \$27,221. The complete report is as follows:

Class	No. of Bldgs	Amt.
Class "C"	12	\$224,200
Fences	161	503,181
Alterations	444	136,405
Harbor Commissioners	1	27,221
Total	618	\$391,007

PAVING CONTRACTS AWARDED.

The Board of Public Works has awarded the following street improvement contracts.

To D. L. Bienfield, improvement of Spruce street from Jackson street westerly; Lida Place from 15th to 16th streets, and Elm street from Pierce to Scott street.

To Eaton & Smith, improvement of Fourteenth street from Rosemont to Dolores street.

To J. G. Harney, improvement of Parnassus avenue.

The Board has rejected all bids submitted for the improvement of the south side of Howard street from First to Fremont, and will take new bids until July 14th.

At their meeting Friday the Board

accepted the Strauss bascule bridge constructed by the Southern Pacific Company at the foot of Third street over the Islais Creek.

AMERICAN FIRMS REPRESENTED IN AMOY, CHINA.

Consul Lester Maynard has forwarded a list of the American firms established in Amoy and of the American agencies held by Amoy firms, with comments as to other lines handled but not specifically represented in that Chinese port. These will be loaned to those interested by the Bureau of Foreign and Domestic Commerce or its branch offices. San Francisco branch, 306 Customhouse. (*)

ELECTRICAL MEASURING INSTRUMENTS.

Circular No. 30, recently issued by the Bureau of Standards at Washington, describes the operating principles of electrical instruments used for commercial measurements, including ammeters, voltmeters, and wattmeters. It gives such information on the errors of instruments as will assist those who use them to obtain the most accurate results in any given case. Other related subjects are treated as follows: Current and voltage transformers, which make it possible to measure currents so large and voltages so high as to be out of the range of ordinary instruments; standard apparatus by which ordinary instruments may be checked; and some notes on the design of electrical instruments.

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Fifteenth Year No. 28

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San Francisco Cal., July 14, 1915

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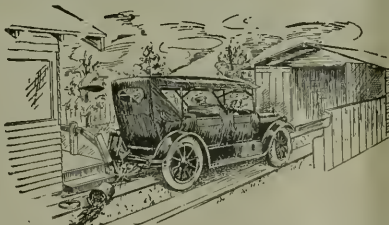
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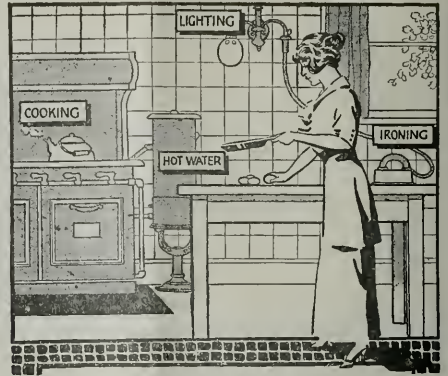
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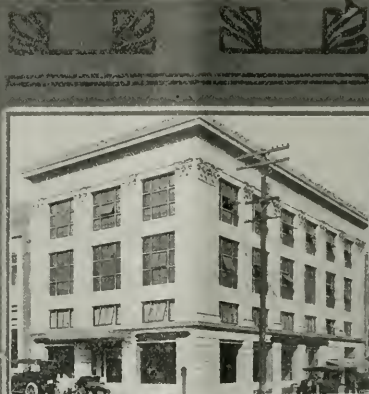
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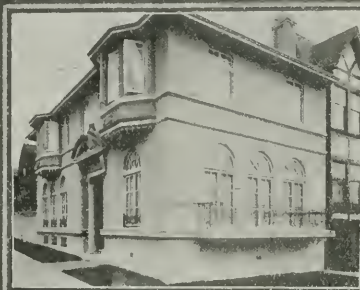
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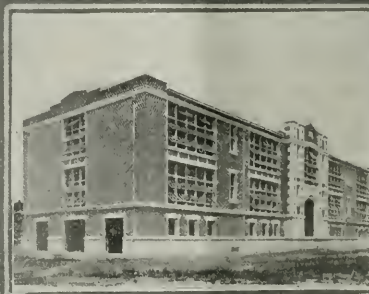
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Building and Engineering News

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San Francisco, July 14, 1915

Fifteenth Year, No 27

Those War Orders—The daily press has from time to time contained announcements of enormous orders for different kinds of war material given by some foreign government to one or other of our large manufacturing concerns. An analysis of the situation and a presentation of the actual orders may be of interest. The volume of orders in the aggregate is perfectly enormous. A study of our import and export trade indicates that during the past two or three months our total exports have included war supplies and munitions of all sorts to the amount of at least 140 millions a month. Now, considering that such business has to be placed three to ten months ahead, it is surely a fair assumption that as an average the present orders have extended over a period of at least five months, and upon this basis the orders now on hand would figure out 700 millions in the aggregate.

There is no reason to doubt that the Bethlehem Steel Company will turn out this year somewhere between 25 and 35 million dollars worth of war material. The newspapers placed these orders at 100 millions, but this is absurd for more reasons than one.

The Westinghouse Electric Company is supposed to have actually received an order for 5 million dollars worth of shrapnel and one million rifles at \$27.50 a piece.

The American Locomotive Company, it is stated, will turn out about 30 million dollars worth of shrapnel, another 30 million dollars worth going to the New York Air Brake Company and the Westinghouse Air Brake Company.

The American Car and Foundry Company is stated to have an order from the Russian Government for 2,000 railway cars and the Pressed Steel Car Company an order for 7,000 cars.

Crucible Steel Co. is estimated to have orders for about 8 million dollars worth of shrapnel material.

United States Cartridge Co. is credited with 10 million dollars worth of war orders. All these estimates are close to the actual facts and are made by men in close touch with these affairs. There are, of course, more orders given, but these are the most important ones.

We call attention to the article on the Pennsylvania Railroad exhibit at the P. P. I. E. This exhibit, which is very complete, consisting as it does of models of the system and of the terminals and of moving pictures of the different railroad activities in the different sections of the country it serves, gives the observer and the student of our present day complex civilization almost at a glance an idea of the enormously important role that a great railroad system is playing in the life of the nation.

The use of relief maps in the profession has become very extensive in recent years and these exhibits gives the engineers the opportunity to study some very high class work of this kind.

Engineers are not often given the opportunity to view a railroad as a system of units, each performing its allotted work in the whole. Our readers should take in this whole exhibit, both models and moving pictures. It will broaden the view of the professional work and stimulate further effort.

The Engineering Record for June 12 started a series of articles to which we call our readers' attention. They treat "Sand," the neglected factor in concrete. It has four main objects: (1) To show that sand testing is not a luxury but a necessity. (2) To show how sand testing may benefit both contractor and owner. (3) To prove that sand testing should continue through the job. (4) To describe briefly and clearly approved methods of testing, and indicate simplified and improved procedure.

Unlike most articles on the subject they are addressed to the contractor as well as the engineer. They eliminate detail in order to drive home the main points. They are above all very practical.

The authors, Cloyd M. Chapman, engineer of tests of Westinghouse, Church, Kerr & Company, and Nathan C. Johnson, author of the articles on the use of the microscope in the study of concrete, which recently appeared in the Engineering Record, needs no introduction to the profession. Thoroughly conversant with the sand-testing and its recent history, they, nevertheless, before writing the series, reviewed the entire literature on the subject in order to profit by the excellences or the weaknesses of other treatments. The result is a series that represents in the present state of the art the last word in sand-testing.

Thomas A. Edison is fairly buried under a shower of university degrees this season. No doubt he values them highly, but he has not said so. In the days of his struggle for recognition and success the universities gave him the "cold shoulder." Now that he has won wealth and honor without their help, they are eager to decorate him. He peckets the decorations and smiles enigmatically, without saying what he thinks about them.

Nevada County Supervisors are sending a delegation to Sacramento to urge the early building of a highway lateral into their county. In the past Nevada County has been satisfied with promises, but the delegation insists that the Highway Commissioners take immediate action regarding this county. Nevada County is waking up to the fact that the glory of the old mining days does not pay present day board bills, and that it is the counties with the biggest mileage of the best roads that are reaping the harvest when the prosperity comes around. Prosperity, that is trade and increased activity in all lines of pursuit follows the line of least resistance and the line of least resistance is the Good Road.

The Highway Commission of the State of Washington approved plans for some 112 miles of permanent road construction, entailing an expenditure of \$741,480. Of the total, 15.5 miles will be of concrete; asphalt, 1.5 miles; asphaltic macadam, 11.5 miles; macadam, 7.1 miles; crushed rock, 1 mile; gravel, 75.9 miles. There is \$1,000,000 more to the credit of the various counties in the permanent highway fund for which permanent highway contracts may be awarded this year.

The Pacific States, with their comparatively smaller population, are doing more for the Good Roads movement than many of the larger and better populated Eastern States.

The State Railway Commission has approved the petition of the Midway Gas Company for the consolidation with that company of the Southern California Gas Company and the Northern Exploration Company.

Approval was given by the State Railroad Commission to the reorganization and consolidation of the three companies into one, to be known as the Midway Gas Company, and to issue \$2,995,655 in bonds to take over the other companies, to retire outstanding bonds and to make improvements. The reorganization and consolidation of the three companies, which, in addition to controlling the Midway natural gas supply, are engaged in developing 10,000,000 additional feet of natural gas in the Fullerton field, means a wider use of natural gas and may mean the retirement of artificial gas.

Lessons From the Exposition.

Collected by GEORGE NELSON, C. E.

The Pennsylvania Railroad Company Exhibited in the Transportation Building.

The Pennsylvania System, with its 11,729.92 miles of length, and its 26,200 miles of track; its 250,000 employees, 7,561 locomotives, 6,884 passenger cars, 281,590 freight cars, and 63 steamers and ferry boats, directly serves fifteen of the forty-eight States of the Union and the District of Columbia, whose combined population is 48,227,840, or 52 per cent of the entire population of the United States. All but two of the ten largest cities in the Union are directly on its lines, and its 4,500 stations are at the command of twenty cities with a population of over 100,000; one hundred and fifty each with a population of over 10,000 and two hundred and sixty-three with a population of over 5,000.

The Pennsylvania System, consisting of the Pennsylvania Railroad, the Pennsylvania Lines West of Pittsburgh, and affiliated lines, presents to visitors to the Panama-Pacific International Exposition, at San Francisco, California, a comprehensive exhibit of progress and human ingenuity that fully meets the ideal of the Exposition in commemorating the completion of the great ocean-to-ocean waterway.

Occupying one of the most prominent exhibit spaces in the Palace of Transportation, the Pennsylvania System has brought thither the largest model topographical map, showing the System in its entirety, ever designed; a most complete model of Greater New York, a perfect picture in miniature of the metropolis of the United States, and models of the modern and convenient terminals in New York City and Washington; the proposed terminal in Chicago, and the famous Hell Gate Bridge, which will link New England with the Middle States and the South and West.

These models, perfect in every detail, are the work of Henry Kablerskie, who is the designer of the Founder's Week Pageant, in Philadelphia, and the Mission Play of Southern California, has achieved international reputation. With a force of trained artisans, a full year was spent in the completion of this exhibit.

The exhibit at San Francisco is principally educational, inasmuch as it presents, in an interesting manner, certain features of instructive value to young and old alike. That this spirit has been carried out, an inspection of the exhibit will readily prove.

Ten thousand square feet of space, located almost in the center of the mammoth Palace of Transportation, has been set apart for the proper display of this great exposition of the country's and the Pennsylvania System's growth. Here the various models have been so arranged that visitors may inspect them from every point of vantage.

Largest Relief Map in the World.

Whilst all of the models are interesting, the attention of the visitor will be directed, probably first, to the great map of the Pennsylvania System in relief, the largest relief map ever con-

structed in the world. This map is forty-two feet in length by twenty-six feet in width, and shows, in interesting detail, the stretch of the United States and Canada from the Atlantic Ocean to the prairies beyond the Mississippi River, and from Chesapeake Bay and the Virginias to the plateaus of Ontario and Quebec.

Engineers were engaged for several months laying out the plan for this map, the drawing being made from the Government maps of the territory, the elevations lines of rivers being computed to minute detail. Persons familiar with this stretch of country will readily recognize mountain ranges and rivers, so closely do they approximate nature. An endeavor has been made to indicate by the coloring of this map the geographic character of the country traversed.

The lines of the Pennsylvania System, which are shown on the map as a silver band, were constructed of oak strips of the proper width upon which silver leaf is laid. The map itself is made of a composition of plaster, German dextrin and certain acids, which forms a combination almost indestructible.

The larger cities along the lines of the Pennsylvania System are marked with an electric lamp bearing the city's name and population, which are illuminated at short intervals. Practically every large city on the Pennsylvania's lines or adjacent to them, is indicated, and all points of historical interest are marked by small silk American flags. The State boundary lines are indicated by a strip of bright colored paint, and the State Capitals are marked by a small blue flag.

On the blue stretches showing the Great Lakes, little steamers mark the service of the Erie and Western Transportation Company, also known as the "Anchor Line," the Pennsylvania's lake passenger and freight service.

New York from an Aeroplane.

Next in size, but even more interesting to the visitor, is the wonderful relief model of New York City and its immediate suburbs. We gaze upon the metropolis as though from an aeroplane, our views extending from the narrows of New York Bay to the entrance to Long Island Sound through Hell Gate, and from the cities of Elizabeth and Newark to the far stretches of Brooklyn and Long Island City.

This model reproduces, with a faithfulness that is marvelous, not only the main physical features of Manhattan Island and the surrounding country and water courses, but the prominent buildings; the streets whose names are known far and wide; the great bridges spanning the East River, and the parks and squares.

Every street is depicted with its row after row of business places; its skyscrapers, hotels, theatres, Central Park, with its lake and its statues, the Battery; Ellis Island, the great receiving station for immigrants; the

Statue of Liberty; Staten Island; all are there as though one looked at them in reality.

One sees how the imposing and artistic Pennsylvania Station, the portal to Greater Gotham, is actually the "Heart of New York." Only one block from Broadway, its erection and operation is an achievement that is in itself a triumph for the Pennsylvania System.

One is amazed to find that this great model, twenty-six feet square, is laid out to scale, and the principal buildings of the city were modeled from architects' drawings. Care has even been taken to preserve, as far as possible, the proper coloring of these buildings. Many of them are lighted by small incandescent globes within the building, so that one may see New York by day and night. The little globe surmounting the Statue of Liberty is the smallest incandescent light ever made.

One sees the lines of the Pennsylvania System as they traverse the cities of Elizabeth and Newark and cross the great meadow stretches back of the hills that shut in the Hudson River to the west; past Manhattan Transfer, whence New York trains are drawn through the tubes under the river by electric engines. The Bergen Portal, through which the tubes run, is seen in the side of the hill, and across the East River, the Sunnyside Yard where Pennsylvania trains make a full turn on great curves. Beyond, where the East and Harlem Rivers join at Hell Gate, may be seen the magnificent Hell Gate Bridge, under construction, which will link the Middle States with New England.

Like the map, the greater part of this model is formed of hard composition. Almost every large building and the greater part of the business blocks of the city are formed of separate sections of composition, carved by hand and fitted into spaces in the model.

The creation of this model and map occupied practically a whole year and the service of a corps of about twenty persons. There are a thousand or more separate pieces in the New York model alone.

In connection with this model of New York are shown models in perfect detail of Pennsylvania Station and of the Hell Gate Bridge.

Great Stations of the System.

To the student of the beautiful art, the proposed Union Station in Chicago, that already in use in Washington, and Pennsylvania Station, New York, as shown in the models of the three stations in the Pennsylvania exhibit, will prove to be of more than passing interest.

The model of the proposed Union Station, Chicago, which will house when completed the train service of the Pennsylvania System to and from Chicago, is interesting in showing what the third largest terminal in the world will look like when completed.

The new station, as will be seen from the model, will be a magnificent speci-

men of architectural skill, and will be located on the site of the present Union Station, but its increased size and the space devoted to yards and platforms will greatly exceed the space now occupied.

This station will be about three years in building. The train sheds alone will cover an area of more than thirteen acres, and the general waiting room will have 31,000 square feet of floor space. In this particular it will be excelled by only three other stations, those at Leipzig, Germany; Washington, D. C., and Pennsylvania Station, New York City.

The noble, classic lines of the Washington station, with its colonnades and its vaulted roof, its great statues and its splashing fountains, are all reproduced with wonderful fidelity in the model.

The station is 760 feet in length, 340 feet in width between the front entrance and the track section, and from 65 to 120 feet in height. Its central waiting room was modeled after the famous Baths of Diocletian in Rome.

There are thirty-three tracks in the station, twenty of which terminate on the level of the waiting rooms. The remaining thirteen are depressed twenty feet below the level of the waiting rooms, and nine of these continue under the station building into a tunnel which runs beneath a portion of Capitol Hill and leads to the through lines southward. With the exception of the stairs leading to the depressed tracks, there are no steps anywhere in the building.

On one corner of the large relief model of New York City, will be seen a model of Pennsylvania Station, the Pennsylvania System's mammoth terminal in New York City.

This station occupies four entire city blocks in the heart of New York City, and is unique in that the walls and massive columns on the interior and the great stairways are constructed of travertine, a very hard stone quarried in the foothills of the Apennines of Italy.

The train lobby, or Concourse as it is called, is constructed almost entirely of steel and glass, and all of the tracks and platforms are below the level of the street.

The area of the station proper and the underlying yards is twenty-eight acres. Five hundred houses, including several churches, were removed to make room for this mammoth terminal, the building proper embracing alone an area of nearly eight acres.

There are twin tubes under the Hudson River and Bergen Hill, in New Jersey, extending a distance of over two miles, and a series of four tubes lead from the station under New York City, the East River and Long Island City, two to the great yards at Sunnyside and the other two to the towns and resorts of Long Island.

A Journey Over the System Through the Moving Picture Camera.

The motion picture camera has brought to the Panama-Pacific Exposition a most unique exhibition in the form of a motion picture journey over the principal lines of travel on the Pennsylvania System.

These wonderful pictures are shown in a theatre, forming part of the Pennsylvania's exhibit, constructed of two Pennsylvania standard all-steel pas-

senger coaches, such as are used every day in the regular service of the railroad.

Th two all-steel coaches were converted into a motion picture theatre, after having been taken to San Francisco as a part of a regular train, by installing them on two standard gauge tracks side by side, removing one side of each coach, placing the open sides together and flooring and roofing the opening.

Ample seating space is provided in the cars for the convenience of the audiences who will view the pictures displayed at stated intervals during the time the Exposition is open.

One will note that the car windows have been replaced by transparencies bearing reproductions of the coats of arms of the various States traversed by the Pennsylvania lines, as well as of interesting views of scenery along the lines. At the close of the Exposition, these cars will be restored to normal conditions and be placed in service on the Pennsylvania System.

The motion pictures, which are exhibited without charge for admission, are highly educational. They consist of views along the entire Pennsylvania System, and present an instructive panorama of the country through which the Pennsylvania trains run.

All-steel limited trains between Chicago and New York, between St. Louis and New York, and on other portions of the System, are seen in motion, and at terminals. Freight trains in motion, carrying merchandise, coal, coke, iron ore and other commodities, are displayed in the pictures, which also show the operation of automatic block signals and other appliances. Locomotives taking water from track tanks while running at high speed, and the various devices for the prompt operation and control of trains, are features which possess educational value of special importance.

What with the summer months marking practically the end of construction in the Exposition and the war in Europe embroiling more and more nations in the world strife, the month of June shows a fairly good total for building construction in the City and County of San Francisco. All told the figures amounted to \$1,679,028. This being made up of the following: Private construction, \$1,061,587; Panama-Pacific construction, \$17,040; City street work, \$177,445; City building construction, \$355,435; State Harbor work, \$67,221.

Of private construction \$383,777 was for brick and concrete; \$529,623 for frame construction, and \$148,487 for alterations and additions.

The amount for frame construction is about normal, amounting to a little more than half a million showing that residences and frame apartments are being erected at about a normal rate. Permanent construction within the fire limits is of course below the average. As compared to former years the record is as follows:

June, 1906	\$ 687,391
June, 1907	3,937,559
June, 1908	3,475,506
June, 1909	1,398,416
June, 1910	1,158,464
June, 1911	2,625,710
June, 1912	2,068,224
June, 1913	2,830,306

June, 1914

June, 1915

While the record for June is the smallest since 1910, still 1909 and 1910 both show a less figure than does the same month for the present year. So far the record for the first six months of the present year is as follows:

January	\$1,284,898
February	1,637,148
March	2,043,534
April	1,992,396
May	1,212,413
June	1,679,028

While business generally has felt a depression the general standing of the building business has not suffered more than any other. As things tend to adjust themselves to war conditions we may expect to see a revival in building just in proportion as new business starts.

THE STORY OF THE CENSUS.

Under this title the U. S. Census Bureau has recently published, for free distribution, an interesting little pamphlet containing a history of the census from 1790 to 1915, illustrated with numerous pictures and diagrams. During the period in question the census grew from "little more than a mere count of the population to the many, varied, and complex lines of investigation now conducted by a great statistical laboratory organized on a permanent basis." The magnitude of this branch of the Government, as now constituted, can perhaps be gaged by the fact that its total expenses during a decade, including the decennial census, amounts to about \$30,000,000. In other words, Americans pay about 3 cents per capita per annum for the luxury not only of being counted, but of having a most elaborate, progressive analysis made of all their activities. The machinery of the census has reached a high state of perfection—if not actual infallibility, the fault lies with the human factor. Thus, there is still some "padding" of census returns; not only for the personal benefit of enumerators, but also on account of the burning desire of cities and towns to inflate their population figures. After the census of 1910, sixty-nine indictments were brought against enumerators and others believed to be responsible for the falsity of returns in fourteen cities and towns, and there were fifty-three convictions.

THE INVENTOR OF THE MATCH.

The first match was the product of the ingenuity of John Frederick Komer, who early in the nineteenth century was imprisoned in the penitentiary at Hohenasperg, in Germany. He invented the lucifer match while in his gloomy dungeon. The German government forbade the manufacture of matches on the ground of public policy because some children playing with them had caused a fire. Komer was ruined by Viennese competition when he was released from prison and died a pauper. Up to 1862 the Vienna manufacturers controlled the match markets of the entire world.

It requires 1,550 miles of great embankments to preserve the Netherlands from the incursion of the sea.

ADVANCE NEWS

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$10,000. Architect, none. Owner, Arthur Stevens, Sausalito. The building will be erected on the west side of Leavenworth street north of Vallejo, covering an area of 25 by 74 feet, and has been designed to contain a total of six suites. Interiors will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. All apartments will have wall beds and private baths. Marble and tile wainscot will be used. There will be a central heating system and a hot water supply. Bath rooms will have tile wainscot. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$10,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, Neil L. Nielson. The building will be erected on the south side of Sacramento east of Presidio, covering an area of 25 by 80½ feet. There will be a total of ten suites, all of which will have wall beds and private baths. Interior will be finished in pine with some elm panels and hardwood floors. Plans provide for steam heat and a hot water system. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance. Exterior of the building will be covered with pressed brick veneer, shiplap and cement plaster on metal lath. Plans are being prepared.

SAN FRANCISCO—Apartment house addition, 1 story, frame. Cost not stated. Architect, none. Owner, Chester Williamson, 1464 Devisadero street, S. F. The present building located at 1732 Clement street will undergo alterations and additions. The new portion of the building will contain two and three room apartments. Interior will be finished in pine. There will be a hot water system, modern plumbing and electric work. Plans are complete and the work will be done by Day Labor.

OAKLAND, CAL.—Apartment house, 4 story and base, brick and steel, \$65,000. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner, Edward Sonmarstrom, 202 12th street, Oakland. The building will be erected on the east side of Alice street north of 14th and has been designed for a large number of two, three and four room suites. Interior will be finished in pine, mahogany and white enamel. Hardwood floors will be used in the living and dining rooms. There will be elevator service, a hot water system, steam heat and vacuum cleaning. Bath rooms will be finished in tile. Wall beds are specified. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and segregated figures

are being taken for all parts of the work except the terra cotta, which has been awarded to the Independent Sewer Pipe Co. of Los Angeles.

BONDS.

AUBURN, PLACER CO., CAL.—The Placer County Supervisors will purchase, \$250,000 of the state highway bonds to be placed on sale July 23th. It is understood that with the money paid by the Placer board the trunk line in Placer County and the Roseville-Auburn lateral will be completed at once.

According to the agreement entered into between the Supervisors and the State Highway Commission, the contract for the construction of the lateral from Roseville to Auburn will be let within the next two months and the work completed without delay.

OLYMPIA, WASH.—The school board has decided to call an election to vote bonds in the sum of \$40,000 which will be added to the \$35,000 to be obtained from the State Capital Commission for the construction of a new high school building.

RIVERSIDE, RIVERSIDE CO., CAL.—James A. Langan of Omaha has purchased a 22-acre site at Victoria Hill and will erect a brick residence costing \$25,000. As yet no architect has been selected to prepare the plans.

EL CENTRO, IMPERIAL CO., CAL.—At a meeting of the Board of Supervisors of Imperial County, District Attorney Nichols was authorized to draw up a resolution calling for a bond election for the purpose of constructing bridges and a new jail. The expenditures, which will total \$20,000, are as follows: For the court house, \$150,000; for the jail, \$35,000, and \$40,000 for bridges on the state highway in addition to such sums as will be spent on the county bridges.

MADERA, MADERA CO., CAL.—The City Trustees have set August 1st as the date for the voting of bonds of \$12,000 to provide for the construction of a new bridge over the Fresno River at B street. The proposed bridge will be of concrete construction and 23 feet wide.

PASO ROBLES, SAN LUIS OBISPO CO., CAL.—A special election will be called in the near future for the purpose of voting bonds in the sum of \$10,000 to provide for the erection of new school buildings.

SEASIDE, ORE.—Bonds of \$35,000 with which to erect and equip a new school building have been voted and will be ordered sold immediately. A site for the proposed building has already been selected.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—The Board of Supervisors has pledged themselves to finance and purchase \$135,000 worth of state highway bonds from the State Highway Commission. The purchase will be made to finish the state highway between Atascadero and Paso Robles. The

Highway Commission will call for bids immediately on the work according to statements made as this agreement was made with the San Luis Obispo County Supervisors if they agreed to buy the bonds.

WOODLAND, YOLO CO., CAL.—In accordance with a proposal made at the time the county broke off all negotiations with the State Highway Commission, the Supervisors are planning a bond issue of \$159,000 for the construction of a highway under their own supervision.

The proposed road will be twenty-one miles in length, and will extend from the northern boundary, where the state highway enters the county, to the bank of Cache Creek, near Yolo.

OAKDALE, STANISLAUS CO., CAL.—The Board of Directors of the Oakdale Irrigation District in session recently sold the \$100,000 bond issue voted several months ago to the E. J. Knight Company of Los Angeles at 90.25 and accrued interest.

The proceeds of the sale will be used in the improvement of the district's system.

PARADISE, BUTTE CO., CAL.—A movement is underway to bond the voters of Paradise Ridge and form an irrigation district.

A preliminary survey is to be made in the near future to ascertain the feasibility of the project.

ANDERSON, SHASTA CO., CAL.—The Board of Directors of the Anderson-Cottonwood Irrigation District, at a special session here, passed a resolution to have the legality of the bond issue of the district passed on by Attorneys Goodfellow, Eells, Moors and Orrich, of San Francisco; and to have the bonds validated by the State Bond Commission.

This will make the bonds legal investment for savings banks, insurance companies, etc., and can be sold anywhere.

The entire bond issue of \$450,000 will be covered in 5210 bonds. The first payment of the principal of the issue will fall due twenty-one years after the sale of the same, and the last installment will be paid after the expiration of forty years.

MESA, ARIZ.—Bonds in the sum of \$75,000 for the construction of a municipal sewer system have been sold at a premium of \$2,365. Bids for the construction of the sewer system will be called for shortly.

COMPTON, LOS ANGELES CO., CAL.—Bonds in the sum of \$70,000 for the construction of a municipal sewer system have been voted. Olmsted & Gillette, Hollingsworth Building, Los Angeles, are the consulting engineers.

VISALIA, TULARE CO., CAL.—Bonds in the sum of \$65,000 for the construction of a municipal sewer system have been voted.

BRIDGES AND DAMS

KNIGHTS LANDING, YOLO CO., CAL.—Bridges, 2, timber construction. Cost not stated. Engineer, Haviland & Tibbitts, Alaska-Commercial Bldg., S. F. Owners, Knights Landing Bridge and Drainage District. Plans have been completed for two timber highway bridges near Knights Landing. The work will consist of two timber trestles each about 420 feet in length,

with two combination steel and timber spans 80 feet in length, and graded roadway approaches at each end. Bids are now being taken and will be opened on July 16th. Plans and specifications can be secured from the engineers' offices.

SAN JOSE, SANTA CLARA CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the Santa Clara County Supervisors plans and specifications prepared by the County Surveyor for the construction of a reinforced concrete bridge on the Northern road over Guadalupe Creek were adopted at the Clerk was instructed to advertise for bids until August 2nd at 11 a. m. Further information together with plans and specifications may be had from the County Surveyor at San Jose.

SAN JOSE, SANTA CLARA CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the County Supervisors the County Surveyor presented plans and specifications for the construction of two reinforced concrete bridges on the Alviso road in the County of Santa Clara, and the same were adopted and the Clerk instructed to advertise for bids to close on July 19th at 11 a. m. Plans were also adopted for the construction of a reinforced concrete bridge on Center avenue at San Martin, and bids will be received by the County Supervisors until July 19th at 11 a. m. Plans and specifications together with full information may be had from the County Surveyor at San Jose.

MODESTO, STANISLAUS CO., CAL.—Flume and sand box, reinforced concrete. Cost not stated. Engineer, Chief Engineer Herrmann, Modesto. Owners, Modesto Irrigation District. Plans and specifications have been completed and figures will be opened on July 27th for the construction of a flume waterway and sand box along the main line canal and across Dry Creek. Plans and specifications can be secured from the office of the engineer at Modesto.

SAN ANSELMO, MARIN CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, City Engineer, San Anselmo. Owners, City of San Anselmo. The Board of Trustees of San Anselmo proposes to replace a number of wooden bridges which span San Anselmo Creek with concrete structures of the design employed in the municipality of Ross.

SALINAS, MONTEREY CO., CAL.—Bridges, steel construction. Cost not stated. Engineer, County Surveyor, Salinas. Owners, Monterey County. Plans and specifications have been prepared by the County Surveyor for the new steel bridges at Bradley and San Lucas, and will be submitted to the County Supervisors at their next regular meeting for approval. On approval bids will be called.

RED BLUFF, TEHAMA CO., CAL.—Bridges, steel, timber and concrete. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. The Supervisors have voted to readvertise for bids for the construction of three bridges across the sand sloughs to the east of Red Bluff, and if, after obtaining legal advice

from the District Attorney, it is found possible, will proceed at once to the business of calling an election for the purpose of bonding the county for their erection. If the bonding proposition fails, the bridges will be built by direct tax and paid for in three equal annual installments.

VISALIA, TULARE CO., CAL.—Bridge, steel and concrete, \$15,000. Engineer, County Surveyor, Visalia. Owners, Tulare County. The Supervisors of Tulare County are awaiting acceptance from the State Highway Commission of plans for the new bridge to be built over Kings River near Kingsburg. The Supervisors are in session and desire to call for bids for the new bridge, but the plans must first be approved by the State Highway Commission and the State Engineering Department. Bids for the work will be called immediately on the approval of the plans.

NAPA, NAPA CO., CAL.—Bridge repairs. Cost not stated. Engineer, City Engineer Napa. Owners, City of Napa. The City Council has adopted the plans and specifications prepared by the City Engineer for the repairs to be made to the Third street bridge and the clerk of the council has been instructed to advertise for bids on the work. Specifications for the work on Third street, from the stone bridge to the concrete bridge, at a total estimated cost of \$1,685.85, were adopted, and the work was ordered done by the council.

IGO, SHASTA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Redding. Owners, Shasta County. All bids for the construction of a new bridge across Clear Creek a mile east of Igo were rejected by the Supervisors. The plans called for a steel bridge with a concrete floor. The Supervisors decided to call for plans for a reinforced concrete structure. The lowest bid offered for a good bridge was \$6,594.

Contracts Awarded.

SAN JOSE, SANTA CLARA CO., CAL.—Bridges, reinforced concrete. Costs as follow. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, M. E. Kliccourse, 53 West Santa Clara avenue, San Jose, bridge over Campbell Creek on the Homestead road, \$1,387; John Doyle, 113 West Santa Clara avenue, San Jose, bridges over Calabasas and San Tomas Creeks on the Homestead road, \$2,367; and John Doyle, 113 West Santa Clara avenue, San Jose, bridge over Permanent Creek on Fremont avenue, \$3,363.

SAN FRANCISCO—Pier repairs, \$14,281. Engineer, Assistant State Engineer Newman, Ferry Bldg., S. F. Owners, State of California. Contractors, Healy-Tibbitts Construction Co., S. F. Repairs to Pier No. 11, \$14,281.

MODESTO, STANISLAUS CO., CAL.—Earth flume, \$51,950.50. Engineer, Chief Engineer Herrmann, Modesto. Owners, Modesto Irrigation District. Contractors, Tibbitts-Pacific Co., 16 California street, S. F. Contract price, \$51,950.50.

MARYSVILLE, YUBA CO., CAL.—Bridge, reinforced concrete, \$3,353. Engineer, County Surveyor Marysville. Owners, Yuba County. Contractor, William Stephens, Redding. Contract price, \$3,353.

COURT HOUSES.

OAKLAND, CAL.—Court house addition 2 story, brick, \$2,000. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, Alameda County. The new addition will be erected at Broadway and Fifth, and has been designed to contain an additional court room, jury room and judges' chambers on the first floor. Upper floor will contain offices. Interior will be finished in pine and hardwood. The steam heating system in the present building will be extended into the new portion. Exterior will be faced with pressed brick. Plans are being prepared.

OROVILLE, BUTTE CO., CAL.—Hall of Records, 2 story and base, steel or reinforced concrete, \$60,000. Architect, Charles S. Kaiser, Mechanics' Institute Bldg., S. F. Owners, Butte County. Preliminary plans for a new Hall of Records have been presented to the Supervisors and working drawings ordered prepared. Construction will be fireproof, but it has not been decided whether to use steel and brick or reinforced concrete. The building will contain the offices of the County Recorder, Treasurer, Auditor and Assessor. Interior will be finished in pine, hardwoods and metal. Tile floor will be used. Plans provide for steam heat, vacuum cleaning and fireproof vaults. Detail drawings will be submitted to the Board of Supervisors at their August meeting. Further mention will be made of the work.

FACTORIES AND WAREHOUSES

REDDING, SHASTA CO., CAL.—Smelter smoke consumer and stack, \$300,000. Engineer's name not given. Owners, Coram Smelting Co. The million dollar smelter at Coram, which has been shut down since 1911, will be reopened as soon as a smoke controlling device can be constructed. This statement has been made by several directors of the smelter company. A \$50,000 smoke stack will be one of the first additions to the plant. Work will be started immediately on these projects, as it is the intention of the directors of the company to have the plant working within nine months.

MARTINEZ, CONTRA COSTA CO., CAL.—Oil tanks and towers, street construction. Cost not stated. Engineer, Engineering Dept. Shell Oil Co., 343 Sansome street, S. F. Owners, Shell Oil Co. Contracts will be let in a few days by the Shell Oil Co., for the construction of a 10,000 barrel steel tank with tower at their plant in Martinez. Following this contracts will be let for several more similar tanks. The towers will be 30 feet high.

MARTINEZ, CONTRA COSTA CO., CAL.—Factory addition, frame and concrete. Cost not stated. Engineer's name not given. Owners, Atlas Powder Co., Martinez. Plans have already been prepared, according to information received, that the Atlas Powder Company of New Jersey, which recently secured control of the stock of the Giant Powder Co., will make extensive additions to the Giant plant here.

SAN FRANCISCO—Factory, 4 story and base. Class A construction, \$250,000. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, John Bollman Co. It has been learned on

excellent authority that the proposed building to be erected for this company on their newly acquired property at Fourth and Bryant streets will not be started until late in the fall, probably not until October or November. Further mention will be made of the work.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architect, none. Owner, Thomas McCormick, 25 Gladys street, S. F. The building will be erected on the south side of Highland avenue east of Mission and will cover an area of 25 by 56 feet. There will be two modern flats of five and six rooms. Interiors will be finished in pine and redwood. Some oak floors will be used. Each living room will have an open fire place and tile mantel. Automatic water heaters will be installed. Imitation tile wainscot will be used in the bath rooms. Exterior of the building will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Flats and store, 3 story and base, frame, \$6,500. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner's name withheld. The building will be erected in the Mission district and has been designed for a store on the first floor and two modern flats of five and six rooms on the upper floors. Interiors will be finished in pine and redwood. Some oak floors will be used. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, De Fazio, 1837 Mason street, S. F. Owner, M. Francisco. The building will be erected on Lombard street west of Kearny, and has been designed to contain two flats of five and six rooms. Interiors will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Bath rooms will have imitation tile wainscot. Exterior of the building will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Flats, 3 story and base, frame, \$9,000. Architect, S. J. Sterner S. F. Owner, C. Tiedeman, 204 6th avenue, S. F. The building will be erected on the west side of 7th avenue south of California street, and has been designed to contain six modern flats. Interior will be finished in pine and hardwood with some white enamel in the bed rooms. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be a central heating system, hot water heaters and open fire places. Mantels will be of tile. Bath rooms will have tile floors and wainscot. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in

the hands of the owner who will do the work by Day Labor. Materials are being purchased.

SAN FRANCISCO—Flats, 2 story and base, frame, \$3,500. Architect, none. Owner, Henry Shelton, 1523 Santa Clara avenue, Alameda. The building will be erected on the west side of Minna street south of 14th, and has been designed to contain two flats of five rooms each. Interior will be finished in pine and redwood. Some oak floors will be used. There will be open fire places and tile mantels. Bath rooms will have imitation tile wainscot. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$2,500. Architect, none. Owner, A. J. Bowley, 3946 19th street, S. F. The building will be erected on the south side of Hancock street west of Sanchez, covering an area of 24 by 53 feet, and has been designed to contain two small flats. Interiors will be finished in pine and redwood. Some hardwood floors will be used. There will be open fire places in the living rooms with tile or brick mantels. Imitation tile wainscot will be used in the bath rooms. Exterior of the building will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, H. E. Harris, Monadnock Bldg., S. F. Owner, C. A. Rushton. The building will be erected at the northwest corner of Fulton and 9th avenue, and has been designed to contain two modern flats of five and six rooms. Interiors will be finished in pine and hardwood. Hardwood floors will be used in the living and dining rooms and reception halls. There will be open fire places and tile or brick mantels. Bath rooms will be finished in tile. Automatic water heaters will be installed. Exterior of the building will be covered with brick veneer and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Flats, 4, 2 story and base, frame, \$4,500 each. Architect, none. Owner, J. G. Kincanon, 215 Montgomery street, S. F. These buildings will be erected on the west side of Steiner street north of Union, each covering an area of 25 by 60 feet, and each designed to contain two modern flats of five and six rooms. Interior finish will be of pine, redwood and hardwood veneer. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be an open fire place in each living room with tile or brick mantel. Bath rooms will have tile wainscot. Automatic water heaters are specified. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

GOVERNMENT WORK & SUPPLIES

Clackamas, Ore., Fisheries Station.

The following bids were received by the commissioner of fisheries, Washington, D. C., for the construction of a

superintendent's residence at the Clackamas, Ore., fisheries station:
J. A. Peters, Portland, Ore., \$1,769.
F. P. Nelson, Gladstone, Ore., \$3,047.
Ray O. Powers, Portland, Ore., \$2,364.
Cripe & Busse, Portland, Ore., \$2,491.
Hinchman & Scribner, Oregon City, Ore., \$3,286.

Franklin Davis, Portland, Ore., \$2,777.
L. B. Howe, Portland, Ore., \$3,300.
R. A. Junken, Willamette, Ore., \$2,700.

Indian Affairs, Steel Bridge.

The contract for constructing a steel highway bridge across the Colorado River, near Topock, Ariz., has been awarded to the Kansas City Structural Steel Co., Kansas City, Mo., at \$74,450.

The Dalles, Ore., Post Office.

The contract for the construction, complete, of the U. S. post office at The Dalles, Ore., was awarded to George Isackson, Portland, Ore., at \$79,659. In the construction of the building fixtures and material manufactured by the following firms will be used: Plumbing fixtures, Crane Co.; nonconducting coverings, Gillen-Chambers Co.; cast iron column radiators and wall radiators, American Radiator Co.; nonconducting coverings for steam pipes, Keesbey & Mattison; radiator valves, Crane Co.; air valves for radiators, American Radiator Co.; damper regulator, Fulton Co.; air valves for steam mains, Jenkins Bros.; oil-burning apparatus, Fess System Co.; motor for oil-burning apparatus, Wagner; rheostat for motor, do; cabinet and tablet, Agutter-Griswold Co.; conduit, Western Conduit Co.; rubber-covered wire, Roebeling; flush switches, Hart Mfg. Co.; pendant switches, General Electric Co.; canopy switches, Cutler-Hammer Mfg. Co.; keyless sockets, Weber.

Port Townsend, Wash., Oil-Burning System.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for an oil-burning system in the U. S. post office at Port Townsend, Wash.:

S. Normile Heating and Plumbing Co., Seattle, Wash., \$1,706; time, July 30.

A. H. Cox & Co., Seattle, Wash., \$1,490; time, 30 days.

West Coast Heating Co., Seattle, Wash., \$1,395; time, 60 days.

S. T. Johnson Co., San Francisco, Cal., \$1,731; time, Aug. 25.

T. P. Jarvis Crude Oil Burner Co., San Francisco, Cal., \$1,445; time, Aug. 21.

Ben Olson Co., Tacoma, Wash., \$1,500; time, Sept. 15.

Applying-Griggs Co., Tacoma, Wash., \$1,173; time, 60 days.

Steel Gates, Reclamation Service.

The following bids were received by the director, U. S. Reclamation Service, Washington, D. C., for furnishing one set of steel Tainter gates for the Mesilla diversion dam, Rio Grande project, N. M.:

El Paso Foundry and Machinery Co., El Paso, Tex., 4.50c per lb. and 3.91c, alternate; weight, 51,000 lbs; delivered Sept. 1.

Exeter Machine Works, Pittston, Pa., 8.5c per lb; weight, 55,350 lbs; time, Sept. 1.

R. D. Wood & Co., Philadelphia, Pa., 5.9c per lb; weight, 51,750 lbs; time, Aug. 18.

Penn Bridge Co., Morado, Pa., 3.45c; weight, 51,000 lbs; time, Sept. 1.

Federal Bridge Co., Waukesha, Wis., 2.76c; weight, 52,300 lbs; time, Sept. 1.

Minneapolis Steel and Foundry Co., Minneapolis, Minn., 4.15c; weight, 52,000 lbs; time, Sept. 1.

Linman Hydraulic Manufacturing Co., Denver, Colo., 4 1/8c; weight, 50,000 lbs; time, Sept. 1.

Union Machine Co., San Francisco, Cal., 5c; weight, 51,000 lbs; time, Sept. 1.

Variety Iron and Steel Works Co., Cleveland, Ohio, 5.5c; weight, 52,500 lbs; time, Sept. 1.

Chicago Bridge and Iron Works, Chicago, Ill., 3.53c; weight, 55,000 lbs; time, Sept. 1.

Milwaukee Bridge Co., Milwaukee, Wis., 3.65c; weight, 57,900 lbs; time not stated.

Llewellyn Iron Works, Los Angeles, Cal., 6c; weight, 53,300 lbs; time, Aug. 7.

Central States Bridge Co., Indianapolis, Ind., 3.6c; weight, 55,000 lbs; time, Sept. 1.

Riter-Conley Manufacturing Co., Pittsburgh, Pa., 4.2c; weight, 56,000 lbs; time, Sept. 1.

Baker Iron Works, Los Angeles, Cal., 6.75c; weight, 59,000 lbs; time, 60 days.

Darbyshire-Harvie Iron and Machine Co., El Paso, Tex., total, \$3,245; weight, 60,000 lbs; time, Sept. 1.

Fulton Engineering Works, Los Angeles, Cal., 6.85c; weight, 64,000 lbs; time, Sept. 1.

Panama Canal Circular 947.

The purchasing officer of the Panama Canal will open bids July 20 for furnishing the following supplies and material:

Class 1, 370 louver panels for shed of pier No. 7.

Class 2, 59,500 carriage bolts, with square nuts.

Class 3, A quantity of machine bolts.

Class 4, A quantity of plain milling cutters and spiral end mills.

Class 5, 600 stenographers' notebooks.

Class 6, 500 sheets hinder's Board.

Class 7, 10,000 sheets white cardboard.

Class 8, 4,000 sheets fawn cardboard.

Class 9, 100 reams buff bond paper.

Class 10, 150 reams canary bond paper.

Class 11, 600 reams white bond paper.

Class 12, 100,000 manila tags 3x 10 1/2 in.

Denver, Colo., Vault Shelving.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for installing metal vault shelving in the U. S. post office at Denver, Colo.:

The Berger Mfg. Co., Canton, Ohio., \$1,361.

The Keyless Lock Co., Indianapolis, Ind., \$1,457.

The American Bank Protection Co., Minneapolis, Ind., \$1,504.

The General Fireproofing Co., Washington, D. C., \$1,547.

The Canton Art Metal Co., Canton, Ohio., \$1,586.

Watson Mfg. Co., Jamestown, N. Y., \$1,625.

Crown Metal Construction Co., Jamestown, N. Y., \$1,797.

The Van Dorn Iron Works Co., Cleveland, Ohio., \$1,598.65.

Panama Canal Acquisitions.

The general purchasing officer of the Panama Canal will soon call for bids for furnishing 3,250,000 lbs structural steel rivets and cast steel slabs for re-loader wharf at Balboa.

Crow Indian School, Mont., Building.

The following bids were received by the commissioner of Indian affairs, Washington, D. C., for constructing a brick school house and heating plant at the Crow Indian School, Mont.:

Gagnon & Co., Billings, Mont., school only, \$20,900; 135 days.

W. D. Lovell, Minneapolis, Minn., school, \$21,490; heating, \$4,500; total, \$25,990; 1580 days.

Army Work Awarded.

The following awards have been made by the construction branch of the quartermaster general's office during the past week:

San Francisco, Cal., Presidio.—Constructing shed over garbage crematorium, James Curry, San Francisco, Cal., \$954.

Letterman General Hospital. — Concrete ward building and addition to laboratory, all bids of San Francisco. Ward building—Construction, W. A. Newsom, \$12,885; plumbing, Wm. P. Scott, \$2,057; heating, The Turner Co., \$556; light fixtures, do, \$141. Addition to laboratory.—Construction, L. H. Stock, \$3,829; plumbing, D. O. Church, \$782; wiring, do, \$200; light fixtures, Roberts Mfg. Co., \$73.10; heating, The Turner Co., \$380.

SAN FRANCISCO—Subtreasury completion. Class A construction, \$9,760. Architect, Milton Dyer, Cuyahoga Bldg., Cleveland, Ohio. Owners, United States Government. Acting Supervising Architect Wetmore telegraphs from Washington, D. C., that the Construction and Engineering Co., 1047 Folsom street, this city, has presented the lowest bid at \$9,760 for the completion of the second floor of the United States subtreasury building.

HALLS AND SOCIETY BUILDINGS

BURLINGAME, SAN MATEO CO., CAL.—Commercial Club, 1 story, frame. Cost not stated. Architect's name not given. Owners, Burlingame Commercial Club. The building will cover an area of 40 by 100 feet and, besides the offices and display rooms, will contain a lecture hall, swimming tank, bowling alleys and hand ball courts. Interior will be finished in pine and redwood. Exterior design is in the rustic style and will be covered with rustic shingles. Plans are being prepared. Further mention will be made of the work.

HOSPITALS.

SAN FRANCISCO—Veterinary hospital, 2 story and base, reinforced concrete. Cost not stated. Architect, Norman H. Coulter, 46 Kearny street, S. F. Owners, San Francisco Veterinary College. The building will be erected on the east side of Tenth street 125 feet

south of Stevenson. Dr. Crealey, co-operating with the architect, has designed what will be the largest and most up-to-date and sanitary veterinary college in the west. The building, as designed, will have a frontage of 125 feet and a depth of 130 feet and will be of reinforced concrete construction, fireproof throughout. The main floor has been arranged for the hospital proper, operating rooms and laboratories. There will be a large mezzanine floor and second floor will contain the college class rooms, lecture rooms, study hall and offices. This portion of the building will be finished in pine and hardwood. Plans provide for steam heat, the latest and most sanitary plumbing and operating room equipment. Exterior will be faced with cement plaster and has been designed in the Classic style, and will be a decided addition to Tenth street. The college enrollment is in the neighborhood of 150 students. Plans are being prepared.

LIBRARIES.

GRIDLEY, BUTTE CO., CAL.—Library, 1 story and base, brick and concrete, \$6,500. Architect's name not given. Owners, Town of Gridley. George W. Tolley of Gridley submitted the lowest figure for the construction of the new library and will probably be awarded the contract. His bid was \$6,500. Three other bids were received.

RAILROAD CONSTRUCTION AND EQUIPMENT

SAN FRANCISCO—Municipal car barn addition, 1 story, reinforced concrete. Cost not stated. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. All bids received by the Board of Public Works for the construction of a one-story addition to the Geary Street Municipal Car Barns have been rejected. New bids will be called for shortly.

GREENVILLE, PLUMAS CO., CAL.—Electric railroad construction. Cost not stated. Engineer, Engineering Department Great Western Power Co., Shreve Bldg., S. F. Owners, Great Western Power Co., Lloyd P. Cornell of Oakland, representing the Great Western Power Co., is in Indian Valley getting rights of way from the various property holders for an electric line from Butte Valley to Engel's Mine. The pole line will run from a plant at Butte Valley over the hills, striking Indian Valley at the Lawrence race track near Greenville, and then along the base of the mountain to Lights Canyon, where the mine is located.

TACOMA, WASH.—Passenger station 2 and 4 story and base. Class A construction, \$100,000. Architect's name not given. Owners, Chicago, Milwaukee & St. Paul R. Co. The building will be erected on property at the corner of 25th and East A streets. Other than the fact that the building will be of fireproof construction no details have been given out. Bids will not be called at this time. Further mention will be made of the work.

Contracts Awarded

MODESTO, STANISLAUS CO., CAL.—Passenger station, 1 story and base,

frame and plaster, \$9,720. Architect, Chief Engineer Barlow, Flood Bldg., S. F. Owners, Southern Pacific Co. Contractor, George A. Bos, Hearst Bldg., S. F. Contract price, \$9,720.

RESIDENCES.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, L. Muldowney, 310 Guerrero street, S. F. The dwelling has been designed for a five-room house with bath, and will be erected on the east side of Rousseau avenue south of Bosworth. Interior will be finished in pine and redwood. Some hardwood floors will be used. There will be a large open fire place in the living room with a tile or brick mantel. Tile wainscot will be used in the bath room. An automatic water heater is specified. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, E. Ginley, 131 5th avenue, S. F. The dwelling will be erected on the west side of 15th avenue north of Balboa, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine and redwood with some elm panels. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residences, 3, 1 story and base, frame, \$2,000 each. Architect, none. Owner, F. Nelson, 30 Presidio Terrace, S. F. These dwellings will be erected on the east side of 29th avenue north of Irving street and each will contain five rooms and bath. Interior finish will be of pine and redwood. Oak floors will be used in the living and dining rooms. There will be a large open fire place in each living room. Mantels will be of tile and brick. Tile wainscot will be used in the bath rooms. Automatic water heaters are specified. Exteriors will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residence, 3 story and base, frame, \$5,000. Architect, Edward G. Bolles, 660 Market street, S. F. Owners, S. A. Born Building Co. The dwelling has been designed for an eight-room house with bath and sleeping porch and will be erected in Ashbury Terrace. Interior will be finished in pine and southern gum. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. An automatic water heater will be installed. Bath room will have tile floor and wainscot. Exterior of the house will

be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor under the direction of the architect.

SAN FRANCISCO—Residence, 2 story and base, frame, \$7,000. Architect, none. Owner, R. Roundtree, 408 Hugo street, S. F. The dwelling will be erected on the west side of 26th avenue south of West Clay Park, and has been designed to contain eight rooms, two baths and sleeping porch. A garage will also be provided. Interior of the house will be finished in pine and hardwood and mahogany. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, Daniel Ferguson, 65 7th street, Oakland. The dwelling will be erected on Evans avenue north of Wellington, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. An automatic water heater will be installed. Bath room will have tile floor and wainscot. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$4,500. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner's name withheld. The dwelling will be erected in East Oakland and has been designed for an eight-room house with bath and sleeping porch. A garage will also be erected on the property. Interior of the dwelling will be finished in pine with some hardwood veneer and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and sub-figures are being taken on the work.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, Miss Gertrude Anthony. The dwelling will be erected in Cragmont and has been designed for an eight-room house with bath and sleeping porch. Interior will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire

places. Mantels will be of tile or brick. Tile floor and wainscot will be used in the bath rooms. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are now out for figures.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$4,100. Architect, W. H. Ratcliff, Jr., First National Bank Bldg., Berkeley. Owner, Miss Tucker. The dwelling will be erected in North Berkeley, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and redwood with some hardwood veneer and white enamel. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

LOS GATOS, SANTA CLARA CO., CAL.—Residence, 2 story and base, frame, \$5,000. Architect, O. M. Vrooman, 55 South First street, San Jose. Owner, C. H. Phillips. The dwelling will contain eight rooms, bath and sleeping porch. Interior will be finished in pine and redwood with some white enamel. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with shingles. Plans are complete and figures are now being taken.

SAN FRANCISCO — Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, A. T. Morris, 501 11th avenue, S. F. The dwelling has been designed for a seven-room house and will be erected on the west side of 11th avenue north of Balboa street. Interior will be finished in pine and veneer blue gum. Hardwood floors will be used in the living room, dining room and reception hall. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO — Residence, 2 story and base, frame, \$4,000. Architects, Yerrick & Smith, Blake Bldg., Oakland. Owner, E. A. Janssen, Hearst Bldg., S. F. The dwelling will be erected in the Richmond District, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and some hardwood veneer. White enamel will be used in the bed rooms. There will be hardwood floors in the living room, dining room and reception hall. Furnace heat and open fire places are specified. Mantels will be of tile or brick. Tile floor and wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal

lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$5,400 each. Architect, none. Owners, Emma Vonach and Mrs. L. V. Grant, 131 Beaver St., S. F. These two houses will be erected at the gore corner of West Ashbury and North Ashbury, and each has been designed for a eight room house with bath, sleeping porch and basement garage. Interiors will be finished in pine, hardwood veneer and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be furnace heat and open fire places. Automatic water heaters will be installed. Bath rooms will be finished in tile and equipped with showers. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO — Residence, 2 story and base, frame, \$6,000. Architect, Albert Lapachet, 110 Sutter street, S. F. Owner's name withheld. The dwelling has been designed for an eight-room house with bath, sleeping porch and basement garage, and will be erected in the Richmond District. Interior will be finished in pine, hardwood veneer and white enamel. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile floor and wainscot and will be equipped with shower. An automatic water heater will be installed. Exterior of the building will be covered with brick veneer and cement plaster on metal lath. Plans are now being prepared.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$4,000. Architect, none. Owner, C. M. MacGregor, 470 13th street, Oakland. The dwelling will be erected on the south side of Lerida street west of Carlston, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and redwood with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of brick or tile. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, M. P. Brash. The dwelling will be erected in Northbrae, and has been designed for a five-room house with bath. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be an open fire place and tile or brick mantel. Exterior will be covered with rustic and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, Bernard F. Chambers, 9 Heyman avenue, S. F. The dwelling will be erected on the west side of Diamond street north of Chenery, and has been designed to contain five rooms and bath. Interior will be finished in pine and redwood. Some oak floors will be used. There will be open fire places and tile mantels. Exterior of the house will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SCHOOLS.

FRUITVALE, ALAMEDA CO., CAL.—School gymnasium, 1 story, frame. Cost not stated. Architect, Julia Morgan, Merchants' Exchange Bldg., S. F. Owners, Mills College. The building will be in the nature of an addition to the present building and will contain bowling alleys. Interior will be finished in pine. Exterior will be covered with rustic and cement plaster on metal lath. Plans are complete and figures are now being taken.

CHICO, BUTTE CO., CAL.—School power house, \$1,420. Architect, State Architect, George B. McDougall, Sacramento. Owners, State of California. Six sets of figures were received for the construction of the new power house at the Chico State Normal School. E. D. Sharp, Chico, presented the lowest bid at \$1,420 and will probably be awarded the contract. A complete list of the bids received will be found under the heading of San Francisco in this issue.

STOCKTON, SAN JOAQUIN CO., CAL.—School, 1 story and base, frame and brick veneer, \$25,000. Architects, Stone & Wright, 24 South California street, Stockton. Owners, City of Stockton. The building will be erected on property bounded by Lincoln, Harrison, Anderson and Jefferson streets, and has been designed for a seven class room building with a large auditorium. Interior will be finished in pine with maple floors in the class rooms. There will be steam heat, oil burning system and program clocks. Modern school plumbing and vacuum cleaning will be installed. Exterior of the building will be covered with veneer pressed brick. Plans are complete and figures will be called for at once.

MONTEZUMA SCHOOL DISTRICT, SAN JOAQUIN CO., CAL.—School, 1 story, frame, \$4,800. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owners, Montezuma School District. Five bids opened for the construction of this building show Frank Darnell, 1943 San Joaquin avenue, Stockton, low at \$4,800. All bids were taken under advisement.

LA CRESCENTA, LOS ANGELES CO., CAL.—School, 1 story and base, hollow tile. Cost not stated. Architects, Tuttle & Angel, Delta Bldg., L. A. Owners, La Crescenta School District. The building will cover an area of 108 by 112 feet and has been designed to contain four large class rooms and an auditorium. Interior will be finished in pine with maple floors in the class rooms. Plans provide for steam heat, modern school plumbing and vacuum cleaning. Exterior of the building will be faced with cement plaster. Plans

PROPOSALS FOR BRONZE AND IRON WORK.

BRONZE AND IRON WORK—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 21st day of July, 1915, and then opened, for the flagpoles and miscellaneous bronze and iron work for the United States post office at Denver, Colo., in accordance with the specifications, copies of which may be had at the office of the supervising architect, JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR BUILDING.

BUILDING—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Washington, D. C., until 2 o'clock p. m. July 20, 1915, for furnishing material for outlet structures for Keechelus reservoir, Yakima project, Washington, and for Sherburne reservoir, Milk River project, Montana. Estimated cost, \$163,777. Slide gates for 100 feet head, cast iron piers, two cast steel columns and other accessory parts for each reservoir. For particulars address the United States Reclamation Service, Washington, D. C. MORRIS BIEN, acting director.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 947—Proposals for Louvre Panels, Carriage and Machine Bolts, Pipe, Milling Cutters and Spiral End Mills, Note Books, Binders' Board, Cardboard, Bond Paper and Manila Tags.—Sealed proposals will be received at the office of the general purchasing officer, Panama Canal, Washington, D. C., until 10:30 a. m. July 20, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Plans and general information relating to this circular (No. 947) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. A., general purchasing officer.

STATE OF CALIFORNIA. DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION.

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the **California Highway Commission, 515 Forum Building, Sacramento, Cal.**, until 2 o'clock p. m. on **July 26, 1915**, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:

Colusa County, through Arbuckle (III-Col-7-A), about 0.3 miles in length, to be surfaced with asphalt 55 feet wide.

Marin County, between Burdell and St. Vincent (IV-Mrn-1-A), about 4 miles in length, to be graded.

Monterey County, from Greenfield to Camphora (V-Mon-2-D), about 11.7 miles in length, to be paved with Portland cement concrete.

Sanita Barbara County, from Gaviota Pass to Zaca Station (V-S. B-2-D), about 11.4 miles in length, to be graded.

San Luis Obispo County, from Atascadero Creek to Paso Robles (V-S. L. O-2-B), about 10 miles in length, to be paved with Portland cement concrete.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers offices are lo-

cated at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANLY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.

AUSTIN B. FLETCHER,
Highway Engineer.
WILSON R. ELLIS,
Secretary.

Dated: June 29, 1915.

PROPOSALS FOR SUBMARINES.

SUBMARINES—Proposals for constructing by contract sixteen submarine boats, Nos. 62-77, will be received at the Navy Department until 12 o'clock noon August 2, 1915, when they will be publicly opened. Circulars for the information of bidders and general specifications for the construction of said vessels are ready for distribution among prospective bidders. Forms of proposal and contract may be had on application to the department. FRANK L. D. ROOSEVELT, Acting Secretary of the Navy.

PROPOSALS FOR DREDGING.

1915, and then and there publicly opened for dredging 72,000 cubic yards, **DREDGING**—Sealed proposals, endorsed "Proposals for Dredging," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. July 31, more or less, at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, Chief of Bureau.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Seven Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. July 24, 1915, and then and there publicly opened, for one power house, one operating building and one storehouse of stucco and steel frame, one pump house, one quarters for commanding officer, one double quarters for chief operator and one operators' quarters of stucco wood frame construction at the naval radio station, San Diego, Cal. Plans and specifications may be obtained on application to the bureau or to the officer in charge, naval radio station, San Diego, Cal. H. R. STANFORD, Chief of Bureau.

CALIFORNIA AN ART CENTER.

Rather interesting is the fact that eastern Massachusetts and Southern California, on opposite sides of the continent, should be conspicuous today for triumphs in the realm of esthetics that probably neither the conscience-impelled Pilgrims and Puritans nor the gold-seeking "forty-niners" supposed would become part of the ultimate civilization of the two coasts, says Christian Science Monitor. Equally important to note in connection with the achievements in the plastic arts is their distinct, authentic, characteristically native quality, but little influenced, if at all, by any prevailing fashions in Europe or in the quasi-American city of New York.

How far climate, scenery, and the survivals of aboriginal and Spanish art have shaped the California school

Mary Austin tells in the April Century. It is a convincing, persuasive argument, with its references to the classic cases of Greece and Italy, as showing the relation of the external world to the art that flowered out in Athens and in Rome. Where color abounds in sky and on land, where there is clean-cut definition of landscape forms, where agriculture and its fruits may be made contributory to the pageantry of human experience formally arranged, and where there appears to be a never-ceasing impression upon the beholder of the vitality of nature, there, according to this California interpreter, the creative impulse always flowers out in art.

To these influences, native and inherent, as might be said, in the very physical structure of the region, and bound to influence all who dwell there more or less, add any imported influences of an educational or broadening sort, such as in the course of time may come from contact with Japanese and Chinese art and artists, or as must be latent in the art exhibits of foreign nations at the San Francisco and San Diego expositions, and it should not surprise the nation if out of the southwest and the west were to come some of the greatest of painters, sculptors, and architects. The inspirational influence of the total environment has already registered itself in verse and in fiction, and in nature interpretation by such a genius as Muir.

ADDITIONS TO AMERICAN MERCHANT FLEET.

Merchant vessels built in the United States and officially numbered by the Bureau of Navigation, Department of Commerce, during the fiscal year ended June 30, 1915, were 1,226, of 215,711 gross tons, compared with 1,291, of 311,575 gross tons, for the fiscal year 1914.

During the past 10 months, however, under the Ship Registry Act of August 18, 1914, to the American merchant fleet, 147 foreign-built vessels of 528,907 gross tons have been added, making the total for the year from both sources 1,373 vessels of 744,618 gross tons.

This tonnage is the largest annual addition to the American merchant fleet in the history of the United States. In 1908 the total increase was 718,683 gross tons, in 1907 it was 596,705 gross tons, and in 1955 it was 586,102 gross tons.

The losses to the merchant fleet for the past year have not all been reported, but for the first nine months they numbered 1,062 vessels of 195,052 gross tons.

Two sovereigns of England have lived to an age of over eighty, three to an age of over seventy and ten to an age of over sixty.

Fort Warden, Concrete Wharf.

The bid of John J. Stockland, \$795 in amount, has been accepted for the construction of a concrete wharf at Fort Worden, Wash.

A form of the camera obscura has been invented by a Freemason to inform an aviator when he deviates from a given course.

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, L. Muldowney, 310 Guerrero street, S. F. The dwelling has been designed for a five-room house with bath, and will be erected on the east side of Rousseau avenue south of Bosworth. Interior will be finished in pine and redwood. Some hardwood floors will be used. There will be a large open fire place in the living room with a tile or brick mantel. Tile wainscot will be used in the bath room. An automatic water heater is specified. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$3,500. San Francisco. Architect, none. Owner, E. Ginley, 121 5th avenue, S. F. The dwelling will be erected on the west side of 15th avenue north of Balboa, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine and redwood with some elm panels. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCES—3, 1 story and base, frame, \$2,000 each. San Francisco. Architect, none. Owner, F. P. Nelson, 30 Presidio Terrace, S. F. These dwellings will be erected on the east side of 29th avenue north of Irving street and each will contain five rooms and bath. Interior finish will be of pine and redwood. Oak floors will be used in the living and dining rooms. There will be a large open fire place in each living room. Mantels will be of tile and brick. Tile wainscot will be used in the bath rooms. Automatic water heaters are specified. Exteriors will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, Edward G. Bolles, 660 Market street, S. F. Owners, S. A. Born Building Co. The dwelling has been designed for an eight-room house with bath and sleeping porch, and will be erected in Ashbury Terrace. Interior will be finished in pine and southern gum. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Man-

tels will be of tile and brick. An automatic water heater will be installed. Bath room will have tile floor and wainscot. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor under the direction of the architect.

RESIDENCE—2 story and base, frame, \$7,000. San Francisco. Architect, none. Owner, R. Rountree 408 Hugo street, S. F. The dwelling will be erected on the west side of 26th avenue south of West Clay Park, and has been designed to contain eight rooms, two baths and sleeping porch. A garage will also be provided. Interior of the house will be finished in pine and hardwood and mahogany. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, De Favio, 1837 Mason street, S. F. Owner, M. Francisco. The building will be erected on Lombard street west of Kearny, and has been designed to contain two flats of five and six rooms. Interiors will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Bath rooms will have imitation tile wainscot. Exterior of the building will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

FLATS—2 story and base, frame, \$4,000. San Francisco. Architect, none. Owner, Thomas McCormick, 25 Gladys street, S. F. The building will be erected on the south side of Highland avenue east of Mission, and will cover an area of 25 by 56 feet. There will be two modern flats of five and six rooms. Interiors will be finished in pine and redwood. Some oak floors will be used. Each living room will have an open fire place and tile mantel. Automatic water heaters will be installed. Imitation tile wainscot will be used in the bath rooms. Exterior of the building will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

FLATS AND STORE—3 story and base, frame, \$6,500. San Francisco. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner's name withheld. The building will be erected in the Mission district, and has been

designed for a store on the first floor and two modern flats of five and six rooms on the upper floors. Interiors will be finished in pine and redwood. Some oak floors will be used. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

FLATS—3 story and base, frame, \$9,000. San Francisco. Architect, S. J. Sterner, S. F. Owner, C. Tiedeman, 204 6th avenue, S. F. The building will be erected on the west side of 7th avenue south of California street, and has been designed to contain six modern flats. Interior will be finished in pine and hardwood with some white enamel in the bed rooms. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be a central heating system, hot water heaters and open fire places. Mantels will be of tile. Bath rooms will have tile floors and wainscot. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are being purchased.

APARTMENT HOUSE—2 story and base, frame, \$10,000. San Francisco. Architect, none. Owner, Arthur Stevens, Sausalito. The building will be erected on the west side of Leavenworth street north of Vallejo, covering an area of 25 by 74 feet, and has been designed to contain a total of six suites. Interiors will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. All apartments will have wall beds and private baths. Marble and tile wainscot will be used. There will be a central heating system and a hot water supply. Bath rooms will have tile wainscot. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

APARTMENT HOUSE—3 story and base, frame, \$10,000. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, Neil L. Nielson. The building will be erected on the south side of Sacramento east of Presidio, covering an area of 25 by 80½ feet. There will be a total of ten suites, all of which will have wall beds and private baths. Interior will be finished in pine with some elm panels and hardwood floors. Plans provide for steam heat and a hot water system. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance. Exterior of the building will be covered with pressed brick veneer, shiplap and cement plaster on metal lath. Plans are being prepared.

APARTMENT HOUSE ADDITION—1 story, frame. Cost not stated. San

Francisco. Architect, none. Owner, Chester Williamson, 1364 Divisadero street, S. F. The present street will undergo alterations and additions. The new portion of the building will contain two and three room apartments. Interior will be finished in pine. There will be a hot water system, modern plumbing and electric work. Plans are complete and the work will be done by Day Labor.

FLATS—2 story and base, frame, \$3,500. San Francisco. Architect, none. Owner, Henry Shelton, 1522 Santa Clara avenue, Alameda. The building will be erected on the west side of Minna street south of 14th, and has been designed to contain two flats of five rooms each. Interior will be finished in pine and redwood. Some oak floors will be used. There will be open fire places and tile mantels. Bath rooms will have imitation tile wainscot. Exterior of the building will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

FLATS—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, A. J. Bowley, 3946 19th street, S. F. The building will be erected on the south side of Hancock street west of Sanchez, covering an area of 24 by 53 feet, and has been designed to contain two small flats. Interiors will be finished in pine and redwood. Some hardwood floors will be used. There will be open fire places in the living rooms with tile or brick mantels. Imitation tile wainscot will be used in the bath rooms. Exterior of the building will be covered with rustic and ship-lap. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, H. E. Harris, Monadnock Bldg., S. F. Owner, C. A. Rushton. The building will be erected at the northwest corner of Fulton and 9th avenue, and has been designed to contain two modern flats of five and six rooms. Interiors will be finished in pine and hardwood. Hardwood floors will be used in the living and dining rooms and reception halls. There will be open fire places and tile or brick mantels. Bath rooms will be finished in tile. Automatic water heaters will be installed. Exterior of the building will be covered with brick veneer and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

FLATS—4, 2 story and base, frame, \$4,500 each. San Francisco. Architect, none. Owner, J. G. Kincanon, 215 Montgomery street, S. F. These buildings will be erected on the west side of Steiner street north of Union, each covering an area of 25 by 60 feet, and each designed to contain two modern flats of five and six rooms. Interior finish will be of pine, redwood and hardwood veneer. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be an open fire place in each living room with tile or brick mantel. Bath rooms will have tile wainscot. Automatic water heaters are specified. Interiors will be covered with rustic and cement plaster on metal lath. Plans

are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SUBTREASURY COMPLETION — Class A construction, \$9,760. San Francisco. Architect, Milton Dyer, Cuyahoga Bldg., Cleveland, Ohio. Owners, United States Government. Acting Supervising Architect telegraphs from Washington, D. C., that the Construction and Engineering Co., 1047 Folsom street, this city, has presented the lowest bid at \$9,760 for the completion of the second floor of the United States subtreasury building.

RESIDENCE — 2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, A. T. Morris, 501 11th avenue S. F. The dwelling has been designed for a seven-room house, and will be erected on the west side of 11th avenue north of Balboa street. Interior will be finished in pine and veneer blue gum. Hardwood floors will be used in the living room, dining room and reception hall. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE — 2 story and base, frame, \$4,000. San Francisco. Architects, Yerrick & Smith, Blake Bldg., Oakland. Owner, E. A. Janssen, Hearst Bldg., S. F. The dwelling will be erected in the Richmond District and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and some hardwood veneer. White enamel will be used in the bed rooms. There will be hardwood floors in the living room, dining room and reception hall. Furnace heat and open fire places are specified. Mantels will be of tile or brick. Tile floor and wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$5,400 each. San Francisco. Architect, none. Owners, Emma Vonach and Mrs. L. V. Grant, 131 Beaver street, S. F. These two houses will be erected at the gore corner of West Ashbury and North Ashbury, and each has been designed for an eight-room house with bath, sleeping porch and basement garage. Interiors will be finished in pine, hardwood veneer and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be furnace heat and open fire places. Automatic water heaters will be installed. Bath rooms will be finished in tile and equipped with showers. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE — 2 story and base, frame, \$6,000. San Francisco. Architect, Albert Lapachet, 110 Sutter street, S. F. Owner's name withheld. The

dwelling has been designed for an eight-room house with bath, sleeping porch and basement garage, and will be erected in the Richmond District. Interior will be finished in pine, hardwood veneer and white enamel. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile floor and wainscot and will be equipped with shower. An automatic water heater will be installed. Exterior of the building will be covered with brick veneer and cement plaster on metal lath. Plans are now being prepared.

MUNICIPAL CAR BARN ADDITION — 1 story, reinforced concrete. Cost not stated. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. All bids received by the Board of Public Works for the construction of a one-story addition to the Geary Street Municipal Car Barns have been rejected. New bids will be called for shortly.

STORES — 1 story and base, reinforced concrete. Cost not stated. San Francisco. Architect, Albert Lapachet, 110 Sutter street, S. F. Owner's name withheld. The building will be erected on Geary street near Buchanan, having a frontage of 50 feet. There will be two small stores. Interior will be finished in pine. Patent store fronts are specified. Exterior will be faced with cement plaster. Plans are complete and figures will be taken shortly.

FACTORY—4 story and base. Class A construction, \$250,000. San Francisco. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, John Bollman Co. It has been learned on excellent authority that the proposed building to be erected for this company on their newly acquired property at the corner of Fourth and Bryant streets will not be started until late in the fall probably not until October or November. Further mention will be made of the work.

VETERINARY HOSPITAL—2 story and base, reinforced concrete. Cost not stated. San Francisco. Architect, Norman R. Coulter, 46 Kearny street, S. F. Owners, San Francisco Veterinary College. The building will be erected on the east side of Tenth street 125 feet south of Stevenson. Dr. Creeley, co-operating with the architect has designed what will be the largest and most up-to-date and sanitary veterinary college in the west. The building, as designed, will have a frontage of 125 feet and a depth of 130 feet, and will be of reinforced concrete construction fireproof throughout. The main floor has been arranged for the hospital proper, operating rooms and laboratories. There will be a large mezzanine floor and second floor which will contain the college class rooms, lecture rooms, study hall and offices. This portion of the building will be finished in pine and hardwood. Plans provide for steam heat, the latest and most sanitary plumbing and operating room equipment. Exterior will be faced with cement plaster and has been designed in the Classic style and will be a decided addition to Tenth street. The college enrollment is in the neighborhood of 150 students. Plans are being prepared.

TORRE—1 story and base, frame, \$2,500. San Francisco. Architect, P. F. De Martini, 2123 Powell street, S. F. Owner M. J. Sarraile. The building will be erected at the southwest corner of Beach and Grant avenue, covering an area of 50 by 75 feet. Interior will be finished in pine and redwood. Some special fixtures will be installed. Exterior will be covered with rustic and shiplap. Plans are complete and the work will be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, Bernard F. Chambers, 9 Heyman avenue, S. F. The dwelling will be erected on the west side of Diamond street north of Chenery, and has been designed to contain five rooms and bath. Interior will be finished in pine and redwood. Some oak floors will be used. There will be open fire places and tile mantels. Exterior of the house will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

Contracts Awarded

PIER REPAIRS—\$14,281. San Francisco. Engineer, Assistant State Engineer Newman, Ferry Bldg., S. F. Owners, State of California. Contractors, Healy-Tibbitts Construction Co., S. F. Repairs to Pier No. 11, \$14,281.

City Bids Opened

Board of Public Works Rejects All Bids for the Addition to the Municipal Car Barns.

Bids were opened at the regular Wednesday afternoon session of the Board of Public Works for furnishing hoilers for the Polytechnic High School, re-arranging the Fire Department stables and for furnishing track specials. All bids received for the addition of a second story to the Geary Street Municipal Car Barns have been rejected and new figures will be called. Following is a list of the bids received:

	Prop. No. 1	Prop. No. 2
Wittman Lyman & Co.	\$15,644	\$14,944
F. P. Walsh	13,800	12,990
Atlas Htg & Vnting Co	15,975	15,300
J. C. Hurley	15,922	15,386
Scott Co.	14,720	13,870
R. Daizell Jr.	15,342	15,200

Re-arranging Fire Department Stables.

	Prop. No. 1	Prop. No. 2
O. Monson	\$9,730	\$7,700
Dunnivant Oakley	11,411	2,059
McSheehy Bros.	12,700	792
F. Rolandi	7,950	633
Wm. Bruce	15,735	715

Prop. No. 1 is for moving, etc., and No. 2 for additions to shed.

Track Specials, Municipal Railway.
C. S. Steel Products Co.....\$10,915
Pennsylvania Steel Co.....16,761
W. Wharton Jr.....15,356

Board of Public Works Receives Bids For Third Street Bridge Work and Awards Other Contracts.

Bids were received at the Monday meeting of the Board of Public Works for pile fender and bulkhead work at

the Third street bridge as follows:

Thomson Bridge Co.	\$2,437
Healy Tibbitts Constr. Co.	1,932
C. E. Lamberth	2,800
Hyde-Harjes Co.	2,230

The contract was awarded to Healy-Tibbitts Construction Company.

Other awards made at the same meeting were as follows:

Award contract for furnishing and installing hoilers, etc., in the Polytechnic High School to F. P. Walsh on his bid of \$12,990.

Award contract to F. Rolandi for re-arranging fire department stables on his bid of \$7,950.

Award contract for the light fixtures in the New City Hall Building to Leo J. Meyberg on his bid of \$32,915 with alternate making a total bid of \$32,999.

Chico Power House Bids Are Opened.

Six Bids Received For Small Power House at Chico State Normal School. Contract Not Awarded.

Six sets of figures were received by the State Department of Engineering Wednesday for the construction of a power house for the Chico Normal School. E. D. Sharp submitted the lowest bid at \$1,420 and will probably be awarded the contract, although no official action was taken. Following is a complete list of the bids received:

Power House, Chico State Normal.	
E. D. Sharp	\$1,420
E. B. Johnson	1,598
John A. Silva	1,643
George W. Boxton & Son	1,772
Welch Bros. & Hannaman	1,989
Power Equipment Co.	2,482

INCORPORATIONS

Sebastopol Mining & Development Co.
Capital Stock, \$1,000,000; subscribed, \$25; shares, \$5 each. Directors—J. G. Woodward, C. W. Dodenhoff, E. D. Bills, W. H. Baitey, J. P. Miller, 1 share each. Place of business, S. F.
American Asiatic Trading Co.
Capital Stock, \$75,000; subscribed, \$500; shares \$100 each. Directors—L. F. Haber, A. L. Haber, H. F. Haber, E. E. Haber, R. S. Haber, 1 share each. Place of business San Francisco.

Building Contracts Awarded

No.	Owner.	Contractor	Amt.
1926	Demattell	Delucchi	1500
1927	Proda	Marcussen	1000
1928	Stollenberg	Stollenberg	450
1929	Zanetti	Landelli	1600
1930	Stafford	Delanoy	500
1931	Keyes	Gilson	1000
1932	Pippy	Newton	1000
1933	Walsh	Sup. Collins	1350
1934	Bergendoff	Rudometzin	3300
1935	Sudden	Foster	11146
1936	Eyre	Garden	6075
1937	Hasselbrock	Klahn	2115
1938	Hell	Moriconi	4550
1939	Tiedeman	Tiedman	9000
1940	Scoble	Scoble	8500
1941	Post Amuse.	Owner	400
1942	Fleishmann	Owner	500
1943	Hotaling	Day	800
1944	Galos	Galos	600
1945	Poll	Cerda	600
1946	Kessler	Meek	450
1947	Cleese	Cleese	2250
1948	McCreery	Nielsen	15000
1949	Kacjen	Kacjen	500

1950	Grell	Guilfooy	400
1951	Delicato	Delicato	400
1952	Heyman	Heyman	1350
1953	Westing	Westing	350
1954	Federal Sign	Owner	400
1955	Loazia	Loazia	400
1956	Traversaro	Traversaro	400
1957	Myrick	Rainey	4690
1958	Bacigalupi	Chisippe	3950
1959	Morshead	Miletin	2038
1960	Western Pac.	Counihan	1100
1961	Col. of Phys.	Elam	3000
1962	Petersen	Anderson	1500
1963	Marisch	Marisch	500
1964	Muldowney	Owner	2000
1965	Corponi	Moriconi	700
1966	Knowles	Weldon	400
1967	Lacey	Lacey	500
1968	McCormick	McCormick	400
1969	Doig	Doig	2000
1970	Kelloh	Connolly	500
1971	Born	Born	500
1972	Ginley	Ginley	3000
1973	Nelson	Nelson	1800
1974	Nelson	Nelson	1800
1975	Nelson	Nelson	1800
1976	Geifford	Geifford	225
1977	Swigert	Schrader	4240
1978	Same	Peterson	11140
1979	Same	Ernst	800
1980	Streckenbach	Cavaglieri	12500
1981	Loe	Bowers	325
1982	Franceschi	Del Favero	3375
1983	Welsh	Welsh	4000
1984	Kincanon	Kincanon	4500
1985	Same	Same	4500
1986	Same	Same	4500
1987	Same	Same	4500
1988	Same	Same	25000
1989	Metter	Metter	400
1990	Molloy	McKenna	900
1991	La Forest	La Forest	750
1992	Van Doran	Terry	600
1993	Berlund	Anderson	450
1994	Valllemiga	Anderson	900
1995	Landes	Landes	450
1996	Stevens	Stevens	7000
1997	Yonach	Yonach	3400
1998	Same	Same	5400
1999	Nardi	Ghezzi	6990
2000	Nielsen	Johnson	10638
2001	W'n Pacific	Day	1550
2002	Brickell	City Imp	400
2003	Biltmore	Felt	4490
2004	Auzerais	Wilkie	15600
2005	Gilbert	Mission Con	400
2006	Collins	Collins	400
2007	Post Amuse.	Novelty	400
2008	Maechmald	Maechmald	400
2009	Morris	Morris	2800
2010	S P Co.	Brumfield	3137
2011	Rountree	Rountree	5000
2012	Bauer	Cox	450
2013	Cal Market	Swenson	400
2014	Bowley	Bowley	2000
2015	Shotten	Shotten	3500
2016	Franceschi	Franceschi	3375
2017	McNally	Rose	3095

FRAME DWELLING

(1926) **SE WILLIAMS & NEWHALL.**
One-story and basement frame dwlg. Owner.....G. Demattell, Premises. Architect.....None.
Contractor.....P. Delucchi, 99 Wheat, San Francisco.
COST, \$1500

CONCRETE FOUNDATION.

(1927) **NW WASHINGTON & TAYLOR**
Concrete foundation.
Owner.....L. E. W. Prnda, Bankers' Invest. Bldg., S. F.
Architect.....Fred Meyer, Bankers' Investment Bldg., S. F.
Contractor.....Marcus Marcussen, Royal Insurance Bldg., S. F.
COST, \$1000

ALTERATIONS

(1928) **E. LILAC ALLEY 150 S 25th.**
Alter for garage.
Owner.....Mrs. E. Stollenberg, Okd.
Architect.....A. W. Richardson, 937 Church, San Francisco.
Day's work.....COST, \$450

FRAME DWELING

(1929) **SW KIRKWOOD & PHELPS.**
One-story and basement frame dwlg. Owner.....A. Zanetti, 1741 Kirkwood, San Francisco.

Architect...None.
Contractor...A. Lindelli, 19 Carr, S. F.
COST, \$1600

FRAME GARAGE
(1930) N EUCLID 74 E Palm Ave.
One-story frame garage.
Owner.....Dr. A. A. Stafford, 1908
Santa Clara Ave., Alameda.
Architect...A. Smith, 1004 Broadway,
Oakland.
Contractor...Delaney & Randlett, 2302
Central Ave., Alameda.
COST, \$500

ALTERATIONS
(1931) NOS. 25-37 SANSOME. Alter
interior of store.
Owner.....A. D. Keyes, Humboldt
Bank Bldg., S. F.
Architect...None.
Contractor...J. E. Gilsen, 180 Jessie,
San Francisco.
COST, \$1000

ADDITION
(1932) No. 231 FRANKLIN. Add one
story frame to building.
Owner.....Col. H. Pippy, Premises.
Architect...None.
Contractor...John Newton, 165 Frank-
lin, San Francisco.
COST, \$1000

ALTERATIONS
(1933) NO. 261 TWENTY-SIXTH AVE.
Raise, alter and add 2 rooms to dwlg
Owner.....J. Walsh, 838 14th, S. F.
Architect...None.
Contractor...Superior Constr. Co.
COST, \$1350

FRAME FLATS
(1934) W WISCONSIN near 22nd. Two
story and attic flats.
Owner.....Jno. Bergendoff, Premises.
Architect...W. J. Cuthbertson, 328
Montgomery, S. F.
Contractor...Rudometzin Bros.
COST, \$3500

FRAME AND CONCRETE RESIDENCE
(1935) N WASHINGTON 103 W Spruce
N 127-8½xW 62-6. All work for two-
story and basement frame and con-
crete residence.
Owner.....Margaret E. Sudden, 62
Jordan Ave., S. F.
Architect...G. A. Applegarth, Claus
Spreckels Bldg., S. F.
Contractor...Foster & Vogt, Sharon
Bldg., San Francisco.
Filed July 3, '15. Dated June 23, '15.
On 1st of each month..... 75%
Usual 135 days..... 25%
TOTAL COST, \$11,146
Bond, none. Limit, 60 days. Forfeit,
none. Plans and specifications filed.

ALTERATIONS
(1936) E SANSOME, bet. Bush and
Pine. Alterations and additions to
building.
Owner.....Eyre Investment Co., Mer-
chants' Exchange Bldg.,
San Francisco.
Architect...Benj. G. McDougall, Shel-
don Bldg., S. F.
Contractor...Frank M. Garden & Co.,
251 Kearny, S. F.
Filed July 6, '15. Dated July 2, '15.
Bet. 1st and 10th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$6075
Bond, \$3037.50. Surety, Massachusetts
Bonding & Insurance Co. Limit, 70

days. Forfeit, \$25. Plans and speci-
fications filed.

FRAME STORES
(1937) W MISSION 234 N 17th N 23-6
xW 100. All work except painting
for one-story frame stores.
Owner.....Wm. and Wm. J. II.
Hasselbrock, 5 Montgom-
ery, San Francisco.
Architect...A. Klahn.
Contractor...A. Klahn & Son, 27 Chen-
ery, San Francisco.
Filed July 6, '15. Dated July 6, '15.
Frame up\$320
Brown coated 600
Finished 595
Usual 35 days..... 600
TOTAL COST, \$2115

Bond, none. Limit, 65 days. Forfeit,
\$5. Plans and specifications filed.
NOTE:—1st report on June 16, No.
1767.

FRAME FLATS
(1938) NW UNION & MOORE PLACE
W 26xN 57. All work for two-story
and basement frame flats.
Owner.....Emilio and Agostino Belli,
873 Vallejo, S. F.
Architect...Chas. Fantoni, 916 Kearny,
San Francisco.
Contractor...G. Moriconi & Giovanni
Passarino.
Filed July 6, 15. Dated June 30, '15.
Roofed\$1137.50
Brown coated 1137.50
Completed and accepted..... 1137.50
Usual 35 days..... 1137.50
TOTAL COST, \$4550.00

Bond, \$2275. Sureties, Raffaello Petri
and P. Mei. Limit, — days from filing.
Forfeit, \$3. Plans and specifications
filed.

FRAME FLATS
(1939) W SEVENTH AVE 110 S Cali-
fornia. Three-story and basement
frame (6) flats.
Owner.....C. Tiedeman, 204 6th Ave.,
San Francisco.
Architect...None.
Day's work..... COST, \$9000

FRAME FLATS
(1940) SW PALM AND EUCLID AVES
Two-story and basement frame (4)
flats.
Owner.....Thos. Scoble, 363 14th Ave.,
San Francisco.
Architect...E. E. Young, 251 Kearny,
San Francisco.
Day's work..... COST, \$8500

ADDITIONS
(1941) S ELLIS bet. Fillmore and
Steiner. Add stage entrance and re-
pair stage.
Owner.....Post Amusement Co., Gar-
rick Theatre, S. F.
Architect...None.
Day's work..... COST, \$400

FRAME DWELLING
(1942) NO. 715 BERLIN. One-story
and basement frame dwelling.
Owner.....Chas. F. Fleishmann, 617
Girard, San Francisco.
Architect...None.
Day's work..... COST, \$500

ADDITION
(1943) NO. 1900 FRANKLIN. Add sun
room.
Owner.....F. R. Hotaling, Premises.
Architect...None.

Contractor...C. A. Day Co., Wells
 Fargo Bldg., S. F.
COST, \$800

CONCRETE FLOOR
(1944) NO. 607 LARKIN. Concrete
floor in restaurant.
Owner.....G. Galos.
Architect...None.
Day's work..... COST, \$600

ALTERATIONS
(1945) NO. 210 MAYNARD. Alter
dwelling.
Owner.....A. Poli, Premises.
Architect...None.
Contractor...John Cerda, 358 Vienna,
San Francisco.
COST, \$600

ALTERATIONS
(1946) NO. 118 CALIFORNIA. Alter
saloon and grill.
Owner.....R. T. Kessler.
Architect...None.
Contractor...T. H. Meek Co., 1157 Mis-
sion, San Francisco.
COST, \$450

FRAME DWELLING
(1947) E THIRTY-SIXTH AVE 125 S
Anza. One-story and basement frame
dwelling.
Owner.....Geo. F. and Lucy S. Cleese,
524 27th Ave., S. F.
Architect...None.
Day's work..... COST, \$2250

ALTERATIONS
(1948) SW DRUMM AND PACIFIC.
General alterations and changes for
macaroni factory.
Owner.....McCreery Estate Co., 221
Sansome, San Francisco.
Architect...Charles Peter Weeks, 1106
Mutual Bank Bldg., S. F.
Contractor...N. F. Nielsen, 110 Jessie,
S. F.
COST, \$15,000

ALTERATIONS
(1949) NOS. 1055-57 YORK. Move,
underpin and repair dwelling.
Owner.....Frank Kacjan, 910-A
Florida, San Francisco.
Architect...None.
Day's work..... COST, \$500

MARQUISE
(1950) SE CLAY AND JOICE. Erect
marquise.
General Contractor...P. H. Grell, 148
Park, San Francisco.
Architect...None.
Sub-Contractor...Guilfooy Cornice Wks.,
229 Sth. San Francisco.
COST, \$100

ALTERATIONS
(1951) NO. 316 LONDON. Raise and
underpin dwelling.
Owner.....D. Delicato, Premises.
Architect...None.
Day's work..... COST, \$100

FRAME DWELLING
(1952) W ELEVENTH AVE 50 N Mor-
aga. One-story and basement frame
dwelling.
Owner.....Oscar Heyman & Bro., 742
Market, San Francisco.
Architect...None.
Day's work..... COST, \$1950

FRAME DWELLING
(1953) S SHAFTER 100 E Rail Road

Ave. One-story and basement frame dwelling.
Owner.....J. D. Westing, 1631 Shafter San Francisco.
Architect...None.
Day's work. COST, \$950

ELECTRIC ROOF SIGN
(1954) NO. 257 EIGHTH. Electric roof sign.
Owner.....Federal Sign System Elec., Premises.
Architect...None.
Day's work. COST, \$400

ALTERATIONS
(1955) NO. 1237 WASHINGTON. Alter for garage in basement.
Owner.....D. Loazia, Premises.
Architect...Falch & Knoll, Hearst Bldg., San Francisco.
Day's work. COST, \$400

ALTERATIONS
(1956) NO. 811 SAN JOSE AVE. Alter stable.
Owner.....G. Traversaro, 555 Lombard, San Francisco.
Architect...None.
Day's work. COST, \$400

BRICK STORES
(1957) S RUSH 110 W Polk W 55x120. Brick work for one-story and basement brick stores.
Owner.....Chas. M. Myrick, 1709 Pine, San Francisco.
Architect...Jos. A. Leonard, 85 Ceritos Ave., San Francisco.
Contractor...Wm. A. Rainey, 317 Clementina, San Francisco.

Filed July 7, '15. Dated July 6, '15.
Foundation and basement walls in ready for 1st floor joists.....\$1755
Brick work completed.....1755
Usual 35 days.....1180
TOTAL COST, \$4690
Bonds, Owner, \$2400; Material Men, \$2400. Sureties, Jos. J. Phillips and A. D. Disston. Limit, 30 days after recording. Forfeit, \$10. Plans and specifications filed.

FRAME FLATS
(1958) S UNION 215-3 W Hyde W 21x S 65. All work for two-story and basement frame flats.
Owner.....G. B. Baclgalupi, NW Green & Powell, S. F.
Architect...L. Traverso, 854 Union, San Francisco.
Contractor...Giovanni Chlappe and Agostino Valconesi, 419 Greenwich, San Francisco.

Filed July 7, '15. Dated June 17, '15.
Rough frame up.....\$987.50
Brown coated.....987.50
Completed and accepted.....987.50
Usual 35 days.....987.50
TOTAL COST, \$3950.00
Bond, \$975. Surety, Frank Cuneo. Limit, 75 days. Forfeit, none. Plans and specifications filed.

APARTMENT HOUSE
(1959) SW CALIFORNIA & MASON. Mantel and hearth work for apartment house.
Owner.....S. W. Morshead, Mills Bldg San Francisco.
Architect...Houghton Sawyer, Shreve Bldg., San Francisco.
Contractor...S. Miletin, 362 25th Ave., San Francisco.
Filed July 7, '15. Dated June 14, '15.
On completion.....75%

Usual 35 days.....25%
TOTAL COST, \$2038
Bond, \$1019. Surety, National Surety Co. Limit, Aug. 31. Forfeit, none. Plans and specifications filed.

GRADING, ETC.
(1960) DE HARO from N Mariposa to S line 17th. Grading and laying 18-inch sewer pipe.
Owner.....Frank G. Drum and Warren Olney Jr., Receivers Western Pacific Railway Co., Mills Bldg., S. F.

Architect...None.
Contractor...D. J. Counihan.
Filed July 7, '15. Dated June 30, '15.
On completion.....75%
Usual 35 days.....35%
TOTAL COST, \$1100
Bond, \$550. Surety, Massachusetts Bonding & Insurance Co. Limit, 60 days. Forfeit, none. Plans and specifications filed.

ADDITION
(1961) NE STEVENSON AND 14TH. Add one-story frame to building.
Owner.....College of Physicians & Surgeons.
Architect...E. E. Young, 251 Kearny, San Francisco.
Contractor...Thos. Elam & Son, 180 Jessie, San Francisco.
COST, \$3000

FRAME DWELLING
(1962) SW DUNCAN AND HOFFMAN. One-story and basement frame dwlg.
Owner.....Oscar Petersen, 3554 22nd, San Francisco.
Architect...None.
Contractor...A. V. Anderson, 1604 10th Ave., San Francisco.
COST, \$1600

REMODEL SALOON
(1963) NO. 62 THIRD. Remodel saloon.
Owner.....Luke Marisch.
Architect...None.
Day's work. COST, \$500

FRAME DWELLING
(1964) E ROUSSEAU 225 S Bosworth. Two-story and basement frame dwlg.
Owner.....L. Muldowney, 310 Guerrero, San Francisco.
Architect...None.
Day's work. COST, \$2000

FRAME DWELLING
(1965) N VALLEJO 134-10 E Grant Ave. One-story and basement frame dwelling.
Owner.....M. Petri Corponi, 550 Green San Francisco.
Architect...None.
Contractor...G. Moriconi et al, 2123 Polk San Francisco.
COST, \$700

ALTERATIONS
(1966) NO. 3867 TWENTY-FOURTH. General alterations and repairs for dwelling.
Owner.....Geo. S. Knowles, 218 Clipper, San Francisco.
Architect...None.
Contractor...C. F. Weldon, 4202½ 23rd, San Francisco.
COST, \$400

FRAME SHOP
(1967) W SECOND 47-4 N South Park. One-story frame shop.

Owner.....Ed. V. Lacey.
Architect...None.
Day's work. COST, \$500

FRAME FLATS
(1968) S HIGHLAND 325 E Mission. Two-story and basement frame (2) flats.
Owner.....T. McCormick, 25 Gladys, San Francisco.
Architect...None.
Day's work. COST, \$4000

FRAME DWELLING
(1969) N ATHENS 105-9 E Naples. Two-story and basement frame dwlg.
Owner.....Mrs. Kate Doig, 206 Brazil San Francisco.
Architect...None.
Contractor...P. Doig, 206 Brazil, S. F.
COST, \$2000

FRAME DWELLING
(1970) W FOOTE 25 N Huron. One-story and basement frame dwlg.
Owner.....James and Mary Kellogg, 174 Langton, S. F.
Architect...None.
Contractor...Thos. R. Connolly, 3030 San Bruno, San Francisco
COST, \$500

FRAME DWELLING
(1971) ASHBURY TERRACE Lot 1. Three-story and basement frame dwelling.
Owner.....S. A. Born Bldg. Co.
Architect...Ed. G. Bolles, 660 Market, San Francisco.
Day's work. COST, \$5000

FRAME DWELLING
(1972) W FIFTEENTH AVE 225 N Balboa. Two-story and basement frame dwelling.
Owner.....E. Glinley, 131 5th Ave., San Francisco.
Architect...None.
Day's work. COST, \$3000

FRAME DWELLING
(1973) E TWENTY-NINTH AVE 35 N Irving. One-story and basement frame dwelling.
Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.
Architect...None.
Day's work. COST, \$1800

FRAME DWELLING
(1974) E TWENTY-NINTH AVE 167 N Irving. One-story and basement frame dwelling.
Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.
Architect...None.
Day's work. COST, \$1800

FRAME DWELLING
(1975) E TWENTY-NINTH AVE 101 N Irving. One-story and basement frame dwelling.
Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.
Architect...None.
Day's work. COST, \$1800

ALTERATIONS
(1976) NOS. 1054-56-58 FULTON. Alter flats into apartments.
Owner.....Carl Gelfuss, 46 Kearny, San Francisco.
Architect...None.
Day's work. COST, \$3500
NOTE:—Job started.

CLASS "C" BUILDING

(1977) SE SIXTH AND MISSION E 75
xS 80. Steel and structural iron
work for one-story and basement
Class "C" building.

Owner.....Caroline Schmoll, Mary
Sweigert, Chas. A. and Wm.
J. Sweigert and Caroline
Sullivan, 625 Market, S. F.
Architect...Phillip Schwerdt, 352
Pacific Bldg., S. F.
Contractor...Schradner Iron Works, 1247
Harrison, San Francisco.

Filed July 8, '15. Dated July 3, '15.
Steel work completed.....\$2600
Usual 35 days.....1640
TOTAL COST, \$4240

Bond, \$2250. Sureties, Jno. Beutler and
L. M. Zimmerman. Limit, 35 days.
Forfeit, \$15. Plans and specifications
filed.

(1978) ALL WORK EXCEPT STEEL
work, plumbing, painting and elec-
tric work on above.

Contractor...Pettersen & Persson, 110
Jessie, San Francisco.

Filed July 8, '15. Dates July 3, '15.
Brick work in basement done, the
east and south wall up to 2nd
story floor joists and 1st story
floor joists laid.....\$2785
Brick work done, frame done
and roof completed and brown
coated.....2785
Completed and accepted.....2785
Usual 35 days.....2785
TOTAL COST, \$11,140

Bond, \$7200. Sureties, J. J. Butler and
Jno. Beck. Limit, 75 days. Forfeit,
\$15. Plans and specifications filed.

(1979) PLUMBING, SEWERING, GAS
and water piping on above.

Contractor...Henry Ernst & Sons, 623
Hayes, San Francisco.

Filed July 8, '15. Dated July 3, '15.
Roughing in done.....\$300
Completed and accepted.....300
Usual 35 days.....200
TOTAL COST, \$800

Bond, none. Limit, without delay.
Forfeit, \$5. Plans and specifications
filed.

STORE AND APARTMENTS

(1980) NW EIGHTEENTH & TEXAS
W 50xN 67-6. All work for two-story
and basement frame store and apart-
ments.

Owner.....Hugo W. and Augustine
Streckenbach, 1310 18th,
San Francisco.

Architect...W. D. Shea, 244 Kearny,
San Francisco.

Contractor...G. Cavaglieri, 593 Potrero
Ave., San Francisco.

Filed July 8, '15. Dated June 30, '15.
Roof on.....\$3125
Rough plaster on.....3125
Completed and accepted.....3125
Usual 35 days.....3125
TOTAL COST, \$12,500

Bond, \$6250. Sureties, B. F. Suelfohhn
and J. E. Bowdieu. Limit, 90 days.
Forfeit, none. Plans and specifications
filed.

FRAME RESIDENCE

(1981) E TWENTY-FIFTH AVE 150 S
California S 25xW 120 O L 158. All
work except plumbing, tinning,
chimneys and metal work for two-
story frame residence.

Owner.....Louis Loo, 326 25th Ave.,
San Francisco.

Architect...Louis Loo.

Contractor...J. A. Bowers.

Filed July 8, '15. Dated July 7, '15.
Frame up.....\$566
Brown coated.....566
Completed and accepted.....566
Usual 35 days.....567
TOTAL COST, \$2265

Bond, \$1123. Surety, L. D. MacDonald.
Limit, 90 days after July 10. Forfeit,
none. Plans and specifications filed.

FRAME FLATS

(1982) S CHESTNUT 188-6 W Kearny
W 22xS 107-6. All work except
finish hardware, lighting fixtures,
mantel and shades for two-story
frame flats.

Owner.....Enes Franceschi, 355 Lom-
hard, San Francisco.

Architect...Paul J. Capurro, 1844
Powell, San Francisco.

Contractor...J. Del Favero & A. Pordon
Filed July 8, '15. Dated July 6, '15.

Frame up.....\$843.75
Brown coated.....843.75
Completed and accepted.....843.75
Usual 35 days.....843.75
TOTAL COST, \$3375.00

Bond, \$1687.50. Surety, Royal Indem-
nity Co. Limit, 60 days after July 12.
Forfeit, none. Plans and specifications
filed.

FRAME DWELLING

(1983) W EIGHTEENTH AVE 250 S
Anza S 25xW 120. All work for six-
room frame dwelling.

Owner.....James Welsh, 244 20th Ave
San Francisco.

Architect...James Welsh.

Contractor...James Welsh & Co.
Filed July 8, '15. Dated June 20, '15.

Rafters on.....\$1000
Brown coated.....1000
Accepted.....1000
Usual 35 days.....1000
TOTAL COST, \$4000

Bond, none. Limit, 90 days from June
20. Forfeit, none. Plans and speci-
fications, none.

FRAME FLATS

(1984) E STEINER 112-6 N Union.
Two-story and basement frame flats.

Owner.....J. G. Kincanon, 215 Mont-
gomery, San Francisco.

Architect...None.
Day's work.....COST, \$4500

FRAME FLATS

(1985) E STEINER 137-6 N Union.
Two-story and basement frame flats.

Owner.....J. G. Kincanon, 215 Mont-
gomery, San Francisco.

Architect...None.
Day's work.....COST, \$4500

FRAME FLATS

(1986) E STEINER 162-6 N Union.
Two-story and basement frame flats.

Owner.....J. G. Kincanon, 215 Mont-
gomery, San Francisco.

Architect...None.
Day's work.....COST, \$4500

FRAME FLATS

(1987) E STEINER 87-6 N Union.
Two-story and basement frame flats.

Owner.....J. G. Kincanon, 215 Mont-
gomery, San Francisco.

Architect...None.
Day's work.....COST, \$4500

CONCRETE APARTMENTS

(1988) S POST 137-6 W Polk. Three-
story and basement reinforced con-
crete (15) apartments.

Owner.....J. G. Kincanon, 215 Mont-
gomery, San Francisco.

Architect...Chas. J. Rousseau, 46
Kearny, San Francisco.

Day's work.....COST, \$25,000

ADDITION

(1989) NO. 191 MAYNARD. Raise and
add concrete foundation.

Owner.....Louis Metter, 171 Congdon
San Francisco.

Architect...None.
Day's work.....COST, \$400

ALTERATIONS

(1990) NO. 422 LONDON. Raise and
alter dwelling.

Owner.....Ellen Molloy, Premises.
Architect...None.

Contractor...P. H. McKenna, 115 Russia
San Francisco.

Day's work.....COST, \$900

ALTERATIONS

(1991) NO. 555 CLAYTON. Alter flats

Owner.....Carrie S. La Forest.
Architect...None.

Day's work.....COST, \$750

ALTERATIONS

(1992) NO. 2527 MISSION. Alter
stores.

Owner.....A. D. Van Doran, Prem.
Architect...None.

Contractor...Wm. L. Terry, 1456 Wil-
lard, San Francisco.

Day's work.....COST, \$600

ALTERATIONS

(1993) NO. 859 FILBERT. Alter flats.

Owner.....Mrs. Berlund, Premises.
Architect...None.

Contractor...G. Anderson, 2330 24th,
San Francisco.

Day's work.....COST, \$450

ALTERATIONS

(1994) NO. 3206 FOLSOM. Alter front

Owner.....Mr. Vallelimga, Premises.
Architect...None.

Contractor...G. Anderson, 2330 24th,
San Francisco.

Day's work.....COST, \$900

ALTERATIONS

(1995) NO. 1444 GREAT HIGHWAY.
Alter saloon.

Owner.....G. C. Landes, Premises.
Architect...None.

Day's work.....COST, \$450

FRAME TENEMENTS

(1996) W. LEAVENWORTH 57-6 N
Vallejo. Two-story and basement
frame (6) tenements.

Owner.....Arthur Stevens, Sausalito.
Architect...None.

Day's work.....COST, \$7000

FARME DWELLING

(1997) W ASHBURY 100-2 N Ashbury
(Gore). Two-story and basement
frame dwelling.

Owner.....Emma Vonach, 131 Beaver,
San Francisco.

Architect...None.
Day's work.....COST, \$5400

FARME DWELLING

(1998) W ASHBURY 85-2 N Ashbury.
(Gore). Two-story and basement
frame dwelling.

Owner.....Emma Vonach, 131 Beaver,
San Francisco.
Architect....None.
Day's work..... COST, \$5400

FRAME FLATS

(1999) N LOMBARD 106 W Grant Ave
W 30xN 87-6. All work except finish
hardware, lighting fixtures, mantels
and shades for three-story frame
flats.

Owner.....Paolino Nardi.
Architect...Paul J. Capurro, 1844
Powell, San Francisco.
Contractor...G. Ferroni & G. Ghezzi, 82
Valpariso, San Francisco.
Filed July 9, '15. Dated July 11, '15.
Frame up & roof boards on.....\$1747.50
Brown coated 1747.50
Completed and accepted..... 1747.50
Usual 35 days..... 1747.50
TOTAL COST, \$6990.00

Bond, \$3495. Surety, Royal Indemnity
Co. Limit, 90 days. Forfeit, \$5. Plans
and specifications filed.

FRAME FLATS

(2000) S SACRAMENTO 100 E Presidio
Ave. All work for two-story and
basement frame flats.

Owner.....Neil L. Nielsen, 1750 Mis-
sion, San Francisco.
Architect...C. O. Clausen, Hearst
Bldg., San Francisco.
Contractor...J. Harold Johnson, 740 9th
Ave., San Francisco.
Filed July 9, '15. Dated July 6, '15.
Frame up\$2653
Brown coated 2658
Completed and accepted..... 2658
Usual 35 days..... 2664
TOTAL COST, \$10,638

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

FREIGHT DEPOT

(2001) E BRANNAN AND FIRST SE
140xNE 29.5. All work for erection
of freight depot.

Owner.....Frank G. Drum and War-
ren Olney Jr., Receivers of
Western Pacific Railway
Co., Mills Bldg., S. F.

Architect....None.
Contractor...C. A. Day Co., Wells Fargo
Bldg., San Francisco.

Filed July 9, '15. Dated July 6, '15.
On completion 75%
36 days after..... 25%
TOTAL COST, \$5150

Bond, \$2575. Surety, New England
Casualty Co. Limit, 60 days. Forfeit,
none. Plans and specifications filed.

STREET WORK

(2002) INT'L. OF WEST CLAY AND
27th Ave through lands of Jno. Brick-
ell Co. to termination of 32nd Ave
at North. Street work.

Owner.....John Brickell Co., 901
North Point, S. F.

Architect....None.
Contractor...City Street Imp. Co., 166
Geary, San Francisco.

Filed July 9, '15. Dated May 28, '15.
On completion 75%
Usual 35 days..... 25%
TOTAL COST, 19c per sq. ft.

Bond, \$8000. Surety, United States Fi-
delity & Guaranty Co. Limit, diligently
as possible. Forfeit, none. Specifi-
cations only filed.

LATHING, ETC.

(2003) W TAYLOR 137-6 N Sutter N
28-8xW 137-6. Lathing, plaster and

exterior cement work for building.

Owner.....Biltmore Realty Co.
Architect...Edw. T. Foulkes, Crocker
Bldg., S. F.

Contractor...R. D. Felt,
Filed July 9, '15. Dated July 1, '15.
On or before 10 days after 1st
of each month 75% of work done
and materials furnished..... 25%
Usual 35 days..... 25%

TOTAL COST, \$4490
Bond, \$2235. Surety, Massachusetts
Bonding & Insurance Co. Limit, du-
diligence. Forfeit, none. Plans and
specifications filed.

FRAME RESIDENCE, ETC.

(2004) S PACIFIC AVE 102-6 W Bu-
chanan W 35xS 127-8 1/4. All work
for two-story and basement frame
residence and garage.

Owner.....Mrs. L. G. Auzeais, E-
Santa Clara E of 24th, San
Jose.

Architect...Bakewell & Brown, 251
Ketray, San Francisco.

Contractor...Frank A. Wilkie, 519 Cali-
fornia, San Francisco.

Filed July 9, '15. Dated July 1, '15.
Monthly installments of..... 75%
Usual 35 days..... 25%
TOTAL COST, \$15,600

Bond, \$7800. Surety, Massachusetts
Bonding & Insurance Co. Limit, Dec.
1, 1915. Forfeit, \$20. Plans and speci-
fications filed.

CONCRETE GARAGE

(2005) NO. 782 DOLORES. One-story
concrete garage.

Owner.....Mary B. Gilbert, Premises.

Architect....None.

Contractor...Mission Concrete & Mosaic
Co., 331 Guerrero, S. F.
COST, \$400

ALTERATIONS

(2006) NO. 4426 TWENTY-FIFTH.
Raise and underpin.

Owner.....Hanna Collins, 44 25th,
San Francisco.

Architect....None.

Day's work..... COST, \$400

ELECTRIC SIGN

(2007) NO. 1635 ELLIS. Electric sign.

Owner.....Post Amusement Co., Prem.

Architect....None.

Contractor...Novelty Elec. Sign Co., 165
Eddy, San Francisco.

COST, \$400

ADDITION

(2008) No. 65 HOMESTEAD. Add two
rooms.

Owner.....Henrietta Macchmald, 68
Homestead, S. F.

Architect....None.

Day's work..... COST, \$400

FRAME DWELLING

(2009) W ELEVENTH AVE 325 N Bal-
boa. Two-story and basement frame
dwelling.

Owner.....A. T. Morris, 501 11th Ave.,
San Francisco.

Architect....None.

Day's work..... COST, \$2800

ROOF SIGN

(2010) NE NORTH POINT AND POLK
Construct and install roof sign.

Owner.....Southern Pacific Co., Flood
Bldg., San Francisco.

Architect....None.

Contractor...Bramfield Elec. Sign Co.,
18 7th San Francisco.

COST, \$3197

FRAME DWELLING

(2011) W TWENTY-SIXTH AVE 100
S West Clay. Two-story and base-
ment frame dwelling.

Owner.....Richard Rountree, 110
Jessie, San Francisco.

Architect....None.

Day's work..... COST, \$5000

REPAIRS

(2012) NO. 325 PARNASSUS. Repair
garage.

Owner.....Jos. Bauer, 76 Parnassus,
San Francisco.

Architect....None.

Contractor...Cox Bros., 5th Ave and
Lincoln Way, S. F.

COST, \$150

ALTERATIONS

(2013) NO. 527 CALIFORNIA. Alter
for living rooms.

Owner.....California Market Co.,
Pine and Kearny, S. F.

Architect....None.

Contractor...Swenson & Franzen, 115
Natoma, San Francisco.

COST, \$400

FRAME FLATS

(2014) S HANCOCK 225 W Sanchez.
Two-story and basement frame
flats.

Owner.....A. J. Bowley, 3946 19th,
San Francisco.

Architect....None.

Day's work..... COST, \$2000

FRAME FLATS

(2015) W MINNA 200 S 14th. Two-
story and basement frame (4) flats.

Owner.....Henry Sholten, 1522 Santa
Clara Ave., Alameda.

Architect....None.

Day's work..... COST, \$3500

FRAME FLATS

(2016) S LOMBARD 188-6 W Kearny
W 22xS 107-6. All work except finish
hardware, lighting fixtures, mantels
and shades for two-story frame flats.

Owner.....Enes Franceschi, 355 Lom-
bard, San Francisco.

Architect...Paul J. Capurro, 1844
Powell, San Francisco.

Contractor...J. Del Favero & A. Pordon,
1839 Mason, S. F.

Filed July 10, '15. Dated July 10, '15.

Frame up\$843.75

Brown coated 843.75

Completed and accepted..... 843.75

Usual 35 days..... 843.75

TOTAL COST, \$3375.00

Bond, \$1687.50. Surety, Royal Indem-
nity Co. Limit, 65 days after July 12.

Forfeit, \$5. Plans and specifications
filed.

CLASS "C" STORE BUILDING

(2017) W MISSION 105 N 20th N 25x
W 90. All work except electric fi-
xtures for one-story Class "C" brick
store building.

Owner.....Sadie R. McNally.

Architect...Fabre & Bearwald, 625
Market, San Francisco.

Contractor...L. A. Rose, Monadnock
Bldg., San Francisco.

Filed July 10, '15. Dated July 7, '15.

Brick walls 7 feet high.....\$770

Roof on 775

Completed and accepted..... 775
Usual 35 days..... 775
TOTAL COST, \$3095
Bond, \$1547. Surety, Southwestern
Surety Co. Limit, 35 days. Forfeit, \$5.
Plans and specifications filed.

NOTICE OF NON-RESPONSIBILITY.

July 9, 1915—SE GOUGH & PACIFIC
Ave E 12-S 6 120-2 1/2 W 52-1 S
7-5 1/2 W 160-5 N 127-S. Adolph
Stahl as to improvements on leased
property.....
July 7, 1915—S GIRARD AND BUR-
rows SE 60xSW 30; ptn Lot 1 Blk
12, University Mound. Sarah Wein-
stein as to improvements on leased
property.....
July 7, 1915—E LA PLAYA 262-6 S
Judah S 50x E 120. Oscar Heyman
& Bro as to improvements on leased
property.....

LEASE.

July 9, 1915—W KENTUCKY 100 N 22d
N 25x100. Patrick Noble, Tr Estate
J O'Neal Reis, decd, to John Casey.
5 years. \$10 per month.
July 7, 1915—S GEARY 112-6 E Polk E
72-6xS 120. John Sheehy Co to
Theresa T Johnson. Oct. 31, 1922.
\$78.320.

CANCELLATION OF BUILDING CON- TRACT.

July 9, 1915—S CHESTNUT 188-6 W
Kenry W 22xS 107-6. J Del Favero
& P Pordon with Enes Franceschi
Cancelled..... July 9, 1915

COMPLETION NOTICES

San Francisco

June 26, 1915—E TWENTY-FOURTH
Ave 150 S Anza S 25xE 120. Wil-
liam B Tibbals to whom it may
concern..... June 21, 1915
July 1, 1915—S FELL 100 E Steiner
E 37-6xS 137-6. Isabella J or
Isabel J Murray to Herbert C
Cameron..... June 21, 1915
July 1, 1915—N ELLIS 55 W Jones
N 120xW 52-6. The Peter Windeler
Co to Schrader Iron Works.....
June 25, 1915
July 1, 1915—W SCOTT 37-8 1/2 S Sa-
cramento S 60xW 87-6. John V
Campbell to whom it may concern
..... July 1, 1915
July 1, 1915—W TWELFTH AVE
200 N Anza N 25xW 120. Jos C
Kirby to whom it may concern.....
July 1, 1915
July 1, 1915—E NEVADA 425 N Jar-
boe N 25xE 70. Arthur Lindberg
to whom it may concern..... June 30, 1915
July 2, 1915—N VALLEJO 73 E Fill-
more E 32xN 137-6. Geo P Fuller
to C C W Haun, June 22; Stock-
holm & Allyn..... June 29, 1915
July 2, 1915—E BARTLETT 190 S
21st S 25xE 90. Walter R Pease
to John E Beck..... June 30, 1915
July 3, 1915—S ARMY 175 W Guerrero
W 25xS 114. John and Eleanor J
Nolan to J Gillogley & Son.....
July 2, 1915
July 3, 1915—SE NATOMA 95 SW
Third SW 20xSE 50. Susan M
Burnham to Bay City Bldg Co, Inc.
..... July 1, 1915

July 3, 1915—LOT 8 BLK 1 Crocker
Amazon Tract. Martin Smith to
whom it may concern..... July 3, 1915
July 3, 1915—N PINE 159-6 E Mont-
gomery E 36xN 85. E W Hopkins
to A Sayman..... June 28, 1915
July 3, 1915—S CALIFORNIA 137-6
W Taylor W 137-6xS 137-6. Towne
Realty Co to Vulcan Iron Works.....
June 29, 1915
July 6, 1915—LOT 18 BLK 23 Crock-
er Amazon Tract. Leon Schneider
to McMullin Von Voorhies.....
July 3, 1915
July 6, 1915—S MORAGA 87 W 48th
Ave W 25xS 100. Alexander Neil
to whom it may concern..... July 6, 1915
July 6, 1915—E CHURCH 85 N 29th S
29xE 50. Jno Donovan to Thos
McCormick..... July 6, 1915
July 6, 1915—SW ELLIS & LARKIN
S 49xW 87-6. Mary C and Joseph
B Kennedy to John H Munster and
Henry Bornholdt (as Munster &
Bornholdt)..... June 28, 1915
July 6, 1915—BLK BDED BY THIRD,
Fourth, Townsend and King. South-
ern Pacific Co to E V Lacey.....
June 26, 1915
July 7, 1915—N VALLEJO 73 E Fill-
more E 32xN 137-6. George P Ful-
ler to Frank J Klimm..... July 6, 1915
July 8, 1915—EXPOSITION SITE.
Mrs EH Hertzberg, Chairman Texas
Commission to P. P. I. E. to
Strehlow, Freese & Petersen.....
June 30, 1915
July 8, 1915—SW HOWARD AND
Ninth W 103xS 100. Jno J Foley,
agent and John Tamony to whom
it may concern..... June 30, 1915
July 8, 1915—E FLORIDA 59-9% N
Army 30x75. William Miller to
whom it may concern..... July 8, 1915
July 9, 1915—S PACIFIC 47-6 E Hyde
E 22-6xS 65. Martina or M Scatena
to D Francesconi..... July 3, 1915
July 9, 1915—LOT 25 BLK 40 Crock-
er Amazon Tract. J W Powers to
J W Powers..... June 1, 1915
July 9, 1915—W MIRAMAR AVE 150
N Holloway Ave; Lot 48 Blk 15,
Lakeview. Nicolo Porazzo to New
Era Bldg Co, Inc..... June 26, 1915
July 9, 1915—SE PARIS 125 SW Ex-
celsior Ave SW 25x100. Joseph N
Buckley to New Era Bldg Co, Inc
..... June 26, 1915
July 9, 1915—LOT 18 BLK 21 Crock-
er Amazon Tract. John Bjorkman
to whom it may concern..... July 9, 1915
July 9, 1915—SW DIVISION AND
Kansas S 260 W 200 N 191 NE to S
Division E 57. John G Rapp to The
Turner Co..... July 5, 1915
July 10, 1915—E GOUGH 55 S Green E
29x100. C A Hanaas to J B Reite
..... July 9, 1915
July 10, 1915—W SEVENTH AVE 75
N Lake N 25 W 114 S 15 E 28 S 10
E 86. Sophie Grannis to whom it
may concern..... July 9, 1915
July 10, 1915—E TENTH AVE 175 N
Cabrillo. Marie Hoffman to H E &
T W MacArthur..... July 9, 1915
July 10, 1915—W TAYLOR 137-6 N
Sutter N 38-9xW 137-6. Biltmore
Realty Co to James S Fennell.....
July 2, 1915
July 10, 1915—NO. 2970 BROADWAY.
Florence H Ehrman to Barrett &
Hilp..... July 6, 1915
July 10, 1915—E BARTLETT 190 S
21st S 25xE 90. Walter R Pease to
F E Hooper..... July 8, 1915
July 10, 1915—W TWENTY-EIGHTH

Ave 125 N Ulloa N 170xE 120. Park-
side Realty Co to Lawrence V
Riddell..... July 8, 1915
July 10, 1915—E BEALE 137-6 N Mis-
sion 91-8x137-6. S S Parsons to
McGowan & Butler..... July 9, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

July 1, 1915—SW FILLMORE AND
Moulton S 60xW 137-6. Pacific Bldg
Materials Co vs George L Streshly,
Gustave J Pates, Jno S Howell,
Augustus Regoli, Francis D Belli,
Thos P Crowley, Mary Crowley and
J P Sweeney..... \$99.60
July 1, 1915—N OAK 157-6 W Van
Ness Ave W 59-9 N 120 E 68-7 — 40
E 21 S 80. United Materials Co vs
The Young Mens Institute Hall As-
sociation and Fennell & Wand.....
\$456.05
July 1, 1915—E CORBETT AVE 28-2
SW Mono SW 28-2 E 132 N 22-7 W
128. Mission Lumber Co vs James
J Flaherty and H Kessler..... \$447.29
July 2, 1915—SE CORBETT AVE
28-2 SW Mono SW 28-2 E 132 N
22-7% W 128. Eureka Sash, Door
& Moulding Mills vs James J Fla-
herty and H Kessler..... \$115.98
July 3, 1915—S FELL 100 E Steiner
E 37-6x137-6. H Ginsberg & Co vs
Elizabeth J Murray and H C Cam-
eron..... \$69.10
July 3, 1915—N SUTTER 81 W Taylor
N 137-6xW 56-6. The W F Board-
man Co vs Clara M Clayton, Geo W
Livingston, Josephine L Struve,
Edwin P Gaffney and Willetta H
Hendrickson..... \$538
July 6, 1915—S FELL 100 E Steiner
E 37-6xS 137-6. Herbert I Lauder
vs Isabella J Murray or Isabel J
Murray and Herbert C Cameron..... \$394
July 8, 1915—E FIFTH AVE 155 N
Lake N 45xE 120. Oscar W Thun-
berg vs I and Lena Moss..... \$516
July 8, 1915—W FORTY-SIXTH AVE
200 N 15 W 25xW 120. F J King
vs W A Fenwick..... \$287
July 9, 1915—NE GEARY & MASON
E 92-1xN 68-9. W P Fuller & Co
vs Joseph Grant, Geo B Seaman,
Geo C Salch and L H Fielding..... \$352
July 9, 1915—E FRONT 25-8 S Wash-
ington S 111-2xE 120. E B and
A L Stone Co vs Thos H Price Co.
E W Hopkins..... \$122.30
July 9, 1915—NW FOURTEENTH
Ave & Clement N 50 W 102-6 N 25
W 10 N 25 W 65 S 100 E 177-6. Ver-
mont Marble Co vs Conservative
Bldg & Investment Co..... \$190
July 10, 1915—NE GEARY & MASON
E 92-1xN 68-9. Loop Lumber Co vs
Geo B Seaman (as American
Studios)..... \$80.89
July 10, 1915—E FRONT 25-8 S
Washington E 120 to Ceylon by S
111-2; No. 430 to 452 Front. L A
Norris Co vs I Thomas and Edward
W Hopkins..... \$140.97
July 10, 1915—NE GEARY & MASON
N 68-9xE 92-1. The Mission Marble
Works vs George C Salch, L H
Fielding and Geo B Seaman..... \$649
July 10, 1915—SE EIGHTEENTH &
Douglass E —xS —. The Mission
Marble Works vs John H McLaugh-
lin, Wm Horstmeier and Wm
Horstmeier Co..... \$68.50

July 10, 1915—S FELL 100 E Steiner E 37-6x8 137-6. Pacific Hardware & Steel Co vs Isabel J or Isabella J Murray and Herbert C Cameron... \$134.43

July 10, 1915—SE EIGHTEENTH & Douglass E 25x5 75. A Seghier & Bro, Inc vs John H McLaughlin and Wm Horstmeier & Co... \$87

July 10, 1915—N SUTTER 81 W Taylor N 137-6xW 56-6. G Albert Lansburgh, \$862.90; Thomas Day Co \$333.50 vs Clara M Clayton, Geo W Livingston, Josephine L Struve, Edwin P Gaffney and Willetta H Hendrickson

July 10, 1915—NE GEARY & MASON E 92-1xN 68-9. Loop Lumber Co vs Geo B Seaman (as American Studios

RELEASE OF LIENS

July 2, 1915—E TWENTY-SECOND Ave 265-8 N Taraval N 26-5x E 120. E D Conolley and H W Bode (as Spring Valley Lumber Yard) to Chas and Leona A Bauersachs

July 2, 1915—E TWENTY-SECOND Ave 265-8 N Taraval N 26-5x E 120. Reinhart Lumber & Planing Mill Co to Chas and Leona Bauersachs, P Crell and E Ichter

July 8, 1915—SE HUGO & THIRD Ave — 35 S 95 W 35 N 95. Reinhart Lumber Planing Mill Co to John D and Hazel C Bayles

July 10, 1915—E VALENCIA 135 N 23rd N 55x E 125. Bell's Wall Beds, Olsen Mahony Lumber Co, Eureka Sash, Door & Moulding Mills, Wedel Electric Co, W P Fuller & Co, J Marconi, P E Depaoli, M Stulsaf Co, Chas Weaver, A I Molis, Roberts Mfg Co and Louis Zimmerman to Harriet M Stevens, Henry C Smith and T Loncono

July 9, 1915—W NEWTON 225 N Morse; Lot 20 Blk 5, Crocker Amazon Tract. E D Conolley and H W Bode (as Spring Valley Lumber Yard) to Albert Mattson

OAKLAND AND ALAMEDA COUNTY.

RESIDENCE—2 story and base, frame, \$3,500. Oakland, Cal. Architect, none. Owner, Daniel Ferguson, 65 7th street, Oakland. The dwelling will be erected on Evans avenue north of Wellington, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. An automatic water heater will be installed. Bath room will have tile floor and wainscot. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$1,500. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner's name withheld. The dwelling will be erected in East Oakland and has been designed for an eight-room house with bath and sleeping porch. A garage will also be erected on the property. Interior of

the dwelling will be finished in pine with some hardwood veneer and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and sub-figures are being taken on the work.

RESIDENCE—2 story and base, frame. Cost not stated. Berkeley, Alameda Co., Cal. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, Miss Gertrude Anthony. The dwelling will be erected in Cragmont, and has been designed for an eight-room house with bath and sleeping porch. Interior will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Tile floor and wainscot will be used in the bath rooms. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are now out for figures.

RESIDENCE—2 story and base, frame, \$4,100. Berkeley, Alameda Co., Cal. Architect, W. H. Ratcliff, Jr., First National Bank Bldg., Berkeley. Owner, Miss Tucker. The dwelling will be erected in North Berkeley, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and redwood with some hardwood veneer and white enamel. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

APARTMENT HOUSE—4 story and base, brick and steel, \$63,000. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner, Edward Sommarstrom, 202 12th street, Oakland. The building will be erected on the east side of Alice street north of 14th, and has been designed for a large number of two, three and four room suites. Interiors will be finished in pine, mahogany and white enamel. Hardwood floors will be used in the living and dining rooms. There will be elevator service, a hot water system, steam heat and vacuum cleaning. Bath rooms will be finished in tile. Wall beds are specified. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and segregated figures are being taken for parts of the work except the terra cotta, which has been awarded to the Independent Sewer Pipe Co. of Los Angeles.

GARAGE HOUSE ADDITION—2 story brick, \$2,000. Oakland, Cal. Architect, Henry H. Meyers, Kohl Bldg., S. E. Owners, Alameda County. The new addition will be erected on Broadway and Fifth and has been designed to contain an additional court room, jury

room and judges' chambers on the first floor. Upper floor will contain offices. Interior will be finished in pine and hardwood. The steam heating system in the present building will be extended into the new portion. Exterior will be faced with pressed brick. Plans are being prepared.

RESIDENCE—2 story and base, frame, \$1,000. Oakland, Cal. Architect, none. Owner, C. M. MacGregor, 470 13th street, Oakland. The dwelling will be erected on the south side of Lerida street west of Carlston, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and redwood, with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of brick or tile. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SCHOOL GYMNASIUM—1 story, frame. Cost not stated. Fruitvale, Alameda Co., Cal. Architect, Julia Morgan, Merchants' Exchange Bldg., S. F. Owners, Mills College. The building will be in the nature of an addition to the present building and will contain bowling alleys. Interior will be finished in pine. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

STORES—1 story and base, brick, \$10,000. Berkeley, Alameda Co., Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner's name withheld. The building will be erected on Shattuck avenue having a frontage of 150 feet. There will be five stores. Interiors will be finished in pine with some hardwood veneer. Hardwood floors will be used in the display windows. Patent store fronts and marble bases are specified. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and the architects are taking subfigures.

THEATRE—3 story and base. Class A construction, \$175,000. Oakland, Cal. Architects, Cunningham & Politeo, First National Bank Bldg., S. F. Owners, Moffitt Estate, leased to Turner & Lahnken. The building will be erected at the southwest corner of Franklin and 11th streets, having a frontage of 100 feet on Franklin street and 175 on 11th. Construction will be of reinforced concrete and steel. Inclines will do away with all stairways. The main body of the house will seat 4,000 people, and besides this plans provide for a balcony. Interior will be handsomely finished in hardwoods, ornamental plaster and imported draperies. The most modern heating and ventilating systems will be installed. Exterior of the building will be faced with cement plaster and pressed brick trimmed with terra cotta. Plans are nearly complete and figures will be called for shortly.

SHEET PAVING AND BRICK AND TERRA COTTA GATEWAYS—Cost not stated. Livermore, Alameda Co., Cal



Structural Steel Contractors

Works at
HARRISON ST.,
bet. 8th & 9th
San Francisco
Telephone Market 337

Engineer, Town Engineer, Livermore. Owners, Town of Livermore. Plans and specifications for the paving of a 4-foot strip on the North Stockton road and on North L street to connect the town pavement with the state highway are now being prepared, and bids will soon be called. The length of these strips is 2,500 feet and 300 feet respectively. Plans are also under way for the brick and terra cotta gateways near the town entrances, funds for which have already been granted.

SEWER CONSTRUCTION—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Plans are complete and figures are now being taken for a 6-inch vitrified ironstone sewer 250 feet long with four brick manholes, Y branches etc. Plans can be secured from the office of the City Engineer. Bids will be opened on July 20th.

RESIDENCE—2 story and base, frame, \$2,000. Berkeley, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1841 5th avenue, Oakland. Owner, M. P. Brash. The dwelling will be erected in Northbrae and has been designed for a live room house with bath. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be an open fire place and tile or brick mantel. Exterior will be covered with rustic and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor.

Contracts Awarded.

SCHOOL—1 story and base, frame, \$17,891. Newark, Alameda Co., Cal. Architect, F. D. Wolfe, San Jose. Owners, Newark School District. Contractor, Manuel Lewis, Centerville. Contract price, \$17,891. A complete list of the bids submitted will be found under the heading of Oakland and Alameda County in this issue.

STORE FIXTURES—\$2,400. Berkeley, Alameda Co., Cal. Architect, Henry Sherman, Mills Bldg., S. F. Owners, Bowman's Pharmacy. Contractor, S. Levi, 416 6 street, S. F. Contract price, \$2,400.

SEWER—\$9,679. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. Contractors, Tibbitts-Pacific Co., 16 California street, S. F. Contract price, \$9,679. This contract calls for the construction of the north side sewer.

STREET PAVING—\$54,696.50. Livermore, Alameda Co., Cal. Engineer, Town Engineer, Livermore. Owners, Town of Livermore. Contractors, California Bitulithic Co., Livermore. Contract price, \$54,696.50.

ELECTROLER SYSTEM—\$6,273.21. Livermore, Alameda Co., Cal. Engineer, Town Engineer, Livermore. Owners, Town of Livermore. Contractors, Pacific Fire Extinguisher Co., S. F. Contract price, \$6,273.21.

STREET GRADING AND PAVING—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractors, Contra Costa Construction Co., 2323 Shattuck avenue, Berkeley. Contract price not stated.

Award Contract For Newark School Job.

Six sets of Bids Received. N. H. Lewis
of Centerville Secured Contract on
His Bid of \$17,891.

Bids were opened and a contract awarded for the construction of a one-story and basement frame and plaster school to be erected in the Newark School District of Alameda County. N. H. Lewis, Centerville, presented the lowest figure and was awarded the contract at \$17,891. Plans for the building were prepared by Architect F. W. Wolfe of San Jose. Following is a complete list of the bids:

Newark School Building.

John S. Doyle.....	\$18,800
N. H. Lewis, Centerville....	17,891
C. W. Curry.....	19,200
E. E. Etherton Co.....	17,955
D. E. Parish.....	18,750
Thorup & Assmussen.....	21,095

Building Contracts Awarded

Oakland

No.	Owner	Contractor	Am't.
1273	Peralta Invest.....	Harri	1800
1274	Same.....	Same	1800
1275	Salomon.....	Boeddeker	1240
1276	Clyde.....	Clyde	8000
1277	Clyde.....	Clyde	8000
1278	Hadley.....	Hadley	1200
1279	Small.....	Hurlbut	500
1280	Payson.....	Payson	500
1281	Champion.....	Whitford	2500
1282	Gronzona.....	Hannilton	2000
1283	Gronzona.....	Cuxdahl	2000
1286	Curti.....	Murcell	2000
1287	Silva.....	Silva	400
1288	Silva.....	Lally	500
1289	Difiore.....	Bernard	1900
1291	Wiethan.....	Swaley	4500
1292	Olsen.....	Olsen	2100
1293	White.....	Gustafson	400
1294	Dwarte.....	Kopf	1600
1295	Hautermann.....	Gifford	1600
1296	De Pole.....	Geary	2450
1297	Lawson.....	Higgins	1800
1299	Ferguson.....	Ferguson	3200
1301	Brasch.....	Brasch	2500
1302	Pfrang.....	Pfrang	2000
1303	Rose.....	Rose	1400
1303	Rose.....	Rose	1400
1301	James.....	Tupper	10000
1305	MacGregor.....	MacGregor	1600
1308	Pender.....	Brown	1000
1309	Harrold.....	Peterson	400
1310	Grodin.....	Kulchar	1000

1312	Lagoria.....	Bradhoff	1800
1313	Reverino.....	Garello	1200
1314	Cane.....	Cane	500
1315	Myers.....	Kurtz	2100
1316	Mogk.....	Mogk	400
1317	Furman.....	Sullivan	1283
1318	Sodergren.....	Noble	2000
1319	Jones.....	Jones	500
1320	Hammarberg.....	Owner	2400
1321	Hyman.....	Venn	500
1322	Zolski.....	Zolski	400
1323	Knotts.....	Graff	3355

DWELLING

(1273) E RHODA AVE 385 N Madeline, Oakland. One-story 5-room dwlg. Owner.....Peralta Investment Co. Architect...None. Contractor...Harris & Hudson, 1937 E-38th, Oakland. COST, \$1800

DWELLING

(1274) E RHODA AVE 524 N Madeline, Oakland. One-story 5-room dwlg. Owner.....Peralta Investment Co. Architect...None. Contractor...Harris & Hudson, 1937 E-38th, Oakland. COST, \$1800

DWELLING

(1275) E TELEGRAPH AVE 75 S 48th, Oakland. One-story 4-room dwlg. Owner.....J. L. Salomon, Blind Home, 36th & Telegraph, Okd. Architect...None. Contractor...Joseph Boeddeker, 1814 34th Ave., Oakland. COST, \$1240

FRAME APARTMENTS

(1276) E THIRD AVE 220 N E-14th, Oakland. Two-story frame apartments. Owner.....Clyde Improvement Co. Architect...Rousseau & Rousseau, 110 Sutter, San Francisco. Day's work. COST, \$8000

FRAME APARTMENTS

(1277) E THIRD AVE 185 N E-14th, Oakland. Two-story frame apartments. Owner.....Clyde Improvement Co. Architect...Rousseau & Rousseau, 110 Sutter, San Francisco. Day's work. COST, \$8000

DWELLING

(1278) N THIRTY-NINTH 250 E Market, Oakland. One-story 5-room dwlg. Owner.....A. E. Hadley, 855 40th, Okd. Architect...None. Day's work. COST, \$1200

ALTERATIONS

(1279) NO. 345 E-SIXTEENTH, Oakland. Land. Alterations. Owner.....Fred A. Small, Premises. Architect...None. Contractor...C. B. Hurlbut, 1475 90th Ave., Oakland. COST, \$500

DWELLING

(1280) N OLIVE 150 E 96th Ave., Oakland. One-story 4-room dwelling. Owner.....Wm. Payson, 2406 26th Ave. Oakland. Architect...None. Day's work. COST, \$500

FRAME DWELLING

(1281) SW FORTY-SECOND AND Webster, Oakland. One and one-half-story six-room frame dwelling. Owner.....Mrs. B. Champion, 467 42nd Oakland. Architect...None.

Contractor...W. T. Whitford, 421 42nd,
Oakland. COST, \$2000

DWELLING

(1282) SW THIRTEENTH & WILLOW
Oakland. One-story 5-room dwelling
Owner.....Carl Grondona, 227 Pacific
Ave., Alameda.
Architect...None.
Contractor...Fred Hambleton, 375 43rd,
Oakland. COST, \$2500

DWELLING

(1283) S SIXTEENTH 190 E Wood,
Oakland. One-story 6-room dwlg.
Owner.....George J. Grondona, 1235
Wood, Oakland.
Architect...None.
Contractor...C. Texdahl, 3035 Harper,
Berkeley. COST, \$2000

FLATS

(1286) N GARNET 100 W Broadway,
Oakland. Two-story 5-room flats.
Owner.....V. Curti, 3327 Abbey, Okd.
Architect...None.
Contractor...A. E. Murcell, 3839 Red-
ding, Oakland. COST, \$2000

STORE

(1287) S E-ELEVENTH 75 E 27th Ave.
Oakland. One-story store.
Owner.....Manuel M. Silva, 2633 E-
11th, Oakland
Architect...None.
Day's work. COST, \$100

ALTERATIONS

(1288) NO. 1496 SEVENTH, Oakland.
Alterations.
Owner.....J. F. Silva, S. F.
Architect...None.
Contractor...G. Lilley, 8th and Wood,
Oakland. COST, \$500

DWELLING

(1289) S E-EIGHTH 100 W Park,
Oakland. One-story 4-room dwlg.
Owner.....Fedele Difiore, 2838 E-8th,
Oakland.
Architect...None.
Contractor...J. H. Bernard, 3335 E-10th,
Oakland. COST, \$1000

FRAME DWELLING

(1291) LOT 16 BLK "K" Map Grand
Avenue Heights (By-the-Parks) Oak-
land. All work for two-story frame
dwelling.
Owner.....Emma Weithan, Berkeley.
Architect...None.
Contractor...H. M. Swalley, 476 Cheney
Ave., Oakland.
Filed July 6, '15. Dated July 6, '15.
Rafters in place and window
frame set 1/4
Interior plastered and 2 coats
exterior plaster on 1/4
Completed except interior paint-
ing, paper hanging and electric
fixtures 1/4
Usual 33 days 1/4
TOTAL COST, \$4500
Bond, none. Limit, 70 days. Forfeit,
none. Plans and specifications filed.

DWELLING

(1292) NW SIXTY-FIRST & BAKER,
Oakland. Two-story 6-room dwlg.
Owner.....C. W. Olsen, 268 61st, Okd.
Architect...None.
Day's work. COST, \$2100

ALTERATIONS

(1293) NO. 1530 E-SEVENTEENTH,
Oakland. Alterations.
Owner.....Mrs. L. C. White, 1717 16th
Ave., Oakland.
Architect...None.
Contractor...Aif Gustafson, 226 29th,
Oakland. COST, \$400

DWELLING

(1294) W EIGHTY-SIXTH AVE 40 N
Holly, Oakland. One-story six-room
dwelling.
Owner.....Manuel Dwaarte, 1609 86th
Ave., Oakland.
Architect...None.
Contractor...B. F. Kopf, 1015 82nd Ave.,
Oakland. COST, \$1600

DWELLING

(1295) W MIDVALE AVE 120 N Kan-
sas, Oakland. One-story 5-room dwlg
Owner.....A. Hautermann, 2059-A
Powell, San Francisco.
Architect...None.
Contractor...J. B. Clifford, 3847 35th
Ave., Oakland. COST, \$1600

ALTERATIONS

(1296) SW FORTY-FOURTH AND
Grove, Oakland. Alter dwelling;
raise house and put stores under.
Owner.....Mrs. M. De Pole, Premises.
Architect...None.
Contractor...L. G. Geary, 679 60th, Okd.
COST, \$2450

DWELLING

(1297) E HUMBOLDT 225 S Lynde,
Oakland. One-story 5-room dwlg.
Owner.....A. V. Lawson, 566 38th,
Oakland.
Architect...None.
Contractor...E. L. Higgins, 5250 Miles
Ave., Oakland. COST, \$1800

DWELLING

(1299) E EVANS AVE 200 N Wellin-
ton, Oakland. Two-story 7-room
dwelling.
Owner.....Daniel Ferguson, 65 7th,
Oakland.
Architect...None.
Day's work. COST, \$3200

DWELLING

(1300) E INYO 250 S Main, Albany.
One-story 5-room dwelling.
Owner.....M. F. Brasch, 5536 Ocean
View Drive, Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING

(1301) W VENTURA 220 N Sonoma,
Albany. One-story 5-room dwelling.
Owner.....H. C. Pfarr, 5359 Shafter
Ave., Oakland.
Architect...None.
Day's work. COST, \$3000

DWELLING

(1302) N FIFTY-EIGHTH 82 W Dover
Oakland. One-story 4-room dwelling.
Owner.....Rosina B. Rose, 5801 Dover
Oakland.
Architect...None.
Day's work. COST, \$1400

DWELLING

(1303) N FIFTY-EIGHTH 50 W Dover,
Oakland. One-story 4-room dwelling

Owner.....Rosina B. Rose, 5801 Dover
Oakland.
Architect...None.
Day's work. COST, \$1400

APARTMENTS

(1304) E EIGHTH AVE 200 N E-15th,
Oakland. Two-story 18-room apart-
ments.
Owner.....Mr. and Mrs. C. A. James,
1834 9th Ave., Oakland.
Architect...None.
Contractor...Thad M. Tupper, 2310 Rus-
sell, Berkeley. COST, \$10,000

DWELLING

(1305) S LERIDA 300 W Carlston,
Oakland. Two-story, 8-room dwlg.
Owner.....C. M. MacGregor, 470 13th,
Oakland.
Architect...None.
Day's work. COST, \$1000

DWELLING

(1308) E FORTY-EIGHTH AVE 175 N
E-14th, Oakland. One-story 5-room
dwelling.
Owner.....Lina Bender, 1432 48th
Ave., Oakland.
Architect...None.
Contractor...Tom Brown, 1642 89th Ave
Oakland. COST, \$1000

GARAGE

(1309) S ASHMON 150 W Mandana
Blvd., Oakland. Garage.
Owner.....W. Harrold.
Architect...Sidney B. Newsom, Nevada
Bank Bldg., S. F.
Contractor...Alfred Peterson, 1201 19th
Oakland. COST, \$100

ALTERATIONS

(1310) NO. 914 WASHINGTON, Oak-
land. Alterations.
Owner.....Schwartz & Grodin, Prem.
Architect...None.
Contractor...S. Kulchar & Co., 518 4th,
Oakland. COST, \$1000

DWELLING

(1312) E CLAREMONT AVE 220 S
Clifton, Oakland. One-story 5-room
dwelling.
Owner.....C. Lagoria, 5818 Claremont
Ave., Oakland.
Architect...None.
Contractor...C. O. Bradhoff, 911 55th,
Oakland. COST, \$1800

DWELLING

(1313) S SEVENTEENTH 162 E Cy-
press, Oakland. One-story 4-room
dwelling.
Owner.....A. Beverino, 1397 17th,
Oakland.
Architect...None.
Contractor...Garello & Caretto, 311 51st,
Oakland. COST, \$1200

ADDITIONS

(1314) NO. 1036 SINTIETH, Oakland.
Addition.
Owner.....Dr. A. Cane, Premises.
Architect...None.
Day's work. COST, \$600

DWELLING

(1315) E WOODRUFF 75 S Hampel,
Oakland. One-story 4-room dwlg.
Owner.....R. F. Myers, 125 Santa
Clara Ave., Oakland.

Architect...None.
Contractor...F. A. Kuriz, 413 23rd, Okd.
COST, \$2100

DWELLING

(1316) N LILLY AVE 100 S Tulip Ave.,
Oakland. One-story 3-room dwlg.
Owner.....F. G. Mogk, 2574 San Pablo
Ave., Oakland.

Architect...None.
Day's work. COST, \$400

DWELLING

(1317) LOT 38 BLK 2 Map North
Cragmont. Oakland Tp. Interior
finish for dwelling now partially
built.

Owner.....M. F. Furman, Berkeley.
Architect...None.
Contractor...John Sullivan, Oakland.
Filed July 9, '15. Dated July 8, '15.

25% completed ¼
50% completed ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$1285

Bond, none. Limit, 60 days. Forfeit,
\$1. Plans and specifications filed.

DWELLING

(1318) S E-THIRTY-SEVENTH 155 E
Elston Ave., Oakland. One and one-
half-story 6-room dwelling.
Owner.....L. Sodergren, 2926 Foot-
hill Blvd., Oakland.

Architect...None.
Contractor...R. K. Noble, 624 Hobart,
Oakland.

COST, \$2000

DWELLING

(1319) S WILBUR 45 E Whittle Ave.,
Oakland. One-story 3-room dwlg.
Owner.....W. J. Jones, 3226 Montana,
Oakland.

Architect...None.
Day's work. COST, \$500

DWELLING

(1320) W SANTA CLARA AVE 372 S
Chetwood, Oakland. One-story six-
room dwelling.
Owner.....A. Hammarberg, 3228 Ade-
line, Berkeley.

Architect...None.
Day's work. COST, \$2400

ALTERATIONS

(1321) NO. 1014 LINDEN, Oakland.
Alterations.

Owner.....J. A. Hyman, 1239 Chestnut
Oakland.

Architect...None.
Contractor...E. C. Venn, 1018 11th, Okd.
COST, \$500

DWELLING

(1322) S EDES AVE 50 W 105th Ave.,
Oakland. One-story 4-room dwelling.
Owner.....M. S. Zolski, Premises.
Architect...None.
Contractor...W. S. Zolski.

COST, \$400

FRAME DWELLING

(1323) LOT 97 Wood Lawn Park Tract,
Oakland. All work for two-story
frame dwelling.

Owner.....J. H. and Ethel V. Knotts,
Berkeley.
Architect...None.
Contractor...Edwin C. Graff, Syndicate
Bldg., Oakland.

Filed July 10, '15. Dated July 9, '15.
Frame up ¼

Brown coated ¼
Completed ¼
Usual 35 days..... ¼
TOTAL COST, \$3285

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

Building Contracts Awarded**Berkeley.**

No.	Owner.	Contractor	Amt.
1284	Bkly Invst	Patrick	3800
1285	Heitman	Weidel	4600
1296	Donahue	Button	6051
1306	Scot	Kollmer	500
1307	Schneider	Carlson	500
1311	Bkly Dev	Peake	2585

DWELLING

(1284) W SPRUCE 300 N Los Angeles,
Berkeley. Two-story 9-room dwlg.

Owner.....Berkeley Investment Co.
Architect...None.
Contractor...H. G. Patrick, 2001 Hop-
kins, Berkeley.

COST, \$3800

DWELLING

(1285) S THE UPLANDS 500 E Clare-
mont Ave., Berkeley. Two-story 7-
room dwelling.

Owner.....H. Heitman, 5566 Lawton
Ave., Oakland.
Architect...None.

Contractor...H. H. Weidel, 1735 Broad-
way, Oakland.

COST, \$4600

FRAME DWELLING

(1290) LOT 1 Map Claremont, being
Cor. Claremont and Uplands, Ber-
keley. All work except painting for
two-story and basement frame dwlg.

Owner.....Mrs. J. T. Donahue, 2314
Grove, Berkeley.

Architect...James W. Plachek, Ache-
son Bldg., Berkeley.

Contractor...Frank Button, 1069 Mari-
posa, Berkeley.

Filed July 6, '15. Dated June 17, '15.

Frame up \$1216.30
Plumbing and electric work
roughed in 1216.30
Plastered 1216.30
Completed and accepted..... 1216.30
Usual 35 days..... 1216.30
TOTAL COST, \$6081.50

Bond, none. Limit, 100 days from date
of agreement. Forfeit, \$5. Plans and
specifications filed.

ALTERATIONS

(1306) NO. 56 UPLANDS, Berkeley.
Alterations.

Owner.....Walter Scot, Premises.
Architect...None.

Contractor...Jacob Kollmer, 2813 Stuart
Berkeley.

COST, \$500

ALTERATIONS

(1307) W SHATTUCK 200 S Allston,
Berkeley. Alterations.

Owner.....G. L. Schneider, Northbrae.
Architect...John Hudson Thomas, 1st
National Bank Bldg., Bkly.

Contractor...H. Carlson, 1627 Parker,
Berkeley.

COST, \$500

DWELLING

(1311) S 35 LOT 14 and N 56 Lot 13
Blk "C" Northbrae Business Property
Berkeley. All work for one-story 6-
room dwelling.

Owner.....Berkeley Development Co.,
Berkeley.

Architect...None.

Contractor...F. R. Peake Co., 2127 Uni-
versity Ave., Berkeley.

Filed July 8, '15. Dated July 3, '15.

Frame up ¼
Brown coated ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$2585

Bond, \$1292.50. Surety, Royal Indemn-
ity Co. Limit, 70 days. Forfeit, none.
Plans and specifications filed.

Building Contracts Awarded**Alameda.**

No.	Owner.	Contractor	Amt.
1298	Thompson	Lindholm	400

GARAGE

(1298) NO. 1301 SAN ANTONIO AVE.,
Alameda. Garage.

Owner.....T. Thompson, Premises.
Architect...None.

Contractor...Jno. Lindholm, 1717 Wood,
Oakland.

COST, \$400

ALAMEDA COUNTY BUILDING OPERATIONS.

The building operations for Oakland,
Alameda and Berkeley for the month
of June are as follows:

Oakland	\$395,474.50
Berkeley	214,650.00
Alameda	30,395.00

Total \$640,519.50
The total for June, 1914, was \$638,-
069.50.

COMPLETION NOTICES.**ALAMEDA COUNTY**

July 1, 1915—NE 11.94 LOT 24 and
SW 23.12 LOT 25 Map McMillan
Tract, Okd. George W. Nunes to
whom it may concern. June 30, 1915

July 1, 1915—NO. 156 HILLCREST
Road, being Lot 9 Blk 10, Clare-
mont Tract. Bkly. Alice Powell

Alvord to H F Wrampelmeier.....
.....June 10, 1915

July 1, 1915—LOT 117 Map Woodlawn
Park, Okd. John E. Murphy to
whom it may concern. June 30, 1915

July 1, 1915—PTN LOTS 14, 15 AND
16 Blk "I" Map Sheridan Tract,
Okd. Mary E. Greenwood to C A

Doss. June 26, 1915

July 2, 1915—NE 10 LOT 32 and SW
30 Lot 33 Map Kelly Tract ptn
Watson 100 acres, Okd. S G Ran-
kin to whom it may concern.....

.....June 30, 1915

July 2, 1915—W 30 LOT 26 and E
40.01 Lot 24 Blk 2 Map Rock Ridge
Place, Okd. David Hadden to H F

Wrampelmeier.....July 1, 1915

July 2, 1915—LOT 9 BLK "F" Map
Kenwood Park, Okd. Lewis &
Mitchell, Inc to R B Litton.....

.....July 1, 1915

July 2, 1915—NO. 1612 SPRUCE, Bkly.
Frank Dutra by James W. Plachek
to Frank Button.....June 24, 1915

July 2, 1915—NO. 754 SANTA RAY
Ave, being Lot 2 Blk "O" East
Piedmont Heights, Okd. Sara M.

Gillespie to Erle Saxton. June 23, '15

July 2, 1915—S MONTE VISTA AVE,
bel Rio Vista and Walsworth, Okd.

Mary T. Reid to United Home Bldrs
.....July 2, 1915

July 3, 1915—S CLEVELAND, being ptn Lot 3 Map Subvn Plot 12 Watson Tract, Okd. Martha E Lodge to whom it may concern. July 2, 1915
July 3, 1915—S BONITA AVE, bet. Blalr and Oakland Aves, Okd. Jessie Robertson to United Home Bldrs. July 3, 1915
July 3, 1915—N NAVY AVE 82 E Broadway N 102xE 40, Okd. A H Settergreen to Arvid E Olson. June 24, 1915
July 3, 1915—E Production FALLON street and S S. P. right of way and along First, Oakland. Sunset Lumber Co to John Vukovich and T M Andrich. July 1, 1915
July 6, 1915—NE LAFAYETTE AND Eagle Ave 80x100, Ala. E D Fortmann to R Knepper. July 1, 1915
July 7, 1915—LOT 20 BLK "K" Northbrae Terrace, Bkly. Herbert J Watt to F R Peake Co. July 3, 1915
July 8, 1915—BET END ROCK SEAWALLS and fill and pier Terminal W shore line, City of Oakland, S F Bay. S F O T Railways to S F Bridge Co. June 29, 1915
July 8, 1915—LOT 35x75 on E Richmond Ave 250 S 29th St., Okd. Justus Norris to whom it may concern. July 1, 1915
July 9, 1915—NO. 3425 THIRTY-ninth Ave, Okd. James E Stewart to whom it may concern. June 15, 1915
July 10, 1915—W FRANKLIN 113 N 14th W 40x74, Okd. Realty Syndicate Co to Schnebly, Hostrauser & Pedgrift. July 1, 1915
July 10, 1915—S RICH 561.44 W Webster W 40xS 110, Okd. W S Montgomery to whom it may concern. July 9, 1915
July 10, 1915—LOT 2 BLK 3 4th Ave Heights, Okd. D O McKellips to E W Woodard. July 10, 1915
July 10, 1915—MOUNTAIN VIEW Cemetery, Alameda County. Henrietta Farrelly to F D Donahue. July 10, 1915
July 10, 1915—NW ELLITA AVE & Bellevue Ave N 120 W 120 SE 147.69 E 47.58, Okd. Florence M Pearson and Amanda Smith to Alfred Peterson. July 9, 1915
July 10 1915—NW ELLITA AVE & Bellevue Ave N 120 W 120 SE 147.69 E 47.58, Okd. Ada M Ayers to Alfred Peterson. July 9, 1915

LIENS FILED

ALAMEDA COUNTY.

July 8, 1915—E INYO 151.17 N Marin Ave, being Lot 16 Blk 19 Map Northbrae Tract, Bkly. Sunset Lumber Co vs J G and W N Taylor \$206.84
July 3, 1915—LOT 33 BLK "C" Map 4th Ave Terrace, Okd. Walter F Lloyd (Boulevard Mill & Lumber Co) vs Torrence S Peterson, Cecelia and Joseph Dodd Simpson. \$407.25
July 9, 1915—LOT 32 BLK 5 Regents Park Tract No. 7, Oakland Tp. Stege Lumber & Hardware Co vs John Doe Doyle and H J Sattin (as Doyle & Sattin), Walter S Mann and John Doe and Mary Green. \$59.15
July 9, 1915—E TELEGRAPH AVE bet. 56th and 58th; being No. 5422 Telegraph Ave, Okd. Wallace J Biddle vs George T Dunlap, John Doe Anderson, Richard Doe and C D Clink and Gus Sawyer. \$170

July 10, 1915—NW COR. VINE AND Josephine W 45xN 100, Bkly. Geo H Tay Co vs Hull Plumbing Co and Cora M Lewis. \$109
July 10, 1915—LOT 16 BLK 19 Map Northbrae, Bkly. I L Cavasso vs W N and J G Taylor. \$41.93
July 10, 1915—E SPRING 153 N Bunice N 45xE 135, Bkly. George H Tay Co vs Hull Plumbing Co and Lillian G Lyman. \$135.60

RELEASE OF LIENS

ALAMEDA COUNTY.

July 8, 1915—LOT 84 Map Fruitvale Addition Tract, Okd. Oakland Home Corporation to Margaret A Murdant and Alfred Goddard. \$184

SAN JOSE AND THE SANTA CLARA VALLEY

STREET PAVING—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, City Engineer, San Jose. Owners, City of San Jose. At the last meeting of the City Council resolutions of intention to pave the following streets were adopted: Crossing at 17th and Julian streets; portion of the roadway on the east side of 17th street, between Empire and Washington streets; portion of roadway on 17th street, between Washington and Julian streets. Resolutions given first reading were for the crossing at 17th and Washington streets and 17th and Empire streets. James H. Quimby, for the Kaish Improvement Co., was given permission to do work between 4th and 7th streets and between 8th and 9th streets on William street.

RESIDENCE — 2 story and base, frame, \$5,000. Los Gatos, Santa Clara Co., Cal. Architect, O. M. Vrooman, 58 South First street, San Jose. Owner, C. H. Phillips. The dwelling will contain eight rooms, bath and sleeping porch. Interior will be finished in pine and redwood with some white enamel. Hardwood floors will be used in the principal rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with shingles. Plans are complete and figures are now being taken.

BRIDGE—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meet of the Santa Clara County Supervisors plans and specifications prepared by the County Surveyor for the construction of a reinforced concrete bridge on the Northern road over Guadalupe Creek, were adopted and the Clerk was instructed to advertise for bids until August 2nd at 11 a. m. Further information together with plans and specifications may be had from the County Surveyor at San Jose.

BRIDGE—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the County Supervisors the County Surveyor presented plans and specifications for the construction of two reinforced concrete bridges on the Alviso road in the

County of Santa Clara, and the same were adopted and the Clerk instructed to advertise for bids to close on July 19th at 11 a. m. Plans were also adopted for the construction of a reinforced concrete bridge on Center avenue at San Martin and bids will be received by the County Supervisors until July 19th at 11 a. m. Plans and specifications together with full information may be had from the County Surveyor at San Jose.

BRIDGES—Steel construction. Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Plans and specifications have been prepared by the County Surveyor for the new steel bridges at Bradley and San Lucas and will be submitted to the County Supervisors at their next meeting for approval. On approval bids will be called.

COMMERCIAL CLUB—1 story, frame. Cost not stated. Burlingame, San Mateo Co., Cal. Architect's name not given. Owners, Burlingame Commercial Club. The building will cover an area of 40 by 100 feet and, besides the offices and display rooms, will contain a lecture hall, swimming tank, bowling, alleys and hand ball courts. Interior will be finished in pine and redwood. Exterior design is in the rustic style and will be covered with rustic and shingles. Plans are being prepared. Further mention will be made of the work.

Contracts Awarded

BRIDGES—Reinforced concrete. Cost as follow. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, M. E. Kilcourse, 58 west Santa Clara avenue, San Jose, bridge over Campbell Creek on the Homestead road, \$4,387; John Doyle, 113 West Santa Clara avenue, San Jose, bridges over Calabasas and San Tomas Creeks on the Homestead road, \$2,367, and John Doyle, 113 West Santa Clara avenue, San Jose, bridge over Permanente Creek on Fremont avenue, \$3,363.

STREET PAVING—\$21,992.73. Salinas, Monterey Co., Cal. Engineer, City Engineer, Salinas. Owners, City of Salinas. Contractors, Granite Rock Co., Salinas. Contract price, \$21,992.73.

SEWER CONSTRUCTION—\$11,770.36. Santa Cruz, Santa Cruz Co., Cal. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. Contractor, D. Byrne, Santa Cruz. Contract price, \$11,770.36.

BUILDING CONTRACTS

SANTA CLARA COUNTY.

FRAME COTTAGE
COR. ACACIA AND POPLAR AVES,
San Jose. All work for frame cottage
Owner. C. Deuble, 70 Autumn St.,
San Jose.
Architect. None.
Contractor. J. I. Kelly, 6 Majellen Ave
San Jose.
Filed June 24, '15. Dated May 21, '15.
Frame up on \$41.50
1st coat plaster on 42.50
Usual 35 days 112.50
TOTAL COST, \$1650.00
Bond, limit, forfeit, none. Plans and
specifications filed.

FRAME BUILDING

AT THE TERMINATION OF STREET known as Alvarado Row, Palo Alto.

All work for two-story frame bldg.
Owner.....C. G. Allen, 22 Alvarado
Campus, Palo Alto.

Architect...J. K. Branner.

Contractor...G. Mosher, Palo Alto, Cal.
Filed June 30, '15. Dated June 30, '15.

Frame up\$1150.75
Rough plastered1150.75
Plaster completed & trimmed 1150.75
Building completed1180.75
Usual 35 days.....1180.75

TOTAL COST, \$6298.00

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

E' LA POLOMA AVE. Saratoga. AM
work for frame dwelling.

Owner.....C. W. Halstead, 982 S-2d,
San Jose.

Architect...S. G. Pelton.

Contractor...S. G. Pelton, 217 S-First,
San Jose.

Filed July 1, '15. Dated June 30, '15.

Frame up\$573.75
When plastered573.75
When completed573.75
Usual 35 days.....573.75

TOTAL COST, \$2295.00

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS.

SAN MATEO COUNTY.

FRAME COTTAGE

LOT 19 BLK "E," San Mateo Heights.

All work for five-room frame cottage

Owner.....M. G. Buckley, San Mateo.

Architect...Julia Morgan, Merchants'

Exchange Bldg., S. F.

Contractor...Croop & Keegan, San
Mateo.

Filed July 2, '15. Dated June 29, '15.

Frame up, etc.....\$637.50
Brown coated637.50
When completed637.50
Usual 35 days.....637.50

TOTAL COST, \$2550.00

Bond, \$125. Sureties, A. E. Rilovich
& William Croop. Limit, 70 days.
Forfeit, none. Plans and specifications
filed.

RESIDENCE

"KELLEY OR DICKSON PROPERTY."

Upper La Honda, La Honda. Excavating, grading and filling, concrete

work, brick, patent flues, carpenter,

plumbing, etc., for country residence.

Owner.....I. Liebes, 167 Post, S. F.

Architect...G. Albert Lansburgh, 709

Mission, San Francisco.

Contractor...H. W. Arnold, 227 Chat-

tanoga, San Francisco.

Filed June 29, '15. Dated June 26, '15.

Frame up\$1895
Standing finish on.....1500
When completed1000
Usual 35 days.....1500

TOTAL COST, \$5895

Bond, \$3000. Surety, The Aetna Accident & Liability Co. Limit, 65 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

LOT 7 BLK 27, Easton Addition to Burlingame, Easton. All work for one-story frame residence.

Owner.....E. A. Rogers, S. F.

Architect...None.

Contractor...W. A. and C. C. Terrill,

3631 17th, San Francisco.

Filed June 28, '15. Dated June 23, '15.

Frame up\$900

Brown plastered775

When completed500

Usual 35 days.....\$25

TOTAL COST, \$3300

Bond, \$1650. Sureties, W. B. Morris &

C. J. Hillard. Limit, 90 days. Forfeit,

none. Plans and specifications filed.

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED

July 1, 1915—LOT 18 BLK 28, Red-

wood Highlands. Redwood High-

lands Co to whom it may concern.

.....June 30, 1915

July 1, 1915—LOT 3 BLK 22 Red-

wood Highlands. Redwood High-

lands Co to whom it may concern

.....June 30, 1915

July 1, 1915—LOTS 7 Blk 22, Red-

wood Highlands. Redwood High-

lands Co to whom it may concern

.....June 30, 1915

July 1, 1915—LOT 10 BLK 24, Red-

wood Highlands. Redwood High-

lands Co to whom it may concern

.....June 30, 1915

ACCEPTED

LIENS FILED

SANTA CLARA COUNTY.

RECORDED

July 3, 1915—LOT 14, Auzerals of Los

Gatos Rancho 108 acres. H Hooper

vs Bertha Beck\$133.35

AMOUNT

MARIN, CONTRA COSTA AND SONOMA COUNTIES

BRIDGES—Reinforced concrete. Cost

not stated. San Anselmo, Marin Co.

Cal. Engineer, City Engineer, San An-

selmo. Owners, City of San Anselmo.

The Board of Trustees of San Anselmo

proposes to replace a number of wooden

bridges which span San Anselmo

Creek with concrete structures of the

design employed in the municipality of

Ross.

BRIDGE REPAIRS—Cost not stated.

Napa, Napa Co., Cal. Engineer, City

Engineer, Napa. Owners, City of Napa.

plans and specifications prepared by

the City Engineer for the repairs to be

made to the Third street bridge and

the Clerk of the Council has been in-

structed to advertise for bids on the

work. Specifications for work on

Third street, from the stone bridge to

the concrete bridge, at a total esti-

mated cost of \$1,685.85, were adopted,

and the work was ordered done by the

Council.

OIL TANKS AND TOWERS—Steel

construction. Cost not stated. Mar-

tin, Contra Costa Co., Cal. Engineer-

ing Department Shell Oil Co., 343 San-

some street, S. F. Owners, Shell Oil

Co. Contracts will be let in a few

days by the Shell Oil Co. for the con-

struction of a 10,000 barrel steel tank

with steel tower at their plant in Mar-

tin. Following this contracts will be

let for several more similar tanks.

The towers will be 30 feet high.

GRADING, CONCRETE CULVERTS,

ETC.—Cost not stated. Martinez, Con-

tra Costa Co., Cal. Engineer, City En-

gineer, Martinez. Owners, City of Martinez. Improvements aggregating \$7,700, and which call for the construction of a flume across Main street, in front of the city hall, and for the changing of the route of the creek on Ferry street and the construction of a concrete culvert over it, are now being considered by the City Trustees. Immediate action is expected.

FACTORY ADDITION — Frame and concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer's name not given. Owners, Atlas Powder Co., Martinez. Plans have already been prepared, according to information received, that the Atlas Powder Company of New Jersey, which recently secured control of the stock of the Giant Powder Co., will make extensive additions to the Giant plant here.

Contracts Awarded.

STREET IMPROVEMENT—Cost not stated. Colusa, Colusa Co., Cal. Engineer, City Engineer, Colusa. Owners, City of Colusa. Contractors, Clark & Henery Construction Co., Ochsner Bldg., Sacramento. Contract price not stated.

STREET IMPROVEMENT—Cost not stated. Rio Vista, Solano Co., Cal. Engineer, Town Engineer, Rio Vista. Owners, Town of Rio Vista. Contract price not stated.

HIGHWAY CONSTRUCTION — \$23,622.50. Martinez. Contra Costa Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California Contractors, Bates, Borland & Ayer, Oakland. Contract price, \$33,622.50.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

FRAME DWELLING

W NINETEENTH, bet. Chanslor and Ohio; Lot 14 Blk 84, Richmond. One-story frame dwelling.

Owner.....Rose A. Martinez.

Architect...None.

Contractor...N. Anderson, 315 Nevin

Ave., Richmond.

COST, \$1500

FRAME DWELLING

W EIGHTEENTH, bet. Barrett and

Roosevelt; Lot 30 Blk 114, Richmond.

One-story frame dwelling.

Owner.....Will West, 100 Ohio St.,

Richmond.

Architect...None.

Day's work. COST, \$1200

FRAME DWELLING

E FOURTEENTH, bet. MacDonald and

Bissell; Lot 31 Blk 63, Richmond.

One-story frame dwelling.

Owner.....J. B. De Woody, 213 Castro

St., Richmond.

Architect...None.

Contractor...Albert Fagerstrom, Rich-

mond. COST, \$1732

BUILDING CONTRACTS

MARIN COUNTY.

BUNGALOW

SHORT RANCH. All work including concrete, plastering, carpenter, etc., for bungalow.

Owner.....Geo. A. Raymond.

Architect...None.

Contractor...A. F. Hanson.

Filed July 6, '15. Dated June 30, '15.
Every 10 days.....\$5.00
Usual 35 days.....\$237.50
TOTAL COST, \$950.00
Bond, \$500. Surety, Carl M. Hanson.
Limit, forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

CONTRA COSTA COUNTY.

RECORDED ACCEPTED
July 3, 1915—LOT 67, City of Pittsburg, Pittsburg Grammar School to Seibert Co.....June 25, 1915

COMPLETION NOTICES

MAHIN COUNTY

RECORDED ACCEPTED
July 8, 1915—ROSS, Norman B Livermore to Edward C Bletch, July 7, 1915
July 6, 1915—FIFTH AVE, San Rafael, Parker F Wood and wife to Wm H Dwyer.....June 28, 1915

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

FLUME AND SAND BOX—Reinforced concrete. Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, Chief Engineer Herrmann, Modesto. Owners, Modesto Irrigation District. Plans and specifications have been completed and figures will be opened on July 27th for the construction of a flume waterway and sand box along the main line canal and across Dry Creek. Plans and specifications can be secured from the office of the engineer at Modesto.

BRIDGE—Steel and concrete \$18,000. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. The Supervisors of Tulare County are awaiting acceptance from the State Highway Commission of plans for the new bridge to be built over Kings River near Kingsburg. The Supervisors are now in session and desire to call for bids for the new bridge, but the plans must first be approved by the State Highway Commission and the State Engineering Department. Bids for the work will be called for immediately on the approval of the plans.

OUTFALL SEWER AND FILTER BEDS—Cost not stated. Fresno, Fresno Co., Cal. Engineer, City Engineer, Fresno. Owners, City of Fresno. Plans and specifications for an outfall sewer and filter beds for draining off the effluent from septic tanks have been completed by the City Engineer, and action is awaited from the State Board of Health. According to reports the board will report favorably on the matter.

HIGHWAY CONSTRUCTION—\$25,000. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. Bids are being advertised for to be opened at the meeting of the Board of Supervisors in August for the construction of a new mountain highway from Three Rivers to Lemon Cove, in accordance with plans and specifications on file in the office of the County Surveyor.

SEWER EXTENSION—Cost not stated. Porterville, Tulare Co., Cal. Engineer, City Engineer, L. H. Althouse, Porterville. Owners City of Porterville. The Council has directed the City Engineer to prepare maps and estimates of the cost of extending the sewer system to the newly platted additions north and west of the high school property. Water mains to these additions have been laid. Bids will be called on completion and approval of the plans.

STREET PAVING—Cost not stated. Lindsay, Tulare Co., Cal. Engineer, City Engineer, Lindsay. Owners, City of Lindsay. At their last meeting the City Trustees ordered the paving of the road from Basil Prior's corner east to the packing house street. The paving would probably be 16 or 18 feet wide. Specifications were also called for the paving of Honolulu street east to the city limits. The new paving plans call for about 200,000 square feet or approximately 12 blocks.

Contracts Awarded.

FURNISHING ROCK—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractors, Sharp & Fellows Construction Co., Bakersfield. Contract price not stated. This contract calls for furnishing approximately 14,000 tons of rock.

PASSENGER DEPOT—1 story and base, frame and plaster, \$9,720. Modesto, Stanislaus Co., Cal. Architect, Chief Engineer Barlow, Flood Bldg., S. F. Owners, Southern Pacific Co. Contractor, George A. Bos, Hearst Bldg., S. F. Contract price, \$9,720.

HIGHWAY CONSTRUCTION—\$4,265.80. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractors, Castro & Blaisdell, Bakersfield. Contract price, \$4,265.80.

HIGHWAY CONSTRUCTION—\$7,000. Quincy, Plumas Co., Cal. Engineer, County Surveyor, Quincy. Owners, Plumas County. Contractors, Bradley Engineering Co., Reno, Nev. Contract price, \$7,000 plus 15 per cent for changes.

EARTH FLUME—\$54,950.50. Modesto, Stanislaus Co., Cal. Engineer, Chief Engineer Herrmann, Modesto. Owners, Modesto Irrigation District. Contractors, Tibbitts-Pacific Co. 16 California street, S. F. Contract price, \$54,950.50.

BUILDING CONTRACTS

FRESNO COUNTY.

DWELLING

LOTS 18, 19, 20 BLK 9 Alhambra Tract, Fresno. All work except painting, plumbing, heating and sheet metal for two-story dwelling.

Owner.....L. M. Mendelsohn, St. Andrew Apartments, Fresno.
Architect...Coates & Traver, Head Bldg., S. F. and Fresno.

Contractor...P. A. C. Williams, 1450 Van Ness, Fresno.

Filed July 2, '15. Dated July 2, '15.
Frame up\$ 90.00
Ready for lathing..... 910.00
Plastered 910.00
Completed 908.50
Usual 35 days..... 1212.50

TOTAL COST, \$4850.00

Bond, \$2450. Sureties, E. E. Pinkley and

W. Turner. Limit, 100 days. Forfeit, \$100. Plans and specifications filed.

DWELLING

LOT 5 BLK 28 Belmont. Dwelling.
Owner.....Helen M. Barrows, 720 Angus St., Fresno.

Architect...None.

Contractor...A. J. Sowles, 2804 Madison St., Fresno.

COST, \$1069

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED ACCEPTED
July 1, 1915—LOT 24 BLK 21 Alta Vista Tract, Fresno. O D Atkins to whom it may concern. June 18, 1915
July 2, 1915—SW 1/4 OF SEC 10 16-15, Fresno. J Hauptl to whom it may concern.....June 30, 1915

LIENS FILED.

FRESNO COUNTY.

RECORDED AMOUNT
July 6, 1915—SW 65x150 of BLK 35, Fresno. Anderson Bros Planing Mill & Mfg Co vs L L Cory, P A Palmer and E Riggins.....\$3985
July 1, 1915—LOT 11 BLK 17, Hazelwood Add'n, Fresno. Crane Co vs Murray Plumbing Co and David Wells\$108
July 1, 1915—LOT 11 BLK 17 Hazelwood Add'n, Fresno. Rout Lumber Co vs David Wells and Metzger & Weston\$182
July 1, 1915—FRONT 65 FEET LOTS 17 to 22 Blk 85, Fresno. Fred Hayden vs Emmett Riggins & P A Palmer\$651

LIBRARY—1 story and base, brick and concrete, \$6,500. Gridley, Butte Co., Cal. Architect's name not given. Owners, Town of Gridley. George W. Tolley of Gridley submitted the lowest figure for the construction of the new library, and will probably be awarded the contract. His bid was \$6,500. Three other bids were received.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA.

BRIDGES—2, timber construction. Cost not stated. Knights Landing, Yolo Co., Cal. Engineers, Haviland & Tibbitts, Alaska-Commercial Bldg., S. F. Owners, Knights Landing Bridge and Drainage District. Plans have been completed for two timber highway bridges near Knights Landing, Yolo County, Cal. The work will consist of two timber trestles each about 120 feet in length with two combination steel and timber spans 80 feet in length and graded railway approaches at each end. Bids are now being taken and will be opened on July 16th. Plans and specifications can be secured from the engineer's office.

BRIDGES—Steel, timber and concrete. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. The Supervisors have voted to readvertise for bids for the construction of three bridges across the sand sloughs to the east of Red Bluff, and if, after obtaining legal advice from the District Attorney, it is found

possible, will proceed at once to the business of calling an election for the purpose of bonding the county for their erection. If the bonding proposition fails, the bridges will be built by direct tax and paid for in three equal annual installments.

HALL OF RECORDS—2 story and base, steel or reinforced concrete, \$60,000. Oroville, Butte Co., Cal. Architect, Charles S. Kaiser, Mechanics' Institute Bldg., S. F. Owners, Butte County Preliminary plans for a new Hall of Records have been presented to the Supervisors and working drawings ordered prepared. Construction will be fireproof, but it has not been decided whether to use steel and brick or reinforced concrete. The building will contain the offices of the County Recorder, Treasurer, Auditor and Assessor. Interior will be finished in pine, hardwoods and metal. Tile floor will be used. Plans provide for steam heat, vacuum cleaning and fireproof vaults. Detail drawings will be submitted to the Board of Supervisors at their August meeting. Further mention will be made of the work.

SMELTER SMOKE CONSUMER AND STACK—\$300,000. Redding, Shasta Co., Cal. Engineer's name not given. Owners, Coram Smelting Co. The million dollar smelter at Coram, which has been shut down since July 1911, will be reopened as soon as a smoke controlling device can be constructed. This statement has been made by several of the directors of the smelter company. A \$50,000 smoke stack will be one of the first additions to the plant. Work will be started immediately on these projects, as it is the intention of the company to have the plant working within nine months.

SCHOOL POWER HOUSE—\$1,420. Chico, Butte Co., Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Six sets of figures were received for the construction of the new power house at the Chico State Normal School. E. D. Sharp, Chico, presented the lowest bid at \$1,420 and will probably be awarded the contract. A complete list of the bids received will be found under the heading of San Francisco in this issue.

SCHOOL—1 story and base, frame and brick veneer, \$25,000. Stockton, San Joaquin Co., Cal. Architects, Stone & Wright, 24 South California street, Stockton. Owners, City of Stockton. The building will be erected on property bounded by Lincoln, Harrison, Anderson and Jefferson

streets, and has been designed for a seven class room building with a large auditorium. Interior will be finished in pine with maple floors in the class rooms. There will be steam heat, oil burning system and program clocks. Modern school plumbing and vacuum cleaning will be installed. Exterior of the building will be covered with pressed brick veneer. Plans are complete and figures will be called for at once.

SCHOOL—1 story, frame, \$1,800. Montezuma School District, San Joaquin Co., Cal. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owners, Montezuma School District. Five bids opened for the construction of this building show Frank Darnell, 1943 San Joaquin avenue, Stockton, low at \$4,800. All bids were taken under advisement.

ELECTRIC RAILROAD CONSTRUCTION—Cost not stated. Greenville, Plumas Co., Cal. Engineer, Engineering Department Great Western Power Co., Shreve Bldg., S. F. Owners, Great Western Power Co. Lloyd P. Cornell of Oakland, representing the Great Western Power Co., is in Indian Valley getting rights of way from the various property holders for an electric line from Butte Valley to Engel's Mine. The pole line will run from a plant at Butte Valley over the hills, striking Indian Valley at the Lawrence race-track near Greenville, and then along the base of the mountain to Lights Canyon, where the mine is located.

STREET PAVING—\$2,500. Eureka, Humboldt Co., Cal. Engineer, City Engineer, Eureka. Owners, City of Eureka. Plans and specifications for the paving and grading of J street from 17th to Harris have been adopted by the City Council and bids have been ordered advertised.

STREET IMPROVEMENTS—Asphalt macadam, \$86,000. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Engineer has completed plans and specifications for street improvements to be made in this city. The streets will be improved with asphalt macadam. The plans call for the improvement of Miner avenue from Hunter to Pilgrim streets; Washington from American to Aurora streets; San Joaquin from Taylor to South streets; Commerce from Main to Church streets and Church from Hunter to California streets.

STREET PAVING—Cost not stated. Eureka, Humboldt Co., Cal. Engineer, City Engineer, Eureka. Owners, City of Eureka. Plans and specifications were ordered at the last meeting of

E. H. Williams

Chalmer Munday

Munday & Williams

Attorneys-at-Law

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5th and Brannan Streets

San Francisco

City Council for the paving and widening of Fairfield street from Broadway to Harris street. Bids will be called for on the completion and acceptance of the plans.

SEWER—Reinforced concrete. Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. At the next meeting of the Council, sealed proposals were asked for constructing a 12-inch storm water sewer on East street from Roosevelt to North street.

BRIDGE—Reinforced concrete. Cost not stated. Igo, Shasta Co., Cal. Engineer, County Surveyor, Redding. Owners, Shasta County. All bids for the construction of a new bridge across Clear Creek a mile east of Igo are rejected by the Supervisors. They call for a steel bridge with a concrete floor. The Supervisors decided to call for plans for a reinforced concrete structure. The lowest bid received for a good bridge was \$8,894.

SCHOOL, ADDITION AND PLUMBING—Cost not stated. Chico, Butte Co., Cal. Architect, A. J. Bryan, Noonan. Igo, Chico. Owners, Chico High School District. Plans are complete for the construction of a frame toilet building, for the concrete work for an addition to the present high school building, and for the installation of a new sewer and plumbing system in the high school building. Figures are now being taken both as a whole and separately for the work. Bids will be opened on July 28th. Plans and specifications can be secured from the architect.

Contracts Awarded.

SEWERS—\$5,587.46. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractor, W. J. Tobin, Oakland. Contract price, \$5,587.46.

BRIDGE—Reinforced concrete, \$3,000. Marysville, Yuba Co., Cal. Engineer, County Surveyor, Marysville. Owners, Yuba County. Contractor, William Stephens, Redding. Contract price, \$3,353.

BUILDING CONTRACTS

SACRAMENTO COUNTY.

ALTERATIONS

NO. 1915 TENTH ST., on N ¼ Lot 1, S. E. 10th and 11th Sts., Sacramento. Place new shingle roof, sleeping porch, etc., on dwelling. Contractor, H. P. Rynall, Premises. Architect...None.

Contractor, W. P. Cippa, 314 21st St., Sacramento.

COST, \$350

RESIDENCE

NO. 1914 FIFTEENTH ON S ¼ Lot 4 Blk "I", S. 14th and 15th Sts., Sacramento. One-story 5-room Denison residence.

Contractor, Mrs. C. Banchi, 1516 4th St., Sacramento.

Architect...None.

Contractor, Peter Leoni, 1330 V St., Sacramento.

COST, \$2260

REPAIRS

NO. 919 FRONT ST., on Lot 3 Blk I, J, Front and Second Sts., Sacramento. Repair roof, raise gutter, etc., of 3-story brick building.

Owner, Kirk Geary Co., 521-3 J St., Sacramento.

Architect...None.

Contractor, M. F. McKenzie, 1126 T St., Sacramento.

COST, \$900

REMODEL

NO. 1021 SIXTH ST., on 70 feet of S 140 of W 70 of Lot 8 Blk J. K. 6th and 7th Sts., Sacramento. Remodel interior of 2-story brick lodging house.

Owner, Frederick Mier Co., 617 J St., Sacramento.

Architect...None.

Contractor, C. B. Conn, 921 6th St., Sacramento.

COST, \$850

REPAIRS

NO. 109 J ST., on E ½ Lot 4 Blk I, J, 1st and 2nd Sts., Sacramento. Repair roof of warehouse.

Owner, Baker & Hamilton, 4th & Brannan, San Francisco.

Architect...None.

Contractor, M. F. McKenzie, 1126 T St., Sacramento.

COST, \$600

FRAME ADDITION

NO. 2913 CARMELO AVE (rear), Sacramento. One-story frame addition.

Owner, Frank Carton, Premises.

Architect...None.

Day's work.

COST, \$500

INTERIOR WORK

NO. 690 K ST., Lot 1 Blk K, L. 6th and 7th Sts., Sacramento. Interior work for store.

Owner, John Breuner Co., 604 K St., Sacramento.

Architect...None.

Contractor, Murcell & Haley, Ochsner Bldg., Sacramento.

COST, \$300

LIENS FILED

FRESNO COUNTY.

RECORDED AMOUNT

July 7, 1915—NW "J" AND FRESNO, Fresno. S J Light & Power Co vs Emmett Riggins\$20

BUILDING CONTRACTS

SAN JOAQUIN COUNTY.

WAREHOUSE

BLOCK 95, East of Center St., Stockton. All work for one-story frame and corrugated iron warehouse.

Owner, Wagner Leather Co., 124 E-Oak St., Stockton.

Architect, Joseph Losekann, San Joaquin Bldg., Stockton.

Contractor, O. H. Chain, 511 W-Willow St., Stockton.

Filed July 7, '15. Dated July 3, '15.

Foundations completed\$350.00

Frame up947.50

Building completed947.50

Usual 35 days..... 650.00

TOTAL COST, \$2895.00

Bond, \$1450. Sureties, J. H. Miller and F. J. Viebrock. Limit, 40 days. Forfeited, none. Plans and specifications filed.

FRAME RESIDENCE, ETC.

SEASILEY AND CHEROKEE LANES, San Joaquin County. All work for one and one-half-story frame residence and tank house.

Owner, Mrs. Clara Voss.

Architect, Victor Galbraith.

Contractor, W. C. Finnell, 1422 N-Commerce St., Stockton.

Filed June 25, '15. Dated June 18, '15.

Frame up\$500

Roof on500

Plastering finished400

Work completed210

Usual 35 days..... 540

TOTAL COST, \$2150

Bond, \$1125. Sureties, Benjamin Walters and T. B. Littlehale. Limit, 60 days. Forfeited, \$1 per day. Plans and specifications filed.

LOS ANGELES AND SOUTHERN CALIFORNIA.

SCHOOL—1 story and base, hollow tile. Cost not stated. La Crescenta, Los Angeles Co., Cal. Architects, Tuttle & Angel, Delta Bldg., Los Angeles. Owners, La Crescenta School District. The building will cover an area of 108 by 112 feet and has been designed to contain four large class rooms and an auditorium. Interior will be finished in pine with maple floors in the class rooms. Plans provide for steam heat, modern school plumbing and vacuum cleaning. Exterior of the building will be faced with cement plaster. Plans are complete and figures are being taken. Bids will be opened on July 23rd. Separate figures are being taken for the general construction and heating and ventilating. Plans and specifications can be secured from the architects.

SCHOOL ADDITION AND ALTERATIONS—2 story and base, brick, \$13,000. San Pedro, Los Angeles Co., Cal. Architect, Lyman W. Farwell, Story Bldg., L. A. Owners, City of San Pedro. The new portion of the building will contain heating plant, storage rooms, auditorium, music and oral rooms, besides several small class rooms. Interior will be finished in pine with maple floors. Steam heat is specified. Alterations to the old portion of the building will include steam heat, modern school plumbing, plastering and interior wood work. Exterior of the new portion will be faced with pressed brick. Plans are nearly complete and figures will be called for shortly.

Contracts Awarded.

SCHOOL—2 story and base, brick addition, \$26,430. Los Angeles, Cal. Architects, John P. Krempel and W. E. Erkes, Fay Bldg., L. A. Owners, City of Los Angeles. Contractor, J. B. Dawson, Fay Bldg., L. A. Contract price, \$26,430.

SCHOOL—2 story and base, brick, \$26,350. Los Angeles, Cal. Architects, John P. Krempel and W. E. Erkes, Fay Bldg., L. A. Owners, City of Los Angeles. Contractor, J. P. Atkinson, Story Bldg., L. A. Contract price, \$26,350.

SCHOOL—2 story and base, brick, \$27,345. Los Angeles, Cal. Architect, Robert M. Taylor, Douglas Bldg., L. A. Owners, City of Los Angeles. Contractors, Broadway Construction Co., 235 East Washington street, L. A. Contract price, \$27,345.

SCHOOL—2 story and base, frame, \$70,000. Rancho La Brea, Los Angeles Co., Cal. Architect, John C. Austin, Baker-Bettler Bldg., L. A. Owners, Marlborough School for Girls. Con-

Contractor, Fred Siegel, Haas Bldg., L.
A. Contract price, \$70,000.

PORTLAND AND OREGON

SCHOOL—1 story and base, brick, \$100,000. Gaston, Ore. Architect, Aaron H. Gould, Henry Bldg., Portland. Owners, Town of Gaston. The building will contain four class rooms, and departments for manual training and domestic science. Interior will be finished in pine with some maple floors. A central heating system will be installed. Exterior of the building will be faced with pressed brick. Plans will be completed in a week and figures called.

MUNICIPAL WATER SYSTEM—\$75,000. West Linn, Ore. Engineer, S. A. Cobb, Beaver Bldg., Oregon City. Owners, City of West Linn. Bids for the proposed water system to be built at West Linn will be opened on July 20th at West Linn. The project includes the construction of a pipe line, a 2,000,000 gallon concrete reservoir, a pump station and standpipe. Alternate proposals will be received for lap welded steel or cast iron pipe in the following quantities and sizes: 13,000 feet of 10-inch pipe, 21,000 feet 6-inch pipe, 700 feet 8-inch pipe, 12,000 feet 4-inch pipe. The reservoir will be of reinforced concrete and will require about 800 cubic yards of concrete. There will be about 10,000 yards of trench excavation, 7,600 yards of reservoir excavation. The equipment to be installed will be a water wheel, two pumps, and a gas engine or a motor.

Contracts Awarded.

SCHOOL—2 story and base, brick, \$74,897. Portland, Ore. Architect's name not given. Owners, City of Portland. Contractor, James S. Winters, Couch Bldg., Portland. Contract price, \$74,897.

SEATTLE AND WASHINGTON

PASSENGER STATION—2 and 4 story and base. Class A construction, \$100,000. Tacoma, Wash. Architect's name not given. Owners, Chicago, Milwaukee & St. Paul R. R. Co. The building will be erected on property at the corner of 25th and East A streets. Other than the fact that the building will be of fireproof construction, no details have been given out. Bids will not be called at this time. Further mention will be made of the work.

Contracts Awarded.

STREET GRADING AND PAVING—\$94,533.20. Port Angeles, Wash. Engineer, City Engineer, Port Angeles. Owners, City of Port Angeles. Contractors, Ferch & Gass, White Bldg., Seattle. Contract price, \$94,533.20.

REGISTRATION OF TRADE-MARKS IN LATIN AMERICAN COUNTRIES.

The following summary of the laws and regulations governing the registration of trade-marks in Latin American countries has been prepared in response to the demand for such information on the part of American manufacturers and exporters. The information is based to a large extent on the official texts of the laws, and in the case of countries for which no original documents are available in the Bureau, use has been made of reliable compila-

tions on the subject of trade-mark laws. No attempt has been made to give all the provisions of the laws, the purpose of the compilation being merely to furnish the American exporter or manufacturer interested in the Latin American market sufficient information to enable him to determine on the best method for the protection of his trade-mark in Latin American countries. It is assumed that the actual work of registration will be effected through the employment of an attorney familiar with the provisions of the various laws. There is on file in the Bureau of Foreign and Domestic Commerce a collection of patent and trade-mark laws of foreign countries, which is being added to and is expected in time to be complete, and the Bureau is prepared to furnish information in answer to specific questions concerning such laws.

Attention should be called to the difference in the legal point of view as to the ownership of trade-marks between the Latin American countries and the United States. By the common law, use is the basis of property in a mark, and registration in the United States is merely an additional means of protecting the property right acquired by use. In the Latin American countries, on the other hand, the rights of property in a mark are derived entirely from the law and depend on the registration of the mark. Legislation is usually granted without investigation of the right to its use, though after due notice to those interested by publication of the application in the official gazettes. When once effected, registration is final against all later comers. The importance of registration is therefore greater in the Latin American countries than in the United States, in view of the facilities for unfair registration afforded by the trade-mark laws in effect in those countries.

In most of the Latin American countries a distinction is drawn between the manufacturer's mark, or ordinary trade-mark (marca de fabrica), used to designate the products of a particular factory or manufacturing concern, and the dealer's mark (marca comercial), used to distinguish the articles handled by a particular dealer of commercial enterprise; and in some countries, notably in Chile, Colombia, and Venezuela, there is separate registration for the two classes. In a few countries there is a third class of marks used for agricultural products.

The laws often contain provisions for the revocation of the right of exclusive use, if the mark is not used within a specified period, but use abroad is, as a rule, sufficient to prevent revocation in the case of foreign marks.

The fees given in the present summary cover only the official fees and do not include other necessary expenses, such as postage, revenue stamps, or stamped paper, except when specifically noted, or attorneys' fees. Application must generally be made on stamped paper or paper with revenue stamps attached.

Unless the applicant appears personally, the appointment of a qualified attorney is usually necessary. Powers of attorney and certificates of previous registration in country of origin, when required, must be legalized or authenticated by the consul of the country in

which the mark is to be registered. Even when not required, it is usually advantageous to present a certificate of registration in the country of origin.

BOLIVIA.

Office of registration.—Ministerio de Instruccion Publica y Fomento, Notario de Hacienda, La Paz.

Duration.—Indefinite.

Fees.—Tax of 5 bolivianos per year (Boliviano equal \$0.359).

Formalities of registration.—Application must contain two copies of the mark on stamped paper of 20 centavo description in duplicate of mark and articles to which it is to be applied, one electrolyte, power of attorney, and receipt for taxes. The mark is published three times at intervals of 1 day at the expense of the applicant after which registration is granted. A trade-mark used must be registered.

CHILE.

Office of registration.—Sociedad Nacional de Agricultura, Santiago.

Duration.—Ten years; renewable.

Fees.—Marca de fabrica (trade mark), 12 pesos; marca comercial (dealer's mark), 3 pesos; renewal, same as for registration; certificates, 1 peso (Paper peso, fluctuating, now worth about \$0.16.)

Formalities of registration.—Application must show name, occupation and residence of petitioner; location of factory, kind of industry or commerce carried on; description of the goods to be marked; 10 copies of the mark, and a certificate of foreign registration the whole to be subscribed by two witnesses. There are two classes of registration, and it is advisable to register in both in order to secure complete protection.

COLOMBIA.

Office of registration.—Despacho de Hacienda, Bogota.

Duration.—Twenty years; renewable.

Fees.—Registration of mark, 15 dollars; renewal, 30 dollars. (Gold dollar equal \$1.)

Formalities of registration.—Application must be made on stamped paper of 20 centavos and should state the distinctive mark adopted, the products to be marked, the place of manufacture and the name and address of the applicant. There should also be presented at least three copies of the mark, each bearing a stamp of 20 centavos, and an electrolyte not over 12 by 12 centimeters; a certificate of foreign registration legalized by a Colombian consul and a receipt showing that the fee has been paid. The application must be published three times in the official gazette, and after 70 days the mark may be registered. The certificate of registration must also be published three times. If registration is denied one-half the fee is returned. There are three classes of marks—manufacture, commerce, and agriculture—but a mark registered in one class may not be registered in another class by a different person.

COSTA RICA.

Office of registration.—Secretaria de Fomento, San Jose.

Duration.—Fifteen years; renewable for periods of 10 years.

Fees.—The following stamp taxes are provided for in connection with the registration of trade-marks: Each copy of the model of the mark, 1 colones; certificate of inscription, 1

colones; inscription, 5 colones. (Colon equals \$0.465.)

Formalities of registration.—File application with two copies of the mark not over 12 by 12 centimeters, and an electrolyte.

ECUADOR.

Office of registration.—Ministerio de Hacienda, Puito.

Duration.—Twenty years; renewable for periods of 15 years.

Fees.—Registration, 25 sucres; publication, 12 sucres; stamped paper, 2.40 sucres; total, 39.40 sucres. Renewal, same, except that no publication is required. (Sucre equal \$0.487.)

Formalities of registration.—Application must contain name and address of applicant; description of articles to be marked; name and location of factory; certificate of foreign registration legalized by an Ecuadorian consul; 20 copies of the mark, with description of use; one electrolyte of 15 to 100 millimeters high by 20 to 30 millimeters wide; a receipt showing that 25 sucres has been paid into the national treasury; and a power of attorney legalized by an Ecuadorian consul. To complete registration it is necessary that the application and mark be published in the official gazette 12 times, at intervals of one week. Copies of the certificate are furnished free if stamped paper of the fifth class is provided.

GUATEMALA.

Office of registration.—Secretaria de Estado en el Despacho de Fomento, Oficina de Marcas, Guatemala.

Duration.—Ten years; renewable.

Fees.—Registration and certificate, 30 pesos; additional copies of certificate, 5 pesos; publication, 50 pesos; authentications (usually two), each, \$3 gold. (Paper peso, fluctuating, about \$0.025.)

Formalities of registration.—Application must be made on stamped paper and must contain two copies of the mark with a description in duplicate; class of articles to be marked and whether the mark is to be used by a manufacturer or dealer; receipt showing the payment of 30 pesos; and also a power of attorney and a certificate of foreign registration, translated, and legalized by a Guatemalan consul. There should also be an electrolyte, for the application must be published for one month in the official gazette before registration is granted. If registration is denied the fee is refunded.

HONDURAS.

Office of registration.—Secretaria de Fomento, Tegucigalpa.

Duration.—Indefinite.

Fees.—None provided by law. Translation, publication, and stamps about \$35 gold. (Peso equals \$0.363.)

Formalities of registration.—Application must show name and residence of petitioner, name and location of factory, and class of goods to be marked. It must be accompanied by two copies of the mark, or samples if done in relief or in some unusual way; a legalized certificate of foreign registration; declaration of rights reserved, power of attorney, and a legalized copy of the commission or contract whereby an agency has been established within the country. The application must be published and registration may be effected after 90 days. If the mark is not used for a period of one year, it is considered abandoned.

MEXICO.

Office of registration.—Secretaria de Estado y del Despacho de Fomento, Colonizacion, e Industria; Oficina de Patentes y Marcas, Mexico City.

Duration.—Twenty years; renewable.

Fees.—Registration, 5 pesos; renewal, same. (Gold peso equals \$0.493.)

Formalities of registration.—Application must show name and address of petitioner; name, location, and kind of factory; articles to be marked; description of the mark (all the above to be in triplicate). It must also include 12 copies of the mark; one electrolyte not over 10 by 10 centimeters, showing name and address of application and the words "Marca industrial registrada;" and a power of attorney. A certificate of foreign registration is not required. Stamps to the amount of 5 pesos must be attached to the certificate when granted. Extra certificates must carry 3 pesos' worth of stamps.

PANAMA.

Office of registration.—Secretaria de Fomento, Ramo de Patentes y Marcas, Panama.

Duration.—Ten years; renewable.

Fees.—Registration, 25 balboas; renewal, 20 balboas; for articles of domestic manufacture or production the fees are one-half the above. (Balboa equals \$1.)

Formalities of registration.—Application must be on stamped paper of the first class and must contain name and address of applicant; articles to be marked; place of manufacture; detailed description of mark; and be accompanied by a receipt showing the payment of 25 balboas; three copies of the mark, two of them to carry stamps of the first class and be signed and dated on the back by the applicant; and a certificate of registration in the country of origin, bearing stamps of the first class and certified by a Panamanian consul. The application is published twice consecutively in the official gazette and after 90 days it may be registered. If registration is not made within 30 days after the expiration of the 90 days, the application is considered abandoned. The certificate of registration must also be published twice.

NICARAGUA.

Office of registration.—Ministerio de Fomento, Managua.

Duration.—Ten years; renewable.

Fees.—Registration, 25 pesos; renewal, same; certificates, 1 peso. (Peso equals \$0.68.)

Formalities of registration.—Application must be made on stamped paper of the sixth class and must contain the name, residence, and nationality of owner; name and location of factory; description of articles to be marked; description of mark applied for; three copies of the mark on thin paper, with two additional copies showing in detail special features, if any; and power of attorney legalized by a Nicaraguan consul. The application must be published three times in the official gazette and registration may be completed after 90 days. Certificates are issued on stamped paper of the first class.

PERU.

Office of registration.—Ministerio de Fomento, Lima, or any Peruvian consulate general.

Duration.—Ten years; renewable.

Fees.—Federal registration free, 25

soles; publication of notices, 4 soles; stamped paper, 1.20 soles if registered with a Peruvian consul. If registered in Peru the fees are higher. Stamped paper, 0.10 to 0.40 sol per sheet. (Sol equals 1-10 pound sterling equals \$0.4866.)

Formalities of registration.—Application must be in Spanish and must contain four copies of the mark, two descriptions of the mark, certificate of registration in country of origin, electrolyte not over 21 centimeters wide by 21 centimeters high, specification of goods to be marked, and class, there being 80 classes, with separate registration required for each. Registration may be effected at any consulate general of Peru, that at New York City being the only one in the United States.

SALVADOR.

Office of registration.—Oficina de Patentes, San Salvador.

Duration.—Twenty years; renewable.

Fees.—Registration of foreign marks, 10 pesos; domestic marks, 5 pesos; annual tax on foreign marks, 5 pesos; domestic marks, 2 pesos; extra certificates, 5 pesos; publication, not over 5 pesos; stamped paper, 0.10 to 0.25 peso per sheet. Ordinary paper may be used with stamps affixed. (Peso equals \$0.263.)

Formalities of registration.—Application must be made on stamped paper and must contain name and residence; description of mark and articles to be marked; name, location, and nationality of factory; receipt for payment of fees; certified copy of foreign registration; 20 copies of the mark; electrolyte of 15 to 100 millimeters long by 20 to 30 millimeters high; and a legalized power of attorney, if application is not made personally. The application must be published three times in the official gazette, and registration is granted after 90 days. The mark may be used only on goods specified or others of the same class or classes. Tax receipts must be presented at the patent office once every five years or the right is revoked.

SANTO DOMINGO.

Office of registration.—Ministerio de Fomento y Obras Publicas, Santo Domingo.

Duration.—Ten to twenty years; renewable.

Fees.—Registration for 10 years, 5 dollars; 15 years, 10 dollars; 20 years, 15 dollars; renewal, same.

Formalities of registration.—Application must be made on stamped paper of the third class and should contain the name, residence and occupation of the applicant; a detailed explanation of the mark; a receipt for payment of fee (and a legalized certificate of foreign registration); and two or more copies of the mark. If registration is refused the fee is refunded. The certificate of registration must be published in the official gazette. The mark must be used within one year.

VENEZUELA.

Office of registration.—Ministerio de Fomento, Ramo de Privilegio o Patentes de Industrias, Caracas.

Duration.—Thirty years; renewable.

Fees.—Seal and stamp for application, 1.50 bolivares; seal and stamp for certificate 15 bolivares. (Bolivar equals \$0.193.)

Formalities of registration.—Application must be made on stamped paper

of the seventh class and should contain the name, residence, and place of business of the applicant; class of articles to be marked, with a particular description of the goods; description of the mark in duplicate, showing manner of application; 10 copies of the mark; certificate of foreign registration legalized by a Venezuelan consul, and a signed declaration that the party applying has the right to use it and that it does not resemble a mark already registered, and that the copies are correct and exact. The application must be published in the official gazette, for which an electrotype should be provided. The certificate is issued on paper of class 3. There is separate registration of marks of manufacture and marks of commerce. If a power of attorney is included, it must be legalized by a Venezuelan consul. Registration is limited to duration of registration in country of origin, or 30 years.

The war has so materially affected immigration to this country that so far the opening of the Panama canal has had no perceptible effect on the Pacific Coast with regard to addition of people from European countries. The bulletins issued by the Department of Commerce and Labor show that immigration up to the end of May reached a total of 304,069 as against 1,218,100 for the year 1914. This is accounted for mainly by the fact that the nations at war or about to go to war prevented the exodus of possible soldiers. This is noticeable from the fact that last year the number of immigrants from Italy amounted to 251,612 while this year they number 44,199. From Poland last year the number was 122,657 as against 8,836 this year. Russians last year 44,957, this year 4,151. Germans last year 79,871, this year 19,695.

The influx from England and Ireland has not been materially affected. Probably owing to the fact that military service in the United Kingdom is not compulsory and the freedom of the government offers no restrictions on its people.

What effect the end of the war will have upon immigration remains to be seen. Many predict that the impoverishment of Europe will lead thousands to emigrate to this country. Others believe that the slaughter of men will create a deficiency of workmen in all trades and thereby induce citizens to remain in their own country.

Popular government is the last word in modern civilization. But it often has some strange abuses. The unthinking often make a lot of noise, the politician grabs the offices of power and trust and the yellow newspaper a power for evil.

Just now we are witnessing a controversy over the street railway. Judge Sturtevant has just rendered a decision that he no doubt thought it incumbent upon him to render. As a consequence he is being maligned by every newspaper in town without regard to his motives and the fact that he was once a dummy director in the United Railroads is made a basis for a big agitation.

San Francisco surely has nothing to be grateful to the United Railroads for.

Under the reign of Pat Calhoun it was the chief source of corruption of the city. The property is capitalized for three times what it is worth and the people are asked to pay dividends upon it. It was an insolvent corporation when it was asked to furnish transportation for the exposition, and whatever it gets now is richly deserved.

But the methods of the Examiner, for instance, are certainly anything but fair. In the campaign of 1912, the great cry was to vote for the Geary Street agreement or there would be a law suit. There was no question as to whether the city had any rights or not. If the city had rights then why not assert them and take possession of the tracks and let the United Railroads oust the city. Now the question is the construction of a contract. It should be decided with reference to the merits of the case and not with reference to the position a judge may have occupied while making his living as a lawyer. Those things may influence his trend of thought, but there is nothing to imply corruptness or dishonesty.

"We hold these truths to be self-evident," wrote Thomas Jefferson in the great Declaration, "that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness." What a splendid heritage these "truths" have been! We have fallen far short of realizing their ideal. But they have always been a court of last resort to which men marching in the advance have been able to appeal. The ideal of equality has warred against slavery and the caste spirit. The ideal of life, liberty and the pursuit of happiness has been a constant incentive to keeping opportunity open to all men. The goal has always been distant. But the way has been plain. Today men are realizing as never before the meaning of the right to the pursuit of happiness. They are understanding that it is mockery to start a child in life unequipped, and tell it that it has full liberty for the pursuit of happiness; that it won't do to permit industrial accidents to disrupt families, and that a whole program for industrial justice is an essential part of the Independence Declaration. It is a heartening fact that never have so many persons been aroused to the necessity of bringing Jefferson's words out of the clouds and of setting them up as a practical creed for the Nation's life.—Kansas City Star.

LABOR SELF HELP.

The visit of Japanese labor leaders to this country to investigate conditions of organization and operation in the United States should give emphasis to a side of labor union operation which so far has received scant attention from publicists, either among labor union men themselves or their critics. The relation of the unions to the rest of the world has been so often of belligerent nature that the other side of their activity, the upbuilding of labor spirit, and the activity they exert for the general welfare, has been too little considered or altogether ignored.

No other class in the economic world has been as restricted. Ever

since we have had social co-operation at all, the merchant class has been specially favored. In fact, the controversies in which merchants have engaged has always been treated as a negligible fraction of their relations to the general public. The professions have always been given special consideration. Financiers, while treated as criminals until the later Middle Ages, have been given favorable consideration during the last two centuries. The human side of labor operations alone has been left to fight its own way. This limitation has meant that the relations of the labor unions with the rest of the world have been too much imbittered with controversy and too little treated as a cognate portion of the industrial and social scheme.

We presume that the representatives of Japanese labor organizations will be received with various degrees of courtesy by labor union men in this country. Some of the leaders will be unable to see any difference between co-operating with a Japanese labor leader in the working out of world labor problems, and the question of the employment of a Japanese "scab" laundry worker or waiter in a closely white unionized town in California. But the world is grown too small to take any such attitude. Just as Japanese and American and European chambers of commerce have problems in common to meet which they can handle best by co-operation, so the Japanese labor leaders can give and take ideas in the business of settling labor difficulties in the United States as well as in the Orient.

We have had a well developed trade consciousness that has proved of value without arousing class antagonism. We can equally well have a useful labor consciousness which will be the better for humanity in general as well as for the members of the unions.—Fresno Republican.

The present war is presenting many new problems to the administration. From now on our relations are bound to be more or less strained. Any American living in England is liable to be killed by a bomb dropped from a Zeppelin and in crossing the ocean is liable to be blown up by a submarine. These are new rules of warfare that have been imposed by Germany and it is a question how neutral countries are to maintain their rights under these conditions and the consequent retaliations of the other nations at war. It is up to every American citizen to support the administration in the policy it is pursuing in maintaining peace with dignity and protecting the rights of neutrals. When this war of kings is over it is up to us to lead the way in emancipation from the thralldom of militarism.

CONTRACTORS FILE INCORPORATION PAPERS.

MODESTO, Stanislaus Co., Cal.—Mahoney Brothers, a contracting firm of San Francisco, incorporated under state seal June 22d, have filed articles of incorporation in the county clerk's office. The capital stock of the corporation is \$100,000, and the directors are: J. J. Mahoney, P. H. Mahoney and Paul F. Fratessa.



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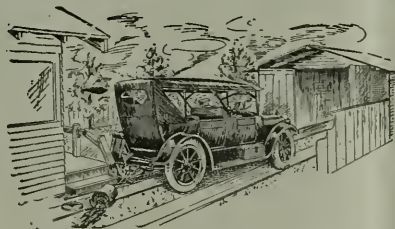
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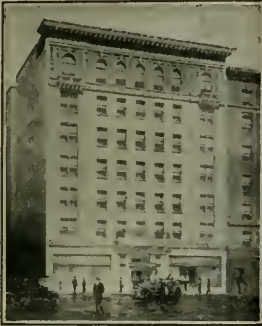
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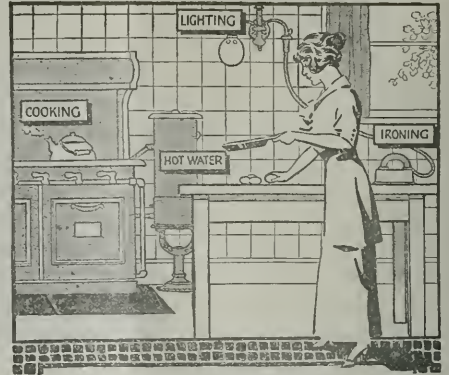
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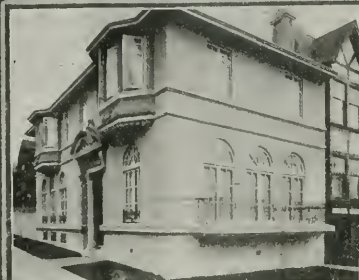
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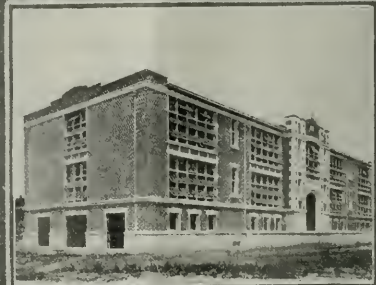
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Building and Engineering News

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Issued Weekly, \$3.00 per year

San Francisco, July 21, 1915

Fifteenth Year, No 28

We are giving in another column the report on the bids for the million and a quarter paving of the Multnomah County roads of Oregon by Roadmaster Yeon, and we feel our readers will appreciate a few historical data leading up to this event.

In 1904 the first bitulithic pavement was laid on Fifth and other streets in Portland.

From 1904 to 1912 approximately 150 miles of bitulithic pavement constructed in the city of Portland.

In 1912 the first contract was awarded for resurfacing the Linnton road with Warrenite under the Warren Bros. Company patent.

In 1914 a special committee consisting of A. S. Benson and E. E. Covert went east to examine all types of hard surface pavements suitable for county highways, and upon their return strongly recommended the adoption of Warrenite for future work.

In the early part of 1915 a bond election for \$1,250,000 to be spent on paving 70 miles of road was held and carried by a majority of 3 to 1. Two months later bids were received on all kinds of pavement by the County Commissioners and same were referred to J. B. Yeon, County Roadmaster, for his recommendations, who recommended the use of Warrenite as the most durable construction; the Portland Chamber of Commerce Paving Committee also unanimously endorsed Warrenite in their report to the Executive Committee, and contracts finally awarded in accordance with these recommendations.

The only other point in connection with this award to bear in mind is that concrete and Topeka pavement (a modified sheet asphalt) was considered a poor investment even at a saving of \$250,000, and the newspapers and organizations in general commented on the good judgment used by the County Commissioners in awarding contracts for permanent pavements, such as Warrenite, the Oregonian in particular in an editorial on June 18th stating: "It is true that the greater portion of the contracts call for one standard pavement—bitulithic—but it is obvious enough why the Commissioners reached their decision. The experience of Portland with bitulithic has been satisfactory, and there was no question that, laid under the proper conditions and with ample guarantees, it would meet all expectations."

The use of Moving Pictures is extending into all branches of human activities, and there will soon be no business or endeavor left that can get along without being moving pictured at some stage of the game. The latest use is in making a picture progress report of the new building being put up for the Third National Bank of Springfield, Mass., to show the history of its construction from the demolition of the last building which occupied its site to the completion of its successor.

Lazing the old building, excavating the plot, operating the quarries from which stone, marble and granite used in it will be quarried, rolling steel for the skeleton, loading beams on cars, putting the skeleton together, trees being felled for wood for its interior and the logs will be followed through saw mills and cabinet shops, making brick and terra cotta for its walls, etc., will be shown by the films. The pictures will show foreign weavers at work making carpets, etc., for the banking rooms. The casting and molding of bronze for various parts of the structure will be reviewed by the movies.

The progress on the Twin Peaks Tunnel is said to be more than satisfying the engineers in charge of the work for the city, as about 20 per cent of the tunneling is done now, and it is expected that this portion of the work will be completed in about a year.

Improvements of the city's boulevard system, a large part of the mileage of which lies west of Twin Peaks, is

abreast or ahead of the tunnel work. Portola Drive, formerly the old Corbett road, has been made one of the finest pieces of scenic roadway in the State. It has been widened and paved from its intersection with Sloat boulevard to Stanford Heights, and is now open to travel. It will be extended over the shoulder of Twin Peaks to Twenty-fourth street. The work will cost about \$40,000. The city is preparing to spend \$100,000 on the scenic Figure-eight boulevard around Twin Peaks summit.

According to the statement of Mayor R. Athow, radical changes are planned in the beautification of San Anselmo Creek at the depot in the town of San Anselmo. These changes cannot come any too soon as the creek at that point is far from being the beauty spot of the town.

The replacement of the wooden bridges with concrete spans is also a much needed improvement and should not be delayed.

Extensive changes are under way in the Civic Center, where considerable concrete work is being done. A children's playground adjoining the City Hall has recently been completed.

The interpretation of incinerator specifications and guarantees will in all probability get thoroughly thrashed out in our local courts when the suits, involving the new Garbage Incinerator Plant, built by the Power Specialty Company for the City of San Francisco and rejected by City Engineer O'Shaughnessy, comes up for hearing.

It certainly is time that something was done to stop this incinerator graft that is going on all over the country. All kinds of guarantees are given about a particular patented plant before the contract is signed, and when the plant is built it only half cooks the garbage, then that is all that was meant by the guarantees. The City Engineer of the City of San Francisco is more than earning his salary.

American iron products are beginning to feel the good effects in the iron trade brought about through the war in Europe. On the Pacific Mail liner Korea there was a shipment of 2,500 dead weight tons of iron consigned to Japan. Sixty-five carloads of iron from Pittsburgh went to make up the shipments.

This is only one shipment of the products which has been finding its way to the kingdom of the Rising Sun since the outbreak of war in Europe. Previously, all of the iron and steel imported by Japan came from Germany. The outbreak of the war shut off the entire supply and as a result, for a brief time there was almost an iron and steel famine in the Far East.

Orders were at once given to American firms and now the supply wave is beginning to make itself felt. Every steamer leaving San Francisco is taking out big cargoes of commercial metal, some consigned to the Japanese Government and some to private interests.

The Southern Pacific has added a new and up-to-date steamer, the Santa Clara, to its fleet of ferry boats. The Santa Clara is a sister ship to the Alameda, her immediate predecessor. She is luxuriously fitted, and can seat 1,700 persons. She will carry life preservers for 3,500, which her constructor estimates is about her capacity. There are various improvements in her machinery and equipment that put her in a class over any thing in her line in the bay.

The Santa Clara is 292 feet long, 42 feet beam and 17 feet from keel to main deck. The hull is of steel and is equipped with seven watertight safety bulkheads for collision purposes which extend to the main deck. On the platform deck there are five more of the bulkheads. The Santa Clara cost about \$500,000.

Rust Resisting Iron at the Panama-Pacific Exposition.

An iron which is capable of resisting rust or corrosion in the same way as the pure old-fashioned iron of a hundred years ago is, of course, a material of keen interest to engineers and builders everywhere. From a somewhat wide experience with road culverts, roofing and siding, tanks, stoves, and furnaces, etc., it would seem that there is available such an iron in the product known as Armcro (American Ingot) Iron, manufactured by the American Rolling Mill Co. of Middletown.

In conjunction with the association of culvert manufacturers using Armcro iron for corrugated pipe, The American Rolling Mill Co. has installed a very unusual and interesting exhibit in the Mines and Metallurgy Building at the Exposition. This is planned with the idea of giving visitors a realization of the varied uses of iron of the highest purity. Corrugated culverts in replica installations under highways and railroads form a prominent

feature. An Armcro flume demonstrates its usefulness in connection with irrigation and power developments. Both culverts and flumes are carrying water as in service. One very interesting feature is a miniature Armcro Farm whereon are exhibited houses, barns, etc., roofed with Armcro iron, and silos, tanks, troughs, fences, etc., also of this highly rust-resisting material. Another portion of this exhibit is devoted to Armcro building products of every description, including roofing and siding of many different types, metal lath, terne plate, and numerous other sheet metal articles of interest to the architect. Still another displays stoves, furnaces, and refrigerators of which the sheet metal parts are entirely of Armcro iron.

It is interesting to note that pure iron which has been thoroughly degasified is very superior as a base for paint, galvanizing, or enameling. This fact has led to its adoption by many

manufacturers of tanks, refrigerators, table tops and other enameled articles, since it reduces the percentage of culls in the enameling almost to zero.

The principle upon which Armcro (American Ingot) Iron is made is that of the elimination of all impurities to the greatest possible extent, since the investigations of many of the leading scientists of the world have led to the conclusion that these are the principal cause of rusting through affording negative poles for electrolytic action. More recent investigations have emphasized the importance of complete degasification or the elimination of the content of gases in iron or steel, usually present in the form of tiny bubbles. The makers of Armcro Iron claim, and it would seem with good reason, that their material is more thoroughly degasified than any other product of the open hearth furnace. At the booth are displayed many fairly convincing evidences of the superiority under conditions of exposure of this type of metal.



"PRESS CARAVAN" IN SAN FRANCISCO.

Pedestrians who happen to be on Market street, San Francisco, on the morning of Saturday, July 24, will see a "Press Caravan," with many startling features, move from the ferry building to the Joy Zone entrance of the Panama-Pacific Exposition as the opening event of "Newspapermen's Day."

Mounting their trusty steeds, and with a spirited use of a whip and spur, advance heralds will dash along the route and prepare the way for the notables who will follow, "some in rags and some in tags and some in velvet gowns." Clowns in their varied colored dominoes will cavort side by

side with impersonators of the comic supplement characters, and even the classified sections of the daily press will be properly and plentifully burlesqued for the amusement of the bystanders.

Plans for the "Press Caravan" include the participation of prominent baseball players, members of San Francisco social and political clubs, state and foreign commissioners to the exposition, famous writers of fact and fiction, matadores and toreadores, Indians, Mexicans, Maori girls and Samoan dancers, all donating their share to the "carnival of hearty revelry and wholesome fun"—the slogan of the day.

A novel feature of the "Press Caravan" will be the appearance of at least four noted aviators, each seated at the wheel of his machine, and drawn by six horses. Giant balloons also will make up this division.

An X-ray machine is used to destroy the tiny insect commonly called the "tobacco bug" which annually destroys thousands of dollars' worth of tobacco.

English submarines fly from their periscopes a flag on which is a skull and crossbones when they succeed in destroying a vessel belonging to the enemy.

Roadmaster Yeon's Report On the Multnomah County Bids.

Below is an extract of Roadmaster Yeon's report to the County Commissioners of Multnomah County, Oregon, on the bids submitted for the paving of 88 miles of roads with hard surface pavements:

Hon. Board of County Commissioners, Gentlemen:

As per your order of June 15, 1915, referring to the tabulation, conference and recommendation, with your Honorable Body, I have the honor to submit to you the following report and recommendations for the awarding of contracts for paving the county roads under the recent bond issue of \$1,250,000.

I have given each of the different types of pavement bid on careful study and investigation, and have gone into the analysis of the bids fully and with the intention of looking after the best interest of the taxpayers of Multnomah County.

Each section of each road has been considered as a separate bid, and the bids compared on the basis of lowest responsible bidder for the type of pavement best suited for that particular locality, the type of transportation, and further increase of traffic.

Due weight has been given the type of pavement best suited for this climate and on the new subgrades where settlement is likely to occur, or on dangerous curves or grades.

Columbia River Highway, Estimate \$408,007.00.

I recommend, that Section "A," Columbia River Highway be awarded to the Warren Construction Company, at the unit prices bid for Asphaltic Concrete No. 1 (Bitulithic) on a crushed stone basis, Totaling\$121,077.52

I recommend that Section "B," Columbia River Highway be awarded to the Warren Construction Company, at the unit prices bid for Asphaltic Concrete No. 1 (Bitulithic) on a crushed stone basis, Totaling 29,806.62

I recommend that Section "C," Columbia River Highway be awarded to the Warren Construction Company, at the unit prices bid for Asphaltic Concrete No. 1 (Bitulithic) on a crushed stone basis, Totaling 137,279.50

"D," Columbia River Highway be awarded to the Pacific Bridge Company, at the unit prices bid for Asphaltic Concrete No. 1 (Bitulithic) on a crushed stone basis, Totaling 155,332.78

I recommend that Section "E," Columbia River Highway be awarded to Boyajohn-Arnold and Hans Ped-

erson, at the unit prices bid for brick on a concrete base, Totaling 22,921.66

Total Bid\$466,418.08

Sandy Road, Estimate \$221,925.00.

I recommend that Section "A," Sandy Road, be awarded to the Warren Construction Company, at the unit prices bid for Asphaltic Concrete No. 1 (Bitulithic) on old macadam base, Totaling\$198,690.90

I recommend that Section "B," Sandy Road, be awarded to the Warren Construction Company, at the unit prices bid for Asphaltic Concrete No. 1 (Bitulithic) on old macadam base, Totaling 16,159.17

Total Bid\$214,850.07

Base Line Road, Estimate, \$152,266.00.

I recommend that Section "A," be awarded to the Clark-Henery Construction Company, at the unit prices bid on Asphaltic Concrete No. 1 (Bitulithic) on an old macadam base, Totaling, \$132,493.20

I recommend that Section "B," Base Line Road, be awarded to the Clark-Henery Construction Company, at the unit prices bid on Asphaltic Concrete No. 1 (Bitulithic) on an old macadam base, Totaling.. 15,866.26

Total Bid\$148,379.40

Foster Road, Estimate \$76,303.00.

I recommend that the Foster Road be awarded to Gebisch & Joplin, at the unit prices bid on Asphaltic Concrete No. 1 (Bitulithic) on an old macadam base, Totaling \$70,976.95

Powell Valley Road, Estimate \$128,935.

I recommend that the Powell Valley Road be awarded to Oskar Huber at the unit prices bid on Asphaltic Concrete No. 1 (Bitulithic) on an old macadam base, Totaling 121,603.90

Capitol Highway, Estimate \$05,814.00.

I recommend that the Capitol Highway be awarded to Gebisch & Joplin, at the unit prices bid on Asphaltic Concrete No. 1 (Bitulithic) on an old macadam base, Totaling 89,988.74

Canyon Road, Estimate \$35,356.00

I recommend that Section "A," Canyon Road, be awarded to Boyajohn-Arnold & Hans Pederson, at the unit prices bid on Asphaltic Concrete No. 1 (Bitulithic) on a crushed stone base, Totaling \$16,903.60

I recommend that Section "B," Canyon Road, be awarded to Montague-O'Reilly Company, at the unit prices bid on Cement Concrete No. 1, inclusive of of Armor joints-Crushed stone aggregate, Totaling, 22,352.00

Total Bid \$39,255.00

This recommendation is based on the fact that this section is on a 7½ per cent grade and there were no bids submitted on brick for this section which were low enough to come within the amount appropriated.

St. Helens Road, Estimate \$67,400.00.

I recommend that Section "M," St. Helens Road, be awarded to the Warren Construction Company, at the unit prices bid on Asphaltic Concrete No. 1 (Bitulithic) on a crushed stone base, Totaling \$28,537.03

I make no further recommendation on the St. Helens Road for the reason that other bids will exceed the estimate.

I would recommend that as soon as the final decision has been made on any section that the contract for the same be promptly awarded and not wait for a decision on all the roads, so that work can be immediately started as the season is getting short and the delay will prove expensive.

v * *

The eyes of the whole of Oregon are on Multnomah County and the example set will have a great influence in the upbuilding of our State. A mistake of not selecting a proper pavement will handicap the progress of the good roads movement.

Respectfully submitted,

JOHN B. YEON,
Roadmaster.

ENGINEERING MEETINGS IN SAN FRANCISCO.

The twenty-eighth general meeting of the American Electrochemical Society will be held in San Francisco September 16 to 18. The American Society of Civil Engineers, the American Society of Mechanical Engineers, the American Institute of Electrical Engineers and the American Institute of Mining Engineers expect to hold their meetings at the same time and arrangements are under way for joint sessions with some of these societies. The holding of this meeting immediately before the date for the International Engineering Congress, September 20 to 25, will also enable the members to attend the sessions of the Congress. All inquiries in regard to transportation should be addressed to J. M. Muir, 239 West 39th street, New York, chairman of the transportation committee.

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, reinforced concrete, \$25,000. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owner, J. G. Kincanon, 215 Montgomery street. The building will be erected on the south side of Post street west of Polk, having a frontage of 27½ feet and a depth of 120 feet. Interior has been arranged for 15 suites of three and four rooms with private baths. Pine, hardwood and white enamel will be used for finish. Hardwood floors will be used in the living and dining rooms. Plans provide for steam heat, an oil burning system, automatic elevator and hot water system. Bath rooms will be finished in tile. Marble wainscot will be used in the entrance lobby. Exterior will be faced with cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Apartment house, 3 story and base, frame. Cost not stated. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owner's name withheld. The building will be erected in the Western Addition, and has been designed to contain a number of three room apartments, all of which will have wall beds and private bath rooms. Interior finish will be of pine. Some oak floors will be used. Bath rooms will have composition floors. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and figures will be taken at once.

SAN FRANCISCO—Apartment house addition and alteration, frame construction, \$8,000. Architect, William Mosser, Nevada Bank Bldg., S. F. Owner, G. Gusti. The present three-story frame building located at the southwest corner of Lombard and Scott streets will undergo extensive alterations. A one-story addition will be made to the rear. The work will require new interior partitions, plastering, painting, plumbing, electric work and interior finish. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$13,000. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, O'Brien Bros. The building will be erected at the northwest corner of Golden Gate and Pierce, covering an area of 34½ by 137½ feet. There will be a total of 24 apartments of three and four rooms. Interior finish will be of pine and Philippine mahogany. Hardwood floors will be used in the living and dining rooms. Plans provide for steam heat, oil burning furnace, hot water supply and an automatic elevator. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the lobby. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and

segregated figures are now being taken.

SAN FRANCISCO—Apartment house, 6 story and base, reinforced concrete, \$60,000. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner's name withheld. The building will be erected on Taylor street near Washington, having a frontage of 42½ feet and a depth of 137½ feet. There will be a total of 16 apartments of four rooms and bath. Interior will be finished in pine and mahogany. Bath rooms will have tile floors and wainscot. Plans provide for an automatic elevator, steam heat, oil burning furnace and hot water system. Bath rooms will be finished in tile. Marble and tile and ornamental plaster will be used in the lobby and entrance. Exterior of the building will be faced with cement plaster in imitation of cut stone. Plans are nearly complete and figures will be called for shortly.

SAN FRANCISCO—Apartment house, 6 story and base, Class C construction, \$100,000. Architect, C. H. Skidmore, Hearst Bldg., S. F. Owner, Dr. C. F. Buckley. The building will be erected on O'Farrell street near Larkin, and will cover an area of 30 by 70 feet. Interior will be arranged for a number of two and three room suites, all of which will have private bath rooms. There will be steam heat, wall beds, a hot water system and elevator service. Bath rooms will have tile wainscot and composition floors. Interior will be finished in pine and hardwood with some hardwood floors. Marble and tile wainscot will be used in the entrance. Exterior of the building will be faced with pressed brick. Plans are complete and figures will be called for shortly.

Contracts Awarded

SEATTLE, WASH.—Apartment house, 4 story and base, reinforced concrete, \$100,000. Architect's name not given. Owners, Kreilheimer Bros. Contractor, Isham B. Johnson, 3838 Evanston avenue, Seattle. Contract price, \$100,000.

BONDS.

VISALIA, TULARE CO., CAL.—County Supervisors have accepted the bid of Bryan & McDonnell of \$451,842 for the \$475,000 state highway bonds which the county will purchase from the state if all legal requirements are overcome.

SAN BERNARDINO, CAL.—The City Council has decided to call an election, the date to be announced later, for the purpose of voting bonds of \$50,000 for the purchase of a site, \$125,000 bonds to build a convention hall, \$25,000 to equip the same and \$10,000 for park improvements.

SACRAMENTO, CAL.—The Board of Control has voted to invest \$20,000 of state funds in the recently voted bonds of the Winters Union High School District, in eastern Yolo County to re-

place the building burned last month, and as the Winters bank has purchased the other \$30,000, the trustees announced that work would begin on the new structure at once.

July 24th is the date set by F. W. Richardson, State Treasurer, for the sale of \$2,500,000 worth of state highway bonds—the biggest block of the \$18,000,000 road bond issue. After the \$2,500,000 block is sold there will remain for sale only \$1,500,000 of the original issue.

Steps towards settling the question of the legality of the issue of \$700,000 worth of bonds for the purchase of the Capitol extension site were taken when the City Commission adopted an ordinance providing for the indebtedness in the issue of the bonds.

The city proposes to purchase the blocks bounded by Ninth and Tenth, L and N streets, and give them to the state for the erection of buildings to cost \$3,000,000. New York experts have declined to go on record in an opinion on the bonds.

WOODLAKE, TULARE CO., CAL.—The \$10,000 bond issue of the Woodlake Union High School District has been sold and work on the new school, to be erected from the proceeds of the sale of the bonds, will be started at once.

MARYSVILLE, YUBA CO., CAL.—Tuesday, August 24th, has been fixed upon by the City Council as the date for the bond election to be held in this city for the purpose of raising the sum of \$18,000 for certain internal improvements, principally the extension of the E street sewer from Ninth street to Fourteenth street by way of D street, and the abatement of a nuisance existing at the present outlet of the sewer.

VISALIA, TULARE CO., CAL.—The Tulare County Supervisors have considered the petition presented for the formation of the Terra Bella Irrigation District and have set August 7th as the date when the voters of that section will vote to incorporate the district and elect directors.

The district as planned will include about 12,000 acres of land in the southern part of Tulare County. A delegation headed by Earle R. Clemens of the Terra Bella News met with the Supervisors in the interest of the project.

PITTSBURG, CONTRA COSTA CO., CAL.—On August 6th the voters will decide on the question of issuing and selling bonds of \$10,000 with which to finish the new grammar school building recently erected here. The issue will carry by a large majority, it is believed.

SANTA CLARA, SANTA CLARA CO., CAL.—According to word received from this city the county officials are contemplating a million and a half bond issue for extensive paving of all the main roads.

PARADISE, BUTTE CO., CAL.—S. S. Compton, a civil engineer, has completed estimates and a preliminary survey of the reservoir site and main canal for the proposed gravity irrigation district and has taken the matter up with the Water Users' Association. The system will no doubt be constructed in two units, and when completed will be able to supply water to the whole ridge. The system will cost in the neighborhood of \$250,000 or \$25 an acre for 10,000 acres. A bond issue will be voted to raise funds for the

proposed system.

MERCED, MERCED CO., CAL.—Notification has been given the good roads committee of the Chamber of Commerce by the California Highway Commission that the Board of Supervisors of this county is expected to bid for \$100,000 of the highway bonds which will be offered for sale on July 28. This amount represents the part of the original 18 million dollars state good roads bond issue that is to be spent on the construction of the Merced-Mariposa lateral.

STOCKTON, SAN JOAQUIN CO., CAL.—The Board of Supervisors has approved the petition of the west side land owners for the formation of the proposed irrigation district near Tracy. The matter will come up for further investigation on August 4th. A bond issue of \$285,000 is planned.

RED BLUFF, TEHAMA CO., CAL.—A campaign is on in Red Bluff in securing funds for the erection of a public bath house at the foot of Pine street.

TURLOCK, STANISLAUS CO., CAL.—A movement has been started to call a bond election to vote bonds of \$75,000 for the erection of a new school building.

BEAUMONT, RIVERSIDE CO., CAL.—The Beaumont School District has voted bonds of \$20,000 for the erection of a school building.

FRESNO, FRESNO CO., CAL.—A special election will be called shortly by the Board of Trustees to vote funds for needed municipal improvements. It has not been decided definitely what will be included but among the suggested projects are \$300,000 for extensions to the sewer system, \$150,000 for storm sewers, \$50,000 for an incinerator, \$200,000 for the fire department, and \$100,000 for an alarm system.

HUNTINGTON PARK, LOS ANGELES CO., CAL.—A special election has been called by the Board of Trustees of the Huntington Park School District for August 2, for the purpose of voting bonds in the sum of \$48,000 for the erection of a new school building. E. B. Lowe, Reba Leonard and Orville Jones are the trustees.

SANTA BARBARA, SANTA BARBARA CO., CAL.—The Board of Supervisors is making preparations for calling a special election to vote bonds in the sum of \$100,000 for the erection of a county hospital building. Architects, Costcrisan & Kavanaugh of Los Angeles, whose plans were accepted in the original competition held several years ago, have been instructed to modify the plans to keep the cost of the building within \$100,000. The original plans called for a building to cost \$200,000.

VISALIA, TULARE CO., CAL.—The County Supervisors have made arrangements for the purchase of \$175,000 of the state highway bonds to insure the completion of the state highway through Tulare County.

BRIDGES AND DAMS

SALINAS, MONTEREY CO., CAL.—Bridge, steel and concrete. Cost not stated. Engineer, County Surveyor, Cozzens, Salinas. Owners, Monterey County. Plans and specifications for the San Lucas steel bridge prepared by County Surveyor Cozzens have been approved and adopted by the Board of Supervisors, and bids have been ad-

vertised for, to be opened on August 3rd. Plans specifications and full information may be had from the County Surveyor at Salinas.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, San Luis Obispo County. Engineers Leonard & Day are now issuing plans and specifications for the concrete bridge to be erected over the San Luis Obispo Creek, near San Luis Obispo. Bids close August 3rd at 10 o'clock. Contractors desiring to bid on this work should apply for plans and specifications at the offices of the engineers.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Bridges, 2, steel and reinforced concrete. Cost not stated. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. At the last meeting of the County Supervisors plans and specifications prepared by the County Surveyor for the construction of a 34-foot span, reinforced concrete, I-beam bridge over the Chorro Creek, about four miles from the City of San Luis Obispo, and for a 12-foot span concrete slab bridge or culvert at the "Ferasai Dairy" on the Stowe Tract, about eight miles from San Luis Obispo, both on the San Luis Obispo and San Simeon public road, were adopted and bids were ordered called. Plans and specifications were also adopted for a 22-foot span, reinforced concrete, I-beam bridge near the "Cerin" ranch, and for a 6-foot arch bridge or culvert near the D. McKean ranch, each about 2½ miles from San Luis Obispo on the Buckley road. Bids on both structures close on August 3rd at 10 a. m.

MODESTO, STANISLAUS CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Plans and specifications for the Roberts Ferry bridge east of Waterford eight miles have been adopted by the County Supervisors and the County Clerk has been instructed to advertise for bids on the work. Plans and specifications may be had from the County Surveyor.

MADERA, MADERA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, City of Madera. The bridge will be erected over the Fresno River at D street and will be 270 feet long. Plans have been completed and figures are now being taken. The opening date has not been set as yet. Plans can be secured from the engineers.

PORTLAND, ORE.—Viaduct, steel and reinforced concrete. Cost not stated. Engineers, Portland Dock Commission, Portland. Owners, City of Portland. Plans and specifications having been completed the Dock Commission of this city has authorized the calling for bids to be received on July 25th for the construction of a viaduct to be built at the foot of 17th street at the county ferry right-of-way. The structure will be 20 feet wide and 180 feet long.

Contracts Awarded.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Bridge, reinforced concrete, \$2,245. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractors, E.

J. Hunt, San Luis Obispo. Contract price, \$2,245.

MILES STATION, SAN LUIS OBISPO CO., CAL.—Bridge, steel and reinforced concrete, \$21,700. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractors, Gutleben Bros., New Call Bldg., San Francisco. Contract price, \$21,700.

OROVILLE, BUTTE CO., CAL.—Bridge, steel and reinforced concrete, \$75,000 to \$150,000. Engineer, none. Owners, Butte County. Officials and residents of Oroville are urging the State Highway Commission to demand the construction of another bridge across the Feather River near Oroville. It is the intention of the Oroville officials to have the Highway Commission make the demand on the county to build the structure.

NAPA, NAPA CO., CAL.—Bridges, 3, stone and concrete. Cost not stated. Engineer, County Surveyor, Napa. Owners, Napa County. Plans have been completed and are now out for figures for three stone arch bridges to be erected on creeks on the road leading into the Pope Valley. Bids will be opened on July 27th. Plans and specifications can be secured from the engineer.

PORTLAND, ORE.—Jetty work, \$176,570.90. Engineer, United States Engineers, Couch Bldg., Portland. Owners, U. S. Government. Bids opened show the Miami Company (A. C. U. Berry), Selling Bldg., Portland, low at \$176,570.90 for the construction of the north and south jetties at the mouth of the Siuslaw River. The north jetty will extend out about 300 feet and the south jetty over 200 feet. The work is to be let in one general contract to include the driving of the piling, placing and delivering the rock.

EUREKA, HUMBOLDT CO., CAL.—Bridge, steel suspension. Cost not stated. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Plans are complete and figures are now being taken for the construction of a cable suspension bridge over Trinity River in Road District No. 5. Bids will be opened on July 30th. Plans and specifications can be secured from the County Clerk.

COURT HOUSES.

OAKLAND, CAL.—Court house repairs. Cost not stated. Architect, none. Owners, Alameda County. All bids previously received for the repairs to the County Recorder's office have been rejected and new figures are being called. Bids will be opened on July 26th. The work requires the following: Painting, electric work, plumbing and carpentry. Plans and specifications can be had from the office of the County Clerk.

SACRAMENTO, CAL.—City hall, 4 story and base. Class A construction, \$175,000. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, City of Sacramento. The building will be erected at the southeast corner of 6th and H streets, covering a large area. Construction will be fireproof throughout. The building will contain offices for the various city officials, council chambers and city jail. Interior will be finished in pine and hardwood with some metal trim. There will be steam heat, oil burning system, vacuum cleaning and metal win-

dow sash and frames. Ornamental plaster work is specified. Exterior of the building will be faced with pressed brick, trimmed with terra cotta and cut stone. Plans are being prepared.

TILLAMOOK, ORE.—City hall, 2 story and base, brick, \$25,000. Architect, Charles H. Burgraff, Albany. Owners, City of Tillamook. The building will cover an area of 52 by 100 feet. The fire department will occupy the basement and a portion of the first floor. City offices, council chamber and library will occupy the balance of the first floor. Second floor will be arranged for an auditorium, offices and club room. Interior will be finished in pine. There will be a central heating system. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken. Bids will be opened on July 26th.

CHURCHES

SAN FRANCISCO—Church addition, 2 story, frame, \$5,000. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owners, Bethany Church, S. F. The building will be erected on Mission street at the corner of Richmond avenue, and has been designed to contain Sunday school rooms. Interior will be finished in pine and redwood. Art glass windows will be installed. Exterior of the building will be covered with cement plaster on metal lath. Plans are now being prepared.

OAKDALE, STANISLAUS CO., CAL.—Church, 2 story and base, frame, \$12,000. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owners, First Methodist Episcopal Church of Oakdale. The building has been designed in the Spanish type and will contain, besides a large auditorium, Sunday school rooms and pastor's study. Interior will be finished in pine and ornamental plaster. Modern ventilating system will be installed. Art glass windows are specified. Exterior of the building will be covered with cement plaster on metal lath. Plans are nearly complete and figures will be called for shortly.

PORTLAND, ORE.—Sunday school, 3 story and base, reinforced concrete, \$45,000. Architects, Tourtellotte & Hummel, Rothchild Bldg., Portland. Owners, First Methodist Church of Portland. The building will be erected at the corner of 12th and Taylor streets, covering an area of 60 by 100 feet. Each floor will be arranged for a number of class rooms, library and offices. Interior will be finished in pine and hardwood with some maple floors. Plans provide for steam heat and vacuum cleaning. Some art glass windows will be used. Exterior of the building will be faced with cement plaster. Plans are complete and figures are being taken.

FACTORIES AND WAREHOUSES

PORTLAND, ORE.—Warehouse, 1 story, reinforced concrete. Cost not stated. Architect, Engineering Department, Portland. Owners, City of Portland. The building will be erected on property near Municipal Dock No. 1. The structure will be 330 feet long and 176 feet wide. Construction will be fireproof with concrete floors and

walls and four-ply asbestos roof. Plans provide for metal window sash and frames and an automatic sprinkler system. Exterior of the building will be faced with cement plaster. Plans are complete and figures are being taken. Bids will be opened on July 25th.

FIRE HOUSES AND JAILS.

SAN FRANCISCO—Fire house, 2 story and base. Class C construction, \$50,000. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. The building will be erected at 34 Mint avenue, and will contain the usual space for apparatus on the first floor and living quarters for the crew on the upper floor. Interior will be finished in pine and hardwood. Some hardwood floors will be used. There will be steam heat, oil burning equipment and special plumbing and electrical equipment. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are being prepared.

SAN FRANCISCO—Fire house, 3 story and base. Class C construction, \$60,000. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. The building will be erected on the north side of Howard street between Second and Third streets. There will be space for four pieces of apparatus on the first floor. Upper floors will be arranged for living quarters. Interior will be finished in pine and hardwood with some maple floors. Plans provide for steam heat, oil burning equipment and special electric and plumbing work. Exterior will be faced with pressed brick and terra cotta. Plans are being prepared.

STOCKTON, SAN JOAQUIN CO., CAL.—Fire house, 2 story and base, brick and frame. Cost not stated. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owners, City of Stockton. The building will be erected on South California street, and will be arranged for two pieces of equipment and living quarters. Interior will be finished in pine. Some hardwood floors will be used. Plans provide for steam heat and modern plumbing. Exterior will be faced with tapestry brick. Plans are complete and figures are being taken. Bids will be opened on July 27th. Plans and specifications can be secured from the architect.

STOCKTON, SAN JOAQUIN CO., CAL.—Fire house, 1½ story and base, brick and frame. Cost not stated. Architect, W. B. Thomas, Yosemite Bldg., Stockton. Owners, City of Stockton. The building will contain space for two pieces of apparatus and living quarters. Interior finish will be of pine throughout. There will be a central heating system and hot water supply. Special plumbing and electrical work is specified. Exterior will be faced with pressed brick. Plans are complete and figures are being taken. Bids will be opened on July 27th. Plans and specifications can be secured from the architect.

SEATTLE, WASH.—Detention home, 4 story and base, brick, \$75,000. Architects, Bebb & Gould, Denny Bldg., Seattle. Owners, United States Government. The building will be erected at

the corner of Western avenue and Union and will cover an area of 60 by 100 feet. The structure has been designed for a detention home for the immigration service and will contain offices, dining rooms, dormitories and detention cells. Interior will be finished in pine. There will be metal window sash and frames. Plans provide for steam heat, elevator service, hot water system and vacuum cleaning. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are now being prepared.

PORTLAND, ORE.—Detention home, 2 story and base, brick and steel, \$25,000. Architects, Doyle & Patterson, Worcester Bldg., Portland. Owners, City of Portland. The building will be arranged for offices, juvenile court rooms, judges' room and library. There will be kitchen equipment, dormitories and dining halls. Interior will be finished in pine. Plans provide for steam heat, a hot water system and vacuum cleaning. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans have been completed and figures will be called for shortly.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$2,500. Architect, none. Owner, A. M. Sylvia, 371 30th avenue, S. F. The building will be erected on the west side of 20th avenue north of Anza street, covering an area of 25 by 50 feet. There will be two modern flats of five rooms each. Interior will be finished in pine and redwood. Hardwood floors will be used in the living rooms. There will be open fire places and tile mantels. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. The building will be erected on the south side of Norton street near Mission, and has been designed to contain two flats of five and six rooms. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. The wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are now being completed and figures will be called for next week.

SAN FRANCISCO—Flats and store, 3 story and base, frame, \$6,000. Architect, C. Pantoni, 916 Kearny street, S. F. Owner, Gaetano Ciampa. The building will be erected on Brazil avenue west of Edinburgh, covering an area of 25 by 67½ feet. There will be a store on the first floor and two modern flats on the upper floors. Interior will be finished in pine and redwood. There will be open fire places in the living rooms and tile or brick mantels. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, W. A. Savage, 776 18th avenue, S. F. Owner, L. B. Ham, 1613 Lake street. The building will be erected on the east side of 19th avenue south of Geary and has been designed to contain two modern flats of five and six rooms. Interior finish will be of pine and redwood with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are being prepared.

SAN FRANCISCO—Flats, 3 story and base, frame, \$7,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. The building will be erected near the corner of Hyde and Union streets, and will contain three flats of five rooms and bath. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exterior of the building will be covered with cement plaster on metal lath. Plans are nearly complete and figures will be called for next week.

OAKLAND, CAL.—Flats, 2 story and base, frame. Cost not stated. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner's name withheld. The building will be erected near the Polytechnic school and has been designed to contain one small two-room flat and four flats of four rooms. All flats will have open air sleeping porches. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living rooms. There will be open fire places and tile mantels. Bath rooms will have tile wainscot. Exterior of the building will be covered with cement plaster on metal lath. Plans are being prepared.

GARAGES.

SAN FRANCISCO—Garage, 1 story and base. Class A construction, \$10,000. Architects, Heiman & Schwartz, Nevada Bank Bldg., S. F. Owner, W. H. Bowen. The building will be erected on the north side of Post street east of Hyde, and has been designed for a public garage. There will be a cement floor and steel frame and roof trusses. Exterior will be faced with pressed brick. Metal window sash and frames and special gasoline storage tanks will be used. Plans are complete and contracts will be let shortly.

GOVERNMENT WORK & SUPPLIES

San Francisco Circular No. 182.

The following bids were received and awards made by the depot quartermaster, San Francisco, Cal., under office circular No. 182:

1. Universal Trading Co., 171 Broadway, New York City.
2. Baker & Hamilton, 4th and Brannan streets, San Francisco, Cal.
3. Mark-Lally Co., 235 2nd street, San Francisco, Cal.

4. Dunham, Carrigan & Hayden Co., 110 Kansas street, San Francisco, Cal.

5. O. F. Williams, 1482 9th avenue, San Francisco, Cal.

6. W. E. Mushet & Co., 518 Mission street, San Francisco, Cal.

7. Marshall-Newell Supply Co., 112 Steuart street, San Francisco, Cal.

8. W. P. Fuller & Co., Mission and Beale streets, San Francisco, Cal.

9. C. W. Marwedel, 76 1st street, San Francisco, Cal.

10. Pacific Hardware & Steel Co., 7th and Townsend streets, San Francisco, Cal.

11. California Paint Co., 12th and Pine streets, Oakland, Cal.

12. Patrick & Co., 560 Market street, San Francisco, Cal.

13. Herbert P. Dugan, 1170 Sutter street, San Francisco, Cal.

14. Levensen & Co., 225 Market street, San Francisco, Cal.

15. Yates & Co., 762 Folsom street, San Francisco, Cal.

16. F. S. Johnson Co., 570 Howard street, San Francisco, Cal.

17. Bemis Bros. Bag Co., Sansome and Vallejo streets, San Francisco, Cal.

18. California Steam & Plumbing Supply Co., 671 5th street, San Francisco, Cal.

19. Paine, Bailey & Co., 440 Market street, San Francisco, Cal.

20. Union Blind & Ladder Co., 235 Peralta street, Oakland, Cal.

21. Coffin-Redding Co., 49 2nd street, San Francisco, Cal.

22. Mose-Klinkner Co., 1212 Market street, San Francisco, Cal.

23. John Clark Saddlery Co., Portland, Ore.

Item 1, 712 boxes blueing, ball, 2-oz boxes—Bid 1, 3.73c box; accepted.

2. 12 hatchets, broad—Bid 2, \$7.50 lot, accepted; 4, \$8.15; 7, \$8.25; 10, \$8.

3. 3 ladders, step, 10-ft—Bid 2, \$3.40 ea; 4, \$3.20; 10, \$3.30; 14, \$3.25; 20, \$3; no award.

4. 12 nippers, hoof-cutting, 10-in—Bid 4, \$11.32 lot; 10, \$10.50, accepted.

5. 100 gals oil, sperm—Bid 8, 87c gal; 11, 76c; 16, 72½c; no award yet.

6. 12 pliers, comb, wire cutting—Bid 1, 48.9c ea; 4, 42c, accepted; 9, 70c.

7. 18 do, 8-in—Bid 1, 59.7c ea; 4, 56c, accepted; 9, 90c.

8. 24 tongs, blacksmiths—Bid 2, \$1, 20 ea; 4, \$1.08, accepted.

9. 500 bags, coal, gunny sack—Bid 17, 23½c ea; no award.

10. 288 cakes soap, toilet—Bid 1, 12-23c cake; 13, 12c; 21, 11½c, accepted.

11. 36 boxes polish, shoe, russet—Bid 5, 8.25c box, accepted.

12. 24 cocks, steam, blow-off, 2-in—Bid 2, \$3.69 ea; 6, \$4.87; 10, \$3.50, accepted; 18, \$4.25; 19, \$3.87.

13. 1 set numbers, n. p.—Bid 10, \$9; 12, \$2.75, accepted; 16, \$18; 22, \$7.28.

14. 72 rings, halter—Bid 23, \$1.18 lot, accepted.

15. 5 skins, calf, oak tanned—28 sq ft, open-market purchase.

16 and 17. 6 lbs thread, machine, harness—Bid 16, \$1.35 lb; 23, \$1.30, accepted.

18. 12 cans, squirt—Bid 1, \$6.49 lot; 2, \$3.15; 4, \$3.12, accepted; 9, \$1.80; 10, \$3.25.

San Francisco Circular No. 177.

The following bids were received by the depot quartermaster, San Francisco, Cal., under office circular No. 177 for 10,000 bed sheets:

Bid 1. The H. B. Claffin Corporation, New York City, \$7.5c ea; commence delivery in 60 days and deliver 10 per cent weekly.

2. Ellis A. Gimbel, Philadelphia, Pa., 37c ea; commence delivery in 70 days and deliver 10 per cent weekly.

3. Greenebaum, Weil & Michels, San Francisco, Cal., 42½c and 43½c ea; commence delivery in 60 days and complete in 120.

4. L. Dinkelspiel Co., San Francisco, Cal., 39.25c ea; deliver 1,000 in 60 days and balance 1,000 every 7 days.

5. Moore-Watson Dry Goods Co., San Francisco, Cal., 36¼c ea, per sample submitted; deliver 1,000 per week; bid out of order.

Tender Manzanita, Repairs.

The following bids were received by the light-house inspector, 17th district, Portland, Ore., for docking, cleaning, painting, and repairing light-house tender Manzanita:

Albrina Engine and Machine Works, Portland, Ore., \$2,248.

Hall Brothers Marine Railway and Shipbuilding Co., Winslow, Wash., \$1,327; accepted.

Seattle Construction and Dry Dock Co., Seattle, Wash., \$1,680.

Willamette Iron and Steel Works, Portland, Ore., \$1,926.26.

Tender Madrone, Repairs.

The following bids were received by the light-house inspector, 18th district, San Francisco, Cal., for docking and repairing tender Madrone:

Moore & Scott, San Francisco, Cal., \$4,171 and \$5,920.20; 35 days.

Mare Island Navy Yard, \$3,477 and \$5,512.

United Engineering Co., San Francisco, Cal., \$3,749.50 and \$4,817.20; accepted.

W. G. Tibbitts & Co., San Francisco, Cal., \$4,320.30 and \$4,702.50.

Port Townsend, Wash., Refrigerator, Etc.

The following bids were received by the custodian U. S. Marine Hospital, Port Townsend, Wash., for a mechanically cooled refrigerator, machine and ice-making compartments at the above building.

H. W. Johns-Manville Co., Seattle, Wash., \$922.90; 10 days.

The Automatic Refrigerating Co., Seattle, Wash., \$1,152; September 10.

The Clothel Co., New York City, \$2,634; 60 days.

Denver, Colo., Furniture.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for installing furniture equipment in the U. S. post office building at Denver, Colo.: Federal Equipment Co., Carlisle, Pa., \$12,957.60; time 100 days.

Furnas Office and Bank Furniture Co., Indianapolis, Ind., \$12,858.25; 100 days.

Louck & Hill Co., Richmond, Ind., \$12,608.94; 100 days.

John E. Sjostrom Co., Philadelphia, Pa., \$13,500; 100 days.

Original Cabinet Co., Evanston, Ill., \$14,875; 100 days.

San Francisco Circular No. 235.

The following bids were received and awards made by the depot quartermas-

ter, San Francisco, Cal., under office circular No. 235:

Bid 1. Jones & Dillingham, Seattle, Wash.

2. Bass-Hueter Paint Co., 816 Mission street, San Francisco, Cal.

3. Pacific Hardware and Steel Co., 7th and Townsend streets, San Francisco, Cal.

4. Levenson Co., 325 Market street, San Francisco, Cal.

5. Marshall-Wells Hardware Co., Portland, Ore.

6. W. P. Fuller & Co., Beale and Mission streets, San Francisco, Cal.

7. The Heyman-Weil Co., 720 Mission street, San Francisco, Cal.

8. Yates & Co., 762 Folsom street, San Francisco, Cal.

9. Holbrook, Merrill & Stetson, 6th and Bloxume streets, San Francisco, Cal.

10. California Paint Co., 12th and Pine streets, Oakland, Cal.

11. The Sherwin-Williams Co., 454 2nd street, San Francisco, Cal.

12. Mark-Lally Co., 235 2nd street, San Francisco, Cal.

13. Baker & Hamilton, 4th and Brannan streets, San Francisco, Cal.

14. Crane Co., 2nd and Brannan streets, San Francisco, Cal.

15. Magner Brothers, 419 Jackson street, San Francisco, Cal.

16. Dunham, Carrigan & Hayden Co., 140 Kansas street, San Francisco, Cal.

17. Nathan-Dohrmann Co., Geary and Stockton streets, San Francisco, Cal.

18. Whittier-Coburn Co., Howard Beale streets, San Francisco, Cal.

19. John Clark Saddlery Co., Portland, Ore.

20. Otis Elevator Co., 2300 Stockton street, San Francisco, Cal.

Item 1. 144 buttons, gilt—No bids.

2. 36 molds, melon—Bid 7, 36c ea; 9, 38c, accepted; 17, 40c.

3. 48 openers, can—Bid 3, 5c ea; 4, 4.5c, accepted; 7, 5c; 9, 6c; 16, 5.5c; 17, 6c.

4. 24 pans, egg—No bids.

5. 500 gals pails, white enamel, 1-gal cans—Bid 1, \$1.98 gal; 2, \$1.64, accepted; 5, \$1.85; 6, \$2.75; 8, \$1.99 and \$2.70; 10, \$2; 11, \$1.65; 15, \$2.18; 18, \$2.30 and \$1.70.

6. 200 gals do, qt cans—Bid 1, \$2.08 gal; 2, \$1.69, accepted; 5, \$1.90; 6, \$2.85; 8, \$2.09 and \$2.80; 10, \$2.10; 11, \$1.70; 15, \$2.20; 18, \$2.36 and \$1.76.

7. 10,000 ft pipe, G. 1, ¾ in—Bid 3, 6½ ft; 5, 5-1-10c; 9, 5.35c; 12, 5.25c; 13, 4.9c; 14, 4.88c; 16, 4.8c, accepted.

8. 6 trays, hotel ware—Bid 3, 54c ea; 4, 45c, accepted; 5, 66c; 7, 45c; 9, 50c; 17, 65c.

9. 12 slicers, egg—Bid 7, 24c ea, accepted; 17, 5c.

10. 30 squeezers, lemon—Bid 7, 13c ea, accepted.

11. 368 combs, pocket—No bids.

12. 12 blankets, horse—Bid 9, \$8.50 ea, accepted.

13. 1 elevator, freight, hand—Bid 20, 248 lot, accepted.

Cement.

The Secretary of the Interior has awarded the following contracts for furnishing cement for use on the various government irrigation projects: To the Iowa Portland Cement Company, of Iowa, Kans., 52,000 barrels at

a net price of 55c per barrel; the Le-high Portland Cement Company, of Metaline Falls, Wash., 47,000 barrels at a net price of \$1 per barrel; the North-western Portland Cement Company, of El Paso, Tex., 12,000 barrels at \$1.40 per barrel; the Three Forks Portland Cement Company, Trident, Mont., 17,000 barrels, \$1.25 per barrel, and the Pacific Portland Cement Company, of Tolenas, Cal., 5,500 barrels at a net price of \$1.40 per barrel.

Eureka, Cal., Painting, Etc.

The contract for painting and minor repairs in the U. S. post office at Eureka, Cal., has been awarded to R. G. Pluke Co., Eureka, Cal., at \$2,296.

Clackamas, Ore., Fisheries Station.

The bid of Cripe & Busse, Portland, Ore., \$2,491 in amount, has been accepted for constructing a superintendent's residence at the Clackamas, Ore., fisheries station.

San Francisco, Cal., Completion.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for the completion of the U. S. subtreasury at San Francisco, Cal.:

Grant Fee, San Francisco, Cal., \$12,500.

P. T. Owsley, San Francisco, Cal., \$10,800.

Lange & Bergstrom, San Francisco, Cal., \$17,500.

Williams Bros. & Henderson, San Francisco, Cal., \$15,300.

C. A. Day Co., San Francisco, Cal., \$16,125.

Harvey L. Klyce, San Francisco, Cal., \$15,670.

Campbell Building Co., Salt Lake City, Utah, \$12,800.

Construction & Engineering Co., San Francisco, Cal., \$9,760.

Prospective Bidders.

Port Townsend, Wash., Elevator, July 21.

Otis Elevator Co., Washington, D. C.
George T. McLauthlin Co., 120 Fulton street, Boston, Mass.

Van Emon Elevator Co., 46 Natoma street, San Francisco, Cal.

Warner Elevator Co., Cincinnati, O.

C. W. Smith Elevator Co., Buffalo, N. Y.

Kaestner & Mecht Co., Chicago, Ill.

Kimball Bros. Co., 717 Commerce street, Kansas City, Mo.

The Ohio Elevator and Machine Co., Washington, D. C.

Warsaw Elevator Co., Rochester, N. Y.

American Elevator and Machine Co., Louisville, Ky.

Abell Elevator Co., Louisville, Ky.

Llewellyn Iron Works, Los Angeles, Cal.

The H. J. Reedy Co., Cincinnati, Ohio.

Albro-Clem Elevator Co., 7th street and Glenwood avenue, Philadelphia, Pa.

The Gurney Elevator Co., 64 W. 45th street, New York City.

Denver, Colo., Vault Shelving.

The contract for installing metal vault shelving in the U. S. post office at Denver, Colo., has been awarded to the Berger Mfg. Co., Canton, Ohio, at \$1,461.

Salt Lake City, Utah, Steel Shelves, Etc.

The contract for steel roller shelves, drawers, etc., for counter at the U. S. post office, Salt Lake City, Utah, has been awarded to the Tribune-Reporter Printing Co., Salt Lake City, Utah, at \$919.30.

Pablo Laterals.

Contract has been awarded the Two-Miracle Concrete Corporation, of Great Falls, Mont., for the construction of Pablo laterals A and 31-A, Flathead irrigation project, Mont. The work involves earthwork and structures, including about 9,000 cubic yards of excavation, the placing of about 75,000 pounds of reinforced steel, etc. The contract price is approximately \$31,383.75.

Contracts Awarded.

FORT SHAFTER, HAWAII—Clinic and Nurses' Home, 2, 1 story and base, frame and concrete, \$33,100. Architect, Constructing Quartermaster's Office, Fort Shafter. Owners, United States Government. Contractors, Lord-Young Co., Honolulu. Contract price, \$33,100.

HALLS AND SOCIETY BUILDINGS

BERKELEY, ALAMEDA CO., CAL.—Lodge hall, 2 story and base, brick. Cost not stated. Architect, James T. Nabett, 704 Macdonald avenue, Richmond. Owners, Eagles Hall Association. The building will be erected at the corner of University and San Pablo avenues, covering an area of 50 by 100 feet. The first floor will be arranged for stores, a large and attractive lobby, ball room and kitchen. Upper floor will contain offices of the association and lodge rooms. Interior finish will be of pine and hardwood with some hardwood floors. There will be steam heat, an oil burning system and modern plumbing. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken. Bids will be opened on July 25th. Plans and specifications can be secured from the architect.

BUTTE, MONTANA—Lodge building, 4 story and base, steel and reinforced concrete, \$125,000. Architects, Link & Haire, Butte, Mont. Owners, Knights of Columbus. The building will occupy a corner site, covering an area of 65 by 100 feet, and will have a complete steel frame, reinforced concrete walls and floors. The entire structure will be occupied by the organization. Interior finish will be of pine and hardwood with hardwood floors. Plans provide for steam heat, elevator service, a hot water system and vacuum cleaning. Marble and tile wainscot and bases are specified. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and figures are being taken.

HOTELS.

SEATTLE, WASH.—Hotel, 3 story and base, brick, \$50,000. Architects, Somervell & Putman, White Bldg., Seattle. Owner, F. E. Welty, New York Bldg. The building will be erected at the corner of Sixth avenue and Spring street, covering an area of 60 by 120 feet. The building has been designed

to contain 100 guest rooms and a number of public and private baths. Interior will be finished in pine. There will be steam heat and a hot water system. Tile wainscot and composition floors will be used in the bath rooms. Exterior will be faced with pressed brick. Plans are complete and in the hands of the owner who is taking figures on the work.

IRRIGATION PROJECTS AND POWER PLANTS.

ALTURAS, MODOC CO., CAL.—Irrigation Project. A party of Minneapolis and Wisconsin capitalists have departed for a trip of inspection over the Cowhead Irrigation proposition in the Surprise Valley, this county. If the enterprise appeals to them, it is announced, they represent abundant capital to finance it completely and bring nearly 50,000 acres of land on the east side of the lake under irrigation. The party was headed by C. A. Gorder of Albert Lea, Minn., accompanied by ten others from various points in Wisconsin and Minnesota.

PARADISE, BUTTE CO., CAL.—Irrigation project, \$250,000. Engineer, C. S. Compton, Paradise. Owners, Paradise Water Users' Association. Civil Engineer, C. S. Compton has completed estimates and preliminary survey of the reservoir site and main canal for the proposed gravity irrigation district, and has taken the matter up with the Paradise Water Users' Association. The system could be constructed in two units, according to Compton. The first by building the dam up to the 75-foot contour of the proposed reservoir. Water from this unit would then irrigate 1,800 acres at a cost of about \$75,000. After the territory in which the water is to be used has developed, the second unit could be installed. The second unit would be constructed by raising the dam to the 145-foot contour. Such a dam would back the water up in the reservoir so that it would cover about 700 acres. Engineer Compton estimates that the two units, and distributing system would cost approximately \$250,000, or \$25 an acre for 10,000 acres. A bond issue will be voted to raise funds for the construction of the proposed system.

Contracts Awarded

WEST OKANOGAN, WASH.—Irrigation plant, \$600,000. Engineer's name not given. Owners, West Okanogan Irrigation District. Contractors, Guthrie-McDougal & Co., Pittcock Block, Portland, Ore. Contract price, \$600,000.

RAILROAD CONSTRUCTION AND EQUIPMENT

SAN FRANCISCO—Car barn addition, 1 story. Class A construction. Cost not stated. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. At Wednesday's meeting of the Board of Public Works new bids were called for on the construction of the addition to the Geary Street Municipal Car Barns. New bids for this work will be opened on July 28th. Plans can be secured from the office of the City Department of Architecture.

RESIDENCES.

SAN FRANCISCO—Residence, 2 story and base, frame, \$4,500. Architect, none. Owner, J. M. Peters, 1010 Baker street, S. F. The dwelling has been designed for a seven-room house, and will be erected on the west side of 16th avenue south of Lake. Interior will be finished in pine, redwood and hardwood veneer with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile or brick. Tile wainscot and floors will be used in the bath rooms. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$4,000. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner, George Tracey. The dwelling has been designed for a seven-room house with bath and sleeping porch, and will be erected in the Parkside Tract on 21st avenue near T. Interior will be finished in pine and redwood with white enamel in the bed rooms. Hardwood floors are specified. Bath room will be finished in tile. There will be a large open fire place in the living room. Mantel will be of tile. An automatic water heater will be installed. Exterior of the house will be covered with lap siding. Plans are complete and figures are now being taken by the architects.

SAN FRANCISCO—Residence, 2 story and base, frame, \$12,000. Architect, none. Owner, R. W. Moller, 185 Stevenson street, S. F. The dwelling will be erected on the east side of Jordan avenue south of California street, and has been designed to contain ten rooms, two baths and sleeping porch. Interior will be finished in pine, hardwood veneer and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat, a hot water supply and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,000. Architect, none. Owner, Richard Roundtree, 110 Jessie street, S. F. The dwelling will be erected on the west side of 26th avenue south of West Clay, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine, redwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residences, 3, 3 story and base, frame. Cost not stated. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner's name withheld. These dwellings have been designed to contain from six to seven rooms. Interiors will be finished in pine and redwood with some white enamel and hardwood veneer. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and figures will be called for at once.

SAN FRANCISCO — Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, Alfred Johnson, 2123 Clement street, S. F. The dwelling has been designed for a six-room house and will be erected on the west side of 20th avenue near Geary street. Interior will be finished in pine, redwood, hardwood veneer and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile or brick mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Bungalows, 2, 1 story and base, frame, \$2,000 each. Architect, none. Owners, Oscar Heyman & Bro., 742 Market street, S. F. These dwellings will each contain five rooms, bath and sleeping porch, and will be erected on 39th and 23rd avenues respectively. Interiors will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be large open fire places and tile or brick mantels. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, Mrs. Mary B. Hallett, 1265 7th avenue, S. F. The dwelling has been designed for a six-room house with bath and will be erected on the east side of 18th avenue south of Geary. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the living and dining rooms. There will be open fire place and an automatic water heater. Mantel will be of tile. Tile wainscot will be used in the bath room. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

BERKELEY, ALAMEDA CO., CAL.—Residences, 10, 1 story and base, frame, \$2,500 each. Architects, Hutchinson & MacLean, 476 13th street, Oakland. Owner's name withheld. The dwellings have been designed for five and six room houses. Interiors will be finished in pine, redwood and hardwood

veneer. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place in each living room. Automatic water heaters are specified. Exteriors will be covered with rustic, shingles and cement plaster. Plans are being completed and the work will be carried on by Day Labor under the direction of the architects.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$8,000. Architect, Louis M. Upton, 111 Ellis street, S. F. Owner, Mrs. George Hammer. The dwelling has been designed for an eight-room house with two baths, sleeping porch and basement garage. Interior will be finished in pine and hardwood with white enamel in the bed rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. An automatic water heater will be installed. Bath rooms will be finished in tile. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

DECOTA, ALAMEDA CO., CAL.—Residence, 1½ story and base, frame, \$3,000. Architect, A. Silva, Centerville. Owner, Mr. Frietas, Decota. The dwelling will contain six rooms and bath. There will be a large open fire place and tile or brick mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and shingles. Plans are complete and work will be done by Day Labor.

OAKLAND, CAL.—Residences, 2, 2 story and base, frame, \$4,500. Architect, none. Owner, C. M. MacGregor, 476 13th street, Oakland. These dwellings will be erected on Mandana Boulevard west of Carlston, and each has been designed to contain eight rooms, bath and sleeping porch. Interiors will be finished in pine, redwood and hardwood veneer. Hardwood floors will be used in the living rooms, dining rooms and reception halls. Plans provide for furnace heat and open fire places. Mantels will be of tile or brick. Bath rooms will be finished in tile. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN LORENZO, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$1,000. Architects, Mau & Sprague, Macdonough Bldg., Oakland. Owner, J. P. Martin. The dwelling has been designed for a ten room house with bath and sleeping porch. Interior will be finished in pine and redwood with some elm panels. Hardwood floors will be used in the principal rooms. Plans provide for open fire places and tile or brick mantels. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

OAKLAND, CAL. — Residence, 1½ story and base, frame. Cost not stated. Architect, Henry Shermund, Mills Bldg., S. F. Owner, Mrs. Clara M. Sadler. The dwelling will contain six

rooms and bath, and will be erected on the east side of 20th street near 23rd avenue. Interior finish will be of pine and redwood with some white enamel. Hardwood floors will be used in the principal rooms. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with shingles. Plans are complete and figures are now being taken.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1½ story and base, frame, \$3,000. Architect, F. Holberg Reimers, 2125 Shattuck avenue, Berkeley. Owner, Mr. Campbell. The dwelling will be erected in Hopkins Terrace, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine and redwood. Hardwood floors will be used in the living room, dining room and reception hall. There will be a large open fire place in the living room. Mantel will be of tile or brick. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures will be taken at once.

SAN MATEO, SAN MATEO CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, Sylvain Schnaitacher, 233 Post street, S. F. Owner, Edward Livingston. The dwelling will be erected on El Cerrito Road, and has been designed for a large and attractive suburban home. A separate garage is included in the work. The dwelling will contain 12 rooms, 3 baths and sleeping porches. Interior finish will be of pine, hardwood and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat, a hot water circulating system and vacuum cleaning. Bath rooms will be finished in tile. There will be open fire places and tile and brick mantels. Exterior of both garage and dwelling will be covered with cement plaster on metal lath. Plans are now being prepared.

REDWOOD CITY, SAN MATEO CO., CAL.—Residences, 3 1½ story and base, frame, \$2,000 to \$3,000. Architect, none. Owner, Harry G. Putman, Redwood City. These houses have been designed to contain from six to seven rooms, bath and sleeping porch. Interiors will be finished in pine and redwood. Some hardwood floors will be used. There will be open fire places and tile or brick mantels. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exteriors will be covered with rustic, shingles and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, A. D. Trively, 791 Callish street, Fresno. The dwelling has been designed to contain five rooms and bath. Interior will be finished in pine and redwood. Some hardwood floors will be used. Tile wainscot will be used in the bath room. There will be an open fire place in the living room. Mantel will be of tile. Exterior of the house will be covered

with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

STOCKTON, SAN JOAQUIN CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, F. Hoberg Reimers, 2125 Shattuck avenue, Berkeley. Owner, Dr. Goodman. The dwelling will be erected in Taxedo Park, and has been designed for a seven room house with bath and sleeping porch. Interior will be finished in pine, redwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, Benj. F. Kopt, 1015 82nd avenue, Oakland. The dwelling has been designed for a six-room house with bath and will be erected on 56th avenue. Interior will be finished in pine and redwood. Some hardwood floors will be used. There will be an open fire place and tile or brick mantel. Exterior of the house will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor.

Contracts Awarded

MARTINEZ, CONTRA COSTA CO., CAL.—Residences, 20, 1 story and base, frame, \$2,500 each. Architect, none. Owners, Shell Oil Co. Contractors, Gutleben Bros., New Call Bldg., S. F. Contract price, \$2,500 each.

ARBuckle, COLUSA CO., CAL.—Residence, 2 story and base, frame, \$15,000. Architect, Chester Cole, Chico. Owner, Jost Hahn, Sr., Arbuckle. Contractor, H. Anderson, Oakland. Contract price, \$15,000.

SEWERS, STREET WORK & WATER SYSTEMS.

MARTINEZ, CONTRA COSTA CO., CAL.—Highway construction. Cost not stated. Engineer, County Surveyor Ralph R. Arnold, Martinez. Owners, Contra Costa County. Plans and specifications prepared by the County Surveyor are now completed and ready for approval for the construction of the first three miles of permanent concrete road to be built in Contra Costa County as part of the boulevard system. The plans call for a concrete road and macadam shoulder on each side making the road 22 feet wide. On the adoption of the plans bids will be called.

SAN RAFAEL, MARIN CO., CAL.—Road construction, bulkheads, culverts, etc. Cost not stated. Engineer, County Surveyor, San Rafael. Owners, Marin County. Plans have been completed and figures will be opened on August 3rd for regrading and improving a portion of the Point San Pedro road, and for the construction of embankments, rip-rap, paving, timber bulkheads, pile bulkheads, ditches and culverts therefor, all in Road District No. 1, Marin County.

RICHMOND, CONTRA COSTA CO., CAL.—Street paving and sewer. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. Plans are complete and bids will be opened on July 26th for paving certain streets with Richmond Standard macadam, and also for laying a 6-inch pipe sewer in several blocks. Plans can be secured from the City Engineer.

RICHMOND, CONTRA COSTA CO., CAL.—Street paving, \$12,200.51. Engineer, City Engineer, Richmond. Owners, City of Richmond. John Ward, Richmond, Submitted the lowest bid for paving 10th street from Barrett to Pennsylvania and will probably be awarded the contract.

SAN ANSELMO, MARIN CO., CAL.—Street improvements. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Plans prepared by the Town Engineer for the improvement of Pine street, Cedar street and San Anselmo avenue, have been approved by the trustees and bids will soon be called. At the same meeting a resolution of intention for the extension of Cedar street was also adopted.

RICHMOND, CONTRA COSTA CO., CAL.—Sewer extensions. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. The City Engineer has been ordered by the Council to prepare plans and specifications for the big sewer project in the annexed district. The work covers the town of Stege, East Shore Park, Coleman-Pullman, Central Pullman, Central Richmond, Wall's Addition, Pullman Townsite, Coleman Park and Bay View Park. On completion and adoption of the plans bids will be called for.

Petaluma, SONOMA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. Plans have been completed and figures are now being taken for the construction of a 6-inch ironstone pipe sewer in B street. There will be one brick manhole and a number of Y branches. Bids will be opened on August 2nd. Plans can be secured from the City Clerk.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving, sewers, curbs, etc. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. At the last meeting of the City Council resolutions of intention were passed for the improvement of several streets, one being for the improvement of North El Dorado street from North street to Wyandotte street, Maple, Ash and Walnut and Sperry avenue from North El Dorado street to Sperry Park. Another was for the improvement of North Commerce and North Center streets from Ash to Wyandotte street; and Ash and Maple from North Eldorado to Sperry Addition. The other was for North Commerce and North Center streets from North street to Ash, and Walnut and Elm streets from North El Dorado to Sperry Addition. Concrete curbs and gutters are to be put in and the roadway to be paved with asphalt concrete.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans and specifications for macadamizing and otherwise improving portions of Jackson, Clay, Van Buren, Monroe, Madison

and Commerce streets, were ordered at the last meeting of the City Council.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans have been completed and figures will be opened on July 27th for furnishing labor and materials and doing the work for paving with asphalt concrete (Topeka specifications) portions of Weber and Miner avenues, Market, Commerce, Sonoma, Church, Washington, Sutter and San Joaquin streets.

STOCKTON, SAN JOAQUIN CO., CAL.—Street improvement, \$10,305.10. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has passed a resolution of intention for the paving and improving of the northwesterly, southerly and central roads of the new city park, west of Yosemite Terrace, by grading all of said roads, paving the northwesterly road with oil macadam and graveling a 20-foot strip along the center of the other two roadways.

DUNSMUIR, SISKIYOU CO., CAL.—Water mains and paving. Cost not stated. Engineer's name not given. Owners, Town of Dunsmuir and California-Oregon Power Co. The California-Oregon Power Company, which furnishes water to the town of Dunsmuir, has contracted for new water mains to be laid on Florence avenue, at a cost of \$10,000. Florence avenue is shortly to be paved and other improvements made to connect with the state highway, which is now being graded from Dunsmuir to Weed, and to connect with the new concrete bridge at the northern outskirts of the city.

SACRAMENTO, CAL.—Street paving and sewers. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Plans are complete and figures will be opened on July 27th for paving with asphalt and laying sewers in certain streets in the Oak Grove Addition. Plans can be secured from the City Engineer.

REDWOOD CITY, SAN MATEO CO., CAL.—Highway construction. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The County Surveyor has been directed by the San Mateo County Supervisors to prepare plans and specifications for a boulevard leading along the summit of the Coast Range from the Half Moon Bay-San Mateo road to Kings Mountain, west of Woodside. On completion and adoption of the plans bids on the work will be called.

SAN BRUNO, SAN MATEO CO., CAL.—Sewer construction, \$31,000. Engineer, Town Engineer, San Bruno. Owners, Town of San Bruno. The Board of Trustees are now taking bids for the construction of sewers in certain streets. Plans and specifications may be had from the City Engineer at San Bruno.

HOLLISTER, SAN BENITO CO., CAL.—Road repairs, \$7,000. Engineer, County Surveyor, Hollister. Owners, San Benito County. The County Surveyor at the last meeting of the County Supervisors, presented his estimate on the cost of repairing the Tres-Pinos-Union road. The distance being four and a half miles, width 14 feet, gravel 6,000 cubic yards, grading \$17,000, making a total of \$7,000. Action will be taken by the board at their next meeting.

FRESNO, FRESNO CO., CAL.—Gas pipe line. Cost not stated. Engineer, none. Owners, Parlier Winery, Fresno. Permission has been granted to the Parlier Winery of this city to lay pipes along the county roads between Sanger, Del Rey, Parlier, Reedley and to the county line at Dinuba. It is the intention of the winery directors to supply gas to all of these small towns.

Contracts Awarded.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction. Cost as follows. Engineer, City Engineer Stockton. Owners, City of Stockton. Contractors, McClouds Addition, to A. Telchert & Son, Ochsner Bldg., Sacramento. Contract price, \$6,968.85. E. C. Hamlin, San Jose, sewers in southern portion of city. Contract price, \$3,401.75.

EUREKA, HUMBOLDT CO., CAL.—Street improvement, \$6,939. Engineer, City Engineer, Eureka. Owners, City of Eureka. Contractors, Elsemore & Jacobs, Eureka. Contract price, \$6,939.

LOS BANOS, MERCED CO., CAL.—street paving, \$48,810.37. Engineer, City Engineer, Los Banos. Owners, City of Los Banos. Contractors, Worswick Paving Co., Modesto. Contract price, \$48,810.37.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Sewer construction, \$20,717. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractors, Eggart & Ukovich, Los Angeles. Contract price, \$20,717.

SCHOOLS.

SAN FRANCISCO—School, 2 story and base, brick and steel, \$125,000. Architect, City Department of Architecture. Temporary City Hall, S. F. Owners, City and County of San Francisco. The building will be known as the Daniel Webster School and will be erected on Connecticut street between 19th and 20th. No details of interior arrangement or construction have been determined on. Exterior will probably be faced with pressed brick and terra cotta. Plans are being prepared.

FRESNO, FRESNO CO., CAL.—Normal school sewer, \$4,000. Architect, State Architect George B. McDougall. Sacramento. Owners, State of California. A sewer system will be installed in the Fresno Normal School, the City Council having granted permission to connect the sewer with the city mains. The sewer will have a six-inch main in Elmhurst avenue, branch on to Olive avenue for about 100 feet and connect with the city main at the alley between Van Ness and Carmel avenues. The work is estimated to cost between \$2,000 and \$4,000. Bids on the work will be called for immediately.

PORTLAND, ORE.—School 1 story and base, brick, \$74,897. Architect's name not given. Owners, City of Portland. Contractor, J. S. Winters, Couch Bldg., Portland. Contract price, \$74,897.

SAN FRANCISCO—School, 2 story and base, brick and steel, \$125,000. Architect, City Department of Architecture. Temporary City Hall, S. F. Owners, City and County of San Francisco. The building will be erected at the southwest corner of Pine and Larkin

streets, and will be known as the Redding School. The department has just received instructions to proceed with the plans and details are not available. Further mention will be made of the work.

BERKELEY, ALAMEDA CO., CAL.—College class rooms, 4 story and base. Class A construction, \$800,000. Architect, John Galen Howard, 604 Mission street, S. F. Owners, University of California. Plans have been completed for the construction of the Benjamin Ide Wheeler Hall to be erected on the Campus grounds at the University of California, Berkeley, and the Regents are now calling for figures on the following parts of the work: Excavating and concrete, structural steel, steel erection, roofing and sheet metal work, lathing and plastering, marble and terrazzo work, carpentry and interior finish, plumbing, ornamental metal, elevator work and acoustic felt. Plans and specifications for the above mentioned work can be secured at the cashiers window at the office of the Regents after 9 A. M., Saturday, July 17th. A deposit of \$5 is required. Bids will be opened on August 9th at 11 A. M. An official proposal appears in another column of this issue.

Contracts Awarded.

LATHROP, SAN JOAQUIN CO., CAL.—School, 2 story, frame, \$3,090. Architects, Young & Jeffery, Wolfe Bldg., Stockton. Owners, Golden West School District. Contractor, Charles Anderson, Stockton. Contract price, \$3,090.

COURTLAND, SACRAMENTO CO., CAL.—School, 1 story and base, frame, \$18,000. Architect, P. J. Herold, Forum Bldg., Sacramento. Owners, Bates Union School District. Contractors, G. W. Martin & Son, 1217 19th street, Sacramento, general construction, \$14,096. Hatley & Hatley, Sacramento, plumbing and heating, \$3,886.

STORES AND OFFICES.

SAN FRANCISCO—Stores, 1 story and base, frame, \$2,500. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, M. J. Sarraile. The building will be erected at the southwest corner of Beach and Grant avenue, and will cover an area of 50 by 75 feet. There will be one store. A cement floor will be used. Interior finish will be of pine and redwood. Exterior of the building will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Station and store, 1 story, brick, \$6,000. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, E. A. Heron. The building will be erected on the east side of Shattuck avenue near University, and has been designed for a local station and small store. Interior will be finished in pine and redwood. Patent store fronts will be used. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken.

SAN LEANDRO, ALAMEDA CO., CAL.—Store, 1 story and base, brick. Cost not stated. Architect, G. Armstrong, 1629 Alcatraz avenue, Berkeley. Owner, W. L. Duarte. The building will be erected on the east side of 14th street at the corner of Washington

and will cover an area of 42 by 100 feet. There will be several small stores. Interior finish will be of pine and redwood with some hardwood in the display windows. Patent store fronts are specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken.

STOCKTON, SAN JOAQUIN CO., CAL.—Store alterations, brick construction. Cost not stated. Architect, William B. Thomas, Yosemite Bldg., Stockton. Owners, Smith & Lang. The building to be altered is located at the southwest corner of Main and San Joaquin streets. Included in the work will be new interior finish, plumbing, painting, electric work and plaster work. Plans are now being prepared.

CALEXICO, IMPERIAL CO., CAL.—Stores and offices, 2 story and base, reinforced concrete. Cost not stated. Architect, Sam Zimmer, Calexico. Owner, Max Harris. The building will cover a site 100 by 100 feet, and has been designed for four small stores on the first floor. Upper floor will contain 21 offices. Foundations and walls have been designed for additional stories. Interior will be finished in pine and redwood. A cement floor will be used. Patent store fronts are specified. Marble and tile bases will be used. Exterior of the building will be faced with cement plaster. Plans are complete and figures are being taken.

SEATTLE, WASH.—Publishing offices, 4 story and base, reinforced concrete, \$50,000. Architects, Bebb & Gould, Denny Bldg., Seattle. Owners, Puget Sound News Co. The building will be erected at the corner of Second and Virginia streets, covering an area of 45 by 108 feet. There will be the general offices and subscription department on the first floor. Upper floors will contain editorial rooms, offices and composing rooms. Mechanical department will occupy the basement. Plans provide for freight and passenger elevators, steam heat and hot water supply. Exterior of the building will be faced with cement plaster trimmed with terra cotta. Plans are nearly complete and figures will be called for shortly.

Contracts Awarded

SAN FRANCISCO—Store alteration. Cost not stated. Architect, Albert Lapachet, 110 Sutter street, S. F. Owners, Shooing Co. Contractors, Atlas Heating and Ventilating Co., S. F. Contract price not stated.

SEALED PROPOSALS

PROPOSALS FOR CONCRETE PIERS.

CONCRETE PIERS—Sealed proposals endorsed "Proposals for Torpedo Boat Piers" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 18, 1915, and then and there publicly opened, for constructing reinforced concrete torpedo boat piers at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR RAILROAD.

MARINE RAILWAY.—Sealed proposals endorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 18, 1915, and

then and there publicly opened, for constructing a marine railway, for a naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 948—Proposals for Structural Steel and Accessory Parts for the Decking of the Reloader Harb at the canal. Sealed proposals will be received at the office of the General Purchasing Officer, the Panama Canal, Washington, D. C., until 10:30 a. m. July 23, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 948) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; F. C. BOGGS, major, division of engineers, U. S. A., general purchasing officer.

PROPOSALS FOR DREDGING.

DREDGING.—Sealed proposals, indorsed "Proposals for Dredging," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. August 14, 1915, and then and there publicly opened, for dredging at the navy yard, Puget Sound, Wash. Amount available, \$15,000. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard, Bremerton, Wash. H. R. STANFORD, chief of bureau.

PROPOSAL FOR BIDS.

SEALED BIDS will be received at the Office of the Comptroller of the University of California, Berkeley, California, at or before 11 A. M. August 9, 1915, for the Excavation and Concrete, Structural Steel, Steel Erection, Roofing and Sheet Metal, Lathing and Plastering, Marble and Terrazzo, Carpentry and Interior Finish, Plumbing, Ornamental Metal, Elevator and Acoustic Felt for Benjamin L. Wheeler Hall on the grounds of the University of California, Berkeley, as per plans and specifications on file and obtainable after 9 A. M. Saturday, July 17th, at the Cashier's window in said office.

A deposit of \$5.00 will be required for each set of plans and specifications, which deposit will be returned upon return of said plans and specifications provided such return is made prior to 12 o'clock, noon, August 10, 1915; no refunds will be made after said date. The time of completion of the work will be an important element in the consideration of bids.

No bids will be received unless accompanied by a certified check or bond in favor of the undersigned, equal to 10% of the bid, to secure execution of the contract by the successful bidder. The right is reserved to reject any or all bids.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA. (*)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, noon, Tuesday, August 10, 1915, and bids then and there to be publicly opened and read for furnishing all plant, material and labor, and doing the work required for the complete construction of the Main Sewer for the Fresno State Normal School, Fresno, California. In accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum

(10%) of the amount of the bid must accompany each bid.

A deposit of Five (\$5.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Main Sewer, Fresno State Normal School, Fresno, California."

(SIGNED) W. F. McCLURE, State Engineer. (*)

PROPOSALS FOR PAINTING.

PAINTING — Treasury Department, Supervising Architect's Office, Washington, D. C.—Sealed proposals will be received at this office until 2 p. m. July 23, 1915, and then opened for painting the plastered walls and ceilings in the U. S. post office at Denver, Colo. Copies of the specifications may be obtained at this office, and drawings of the building may be seen at the office of the architects, Messrs. Tracy, Swartout & Litchfield, No. 244 5th avenue, New York City; the Builders' Exchange, Chicago, Ill.; the superintendent's office, Denver, Colo.; the office of the supervising superintendent, J. W. Roberts, No. 403 post office and court house, San Francisco, Cal.; and at the supervising architect's office, JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR BUILDING.

BUILDING — Sealed proposals indorsed "Proposals for Officers' Quarters" will be received, at the bureau of yards and docks, Navy Department, until 11 o'clock a. m. August 21, 1915, and then and there publicly opened for 4 one-story officers' quarters of wooden construction at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR BUILDING.

ADDITION TO BRICK ASSEMBLY HALL—Department of the Interior, Office of Indian Affairs, Washington, D. C.—Sealed proposals plainly marked on the outside of a sealed envelope "Proposals for Addition to Brick Assembly Hall, Salem School, Oregon," and addressed to the Commissioner of Indian Affairs, Washington, D. C., will be received at the Indian office, until 2 o'clock p. m. of July 21, 1915, for furnishing materials and labor for the construction of an addition to the brick assembly hall, in strict accordance with the plans, specifications and instructions to bidders, which may be examined at the United States Indian warehouses at Chicago, Ill., and St. Louis, Mo., and Builders' exchange, St. Paul, Minn., and at the office of the superintendent of the Salem Indian School, Chemawa, Ore. For further information apply to the superintendent of the Salem School. CATO SELLS, Commissioner.

STATE OF CALIFORNIA. DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock P. M. on July 26, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:

Columbia County, through Arbutuck (111-C-7-A), about 0.3 miles in length, to be surfaced with asphalt 55 feet wide.

Marin County, between Burdell and St. Vincent (IV-Mrn-1-A), about 4 miles in length, to be graded.

Monterey County, from Greenfield to Camphorn (V-Mon-2-B), about 11.7 miles in length, to be paved with Portland cement concrete.

Santa Barbara County, from Gaviota Pass to Zaca Station (V-SB-2-D), about 11.4 miles in length, to be graded. San Luis Obispo County, from Atascadero Creek to Paso Robles (V-SL 0-2-B), about 10 miles in length, to be paved with Portland cement concrete.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers' offices are located at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLOOM, NEWELL D. DARLINGTON, CHARLES F. STERN, California Highway Commission.

AUSTIN B. FLETCHER, Highway Engineer. WILSON R. ELLIS, Secretary. (*)

Dated: June 29, 1915.

PROPOSALS FOR SUBMARINES.

SUBMARINES—Proposals for constructing by contract sixteen submarine boats, Nos. 62-77, will be received at the Navy Department until 12 o'clock noon August 2, 1915, when they will be publicly opened. Circulars for the information of bidders and general specifications for the construction of said vessels are ready for distribution among prospective bidders. Forms of proposal and contract may be had on application to the department. FRANKLIN D. ROOSEVELT, Acting Secretary of the Navy.

PROPOSALS FOR DREDGING.

1915, and then and there publicly opened for dredging 72,000 cubic yards. DREDGING—Sealed proposals, indorsed "Proposals for Dredging," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. July 31, more or less, at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, Chief of Bureau.

PROPOSALS FOR BUILDING.

BUILDING — Sealed proposals indorsed "Proposals for Seven Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. July 24, 1915, and then and there publicly opened, for one power house, one operating building and one storehouse of stucco, brick and steel frame, one pump house, one quarters for commanding officer, one double quarters for chief operator and one operators' quarters of stucco wood frame construction at the naval radio station, San Diego, Cal. Plans and specifications may be obtained on application to the bureau or to the officer in charge, naval radio station, San Diego, Cal. H. R. STANFORD, Chief of Bureau.

A rubber substitute can be made by mixing gelatin with glycerine and a solution of camphor in acetone and treating the mass with sulphur.

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

RESIDENCE—2 story and base, frame, \$4,500. San Francisco. Architect, none. Owner, J. M. Peters, 1010 Baker street, S. F. The dwelling has been designed for a seven-room house and will be erected on the west side of 16th avenue south of Lake. Interior will be finished in pine, redwood and hardwood veneer with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile or tile or brick. Tile wainscot and floors will be used in the bath rooms. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE—2 story and base, frame, \$4,000. San Francisco. Architects, Paich & Knoll, Hearst Bldg., S. F. Owner, George Tracey. The dwelling has been designed for a seven-room house with bath and sleeping porch, and will be erected in the Parkside Tract on 21st avenue near T. Interior will be finished in pine and redwood with white enamel in the bed rooms. Hardwood floors are specified. Bath room will be finished in tile. There will be a large open fire place in the living room. Mantel will be of tile. An automatic water heater will be installed. Exterior of the house will be covered with lap siding. Plans are complete and figures are now being taken by the architects.

RESIDENCE—2 story and base, frame, \$12,000. San Francisco. Architect, none. Owner, R. W. Moller, 185 Stevenson street, S. F. The dwelling will be erected on the east side of Jordan avenue south of California street, and has been designed to contain ten rooms, two baths and sleeping porch. Interior will be finished in pine, hardwood veneer and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat, a hot water supply and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, Richard Roundtree, 110 Jessie street, S. F. The dwelling will be erected on the west side of 26th avenue south of West Clay, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine, redwood and white enamel. Hardwood floors will be used in the living room,

dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCES—3, 3 story and base, frame. Cost not stated. San Francisco. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner's name withheld. These dwellings have been designed to contain six to seven rooms. Interiors will be finished in pine and redwood with some white enamel and hardwood veneer. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and figures will be called for at once.

RESIDENCE—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, Alfred Johnson, 2423 Clement street, S. F. The dwelling has been designed for a six-room house and will be erected on the west side of 20th avenue near Geary street. Interior will be finished in pine, redwood, hardwood veneer and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile or brick mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

BUNGALOWS—2, 1 story and base, frame, \$2,000 each. San Francisco. Architect, none. Owners, Oscar Heyman & Bro., 742 Market street, S. F. These dwellings will each contain five rooms, bath and sleeping porch, and will be erected on 39th and 23rd avenues respectively. Interiors will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be large open fire places and tile or brick mantels. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners who will do the work by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, Mrs. Mary B. Hallett, 1265 7th avenue, S. F. The dwelling has been designed for a six-room house with bath and will be erected on the east side of 18th avenue south of Geary. Interior will be finished in

pine and hardwood veneer. Hardwood floors will be used in the living and dining rooms. There will be open fire places and an automatic water heater. Mantel will be of tile. Tile wainscot will be used in the bath room. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

APARTMENT HOUSE—3 story and base, reinforced concrete, \$25,000. San Francisco. Architect, Charles J. Roussea, 46 Kearny street, S. F. Owner, J. G. Kincanon, 215 Montgomery street. The building will be erected on the south side of Post street west of Polk, having a frontage of 27½ feet and a depth of 120 feet. Interior has been arranged for 15 suites of three and four rooms with private baths. Pine, hardwood veneer and white enamel will be used for finish. Hardwood floors will be used in the living and dining rooms. Plans provide for steam heat, an oil burning system, automatic elevator and hot water system. Bath rooms will be finished in tile. Marble wainscot will be used in the entrance lobby. Exterior will be faced with cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor.

APARTMENT HOUSE—3 story and base, frame. Cost not stated. San Francisco. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owner's name withheld. The building will be erected in the Western Addition, and has been designed to contain a number of three-room apartments, all of which will have wall beds and private bath rooms. Interior finish will be of pine. Some oak floors will be used. Bath rooms will have composition floors. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and figures will be taken at once.

APARTMENT HOUSE ADDITION AND ALTERATION—Frame construction, \$8,000. San Francisco. Architect, William Mooser, Nevada Bank Bldg., S. F. Owner, G. Guisti. The present three-story frame building located at the southeast corner of Lombard and Scott streets will undergo extensive alterations. A one-story addition will be made in to the rear. The work will require new interior partitions, plastering, painting, plumbing, electric work and interior finish. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

APARTMENT HOUSE—3 story and base, frame, \$43,000. San Francisco. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, O'Brien Bros. The building will be erected at the northwest corner of Golden Gate and Pierce, covering an area of 34½ by 137½ feet. There will be a total of 24 apartments of three and four

rooms. Interior finish will be of pine and Philippine mahogany. Hardwood floors will be used in the living and dining rooms. Plans provide for steam heat, oil burning furnace, hot water supply and an automatic elevator. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the lobby. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and segregated figures are now being taken.

APARTMENT HOUSE—6 story and base, reinforced concrete, \$60,000. San Francisco. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner's name withheld. The building will be erected on Taylor street near Washington, having a frontage of 42½ feet and a depth of 137½ feet. There will be a total of 16 apartments of four rooms and bath. Interior will be finished in pine and mahogany. Bath rooms will have tile floors and wainscot. Plans provide for an automatic elevator, steam heat, oil burning furnace and hot water system. Bath rooms will be finished in tile. Marble and tile ornamental plaster will be used in the lobby and entrance. Exterior of the building will be faced with cement plaster in imitation of cut stone. Plans are nearly complete and figures will be called for shortly.

CHURCH ADDITION—2 story, frame, \$5,000. San Francisco. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owners, Bethany Church, S. F. The building will be erected on Mission street at the corner of Richmond avenue, and has been designed to contain Sunday school rooms. Interior will be finished in pine and redwood. Art glass windows will be installed. Exterior of the building will be covered with cement plaster on metal lath. Plans are now being prepared.

FIRE HOUSE—2 story and base. Class C construction, \$30,000. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. The building will be erected at 34 Mint avenue, and will contain the usual space for apparatus on the first floor and living quarters for the crew on the second floor. Interior will be finished in pine and hardwood. Some hardwood floors will be used. There will be steam heat, oil burning equipment and special plumbing and electrical equipment. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are being prepared.

FIRE HOUSE—3 story and base. Class C construction, \$60,000. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. The building will be erected on the north side of Howard street between Second and Third streets. There will be space for four pieces of apparatus on the first floor. Upper floors will be arranged for living quarters. Interior will be finished in pine and hardwood with some maple floors. Plans provide for steam heat, oil burning equipment and special electric and plumbing work. Exterior will be faced with pressed brick and terra cotta. Plans are being prepared.

FLATS—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, A. M. Sylvia, 371 30th avenue,

S. F. The building will be erected on the west side of 20th avenue north of Anza street, covering an area of 25 by 50 feet. There will be two modern flats of five rooms each. Interior will be finished in pine and redwood. Hardwood floors will be used in the living rooms. There will be open fire places and tile mantels. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, Paul J. De Martini, 2123 Powell street, S. F. Owner's name withheld. The building will be erected on the north side of Norton street near Mission, and has been designed to contain two flats of five and six rooms. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are now being completed and figures will be called for next week.

FLAT AND STORE—3 story and base, frame, \$6,000. San Francisco. Architect, C. Fantoni, 916 Kearny street, S. F. Owner, Gaetano Ciampa. The building will be erected on Brazil avenue west of Edinburgh, covering an area of 25 by 67½ feet. There will be a store on the first floor and two modern flats on the upper floors. Interior will be finished in pine and redwood. There will be open fire places in the living rooms and tile or brick mantels. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, W. A. Savage, 776 18th avenue, S. F. Owner, L. B. Ham, 1642 Lake street. The building will be erected on the east side of 19th avenue south of Geary, and has been designed to contain two modern flats of five and six rooms. Interior finish will be of pine and redwood with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

FLATS—3 story and base, frame, \$7,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. The building will be erected near the corner of Hyde and Union streets, and will contain three flats of five rooms and bath. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living room, dining rooms and reception halls. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exterior of the building will be covered with cement plaster on metal lath. Plans are nearly complete and figures will be called for next week.

GARAGE—1 story and base. Class A construction, \$10,000. San Francisco. Architects, Heiman & Schwartz, Nevada Bank Bldg., S. F. Owner, W. H. Bowen. The building will be erected on the north side of Post street east of Hyde, and has been designed for a public garage. There will be a cement floor and steel frame and roof trusses. Exterior will be faced with pressed brick. Metal window sash and frames and special gasoline storage tanks will be used. Plans are complete and contracts will be let shortly.

CAR EARN ADDITION—1 story. Class A construction. Cost not stated. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. At Wednesday's meeting of the Board of Public Works new bids were called for on the construction of the addition to the Geary Street Municipal Car Barns. New bids for this work will be opened on July 28th. Plans can be secured from the office of the City Department of Architecture.

SCHOOL—2 story and base, brick and steel, \$125,000. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. The building will be known as the Daniel Webster School, and will be erected on Connecticut street between 19th and 20th. No details of interior arrangement or construction have been determined on. Exterior will probably be faced with pressed brick and terra cotta. Plans are being prepared.

SCHOOL—2 story and base, brick and steel, \$125,000. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. The building will be erected at the southwest corner of Pine and Larkin streets, and will be known as the Redding school. The department has just received instructions to proceed with the plans and details are not available. Further mention will be made of the work.

STORES—1 story and base, frame, \$2,500. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, M. J. Sarraile. The building will be erected at the southwest corner of Beach and Grant avenue, and will cover an area of 50 by 75 feet. There will be one store. A cement floor will be used. Interior finish will be of pine and redwood. Exterior of the building will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

APARTMENT HOUSE—6 story and base. Class C construction, \$100,000. San Francisco. Architect, C. H. Skidmore, Hearst Bldg., S. F. Owner, Dr. C. F. Bulkeley. The building will be erected on O'Farrell street near Larkin, and will cover an area of 50 by 70 feet. Interior will be arranged for a number of two and three room suites, all of which will have private bath rooms. There will be steam heat, wall beds, a hot water system and elevator service. Bath rooms will have tile wainscot and composition floors. Interior will be finished in pine and hardwood with some hardwood floors. Marble and tile wainscot will be used in the entrance. Exterior of the building

will be faced with pressed brick. Plans are complete and figures will be called for shortly.

Contracts Awarded.

CLINIC AND NURSES' HOME—2, 1 story and base, frame and concrete, \$33,100. Fort Shafter, Hawaii. Architect, Constructing Quartermaster's Office, Fort Shafter. Owners, United States Government. Contractors, Lord-Young Co., Honolulu. Contract price, \$33,100.

STORE ALTERATION—Cost not stated. San Francisco. Architect, Albert Lapachet, 116 Sutter street, S. F. Owners, Shong Co. Contractors, Atlas Heating and Ventilating Co., S. F. Contract price not stated.

SAN FRANCISCO—Bridge bulkhead and pile fender, \$1,932. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Healy-Thibbitts Construction Co., S. F. Contract price, \$1,932.

BULKHEAD AND PILE FENDER—\$1,932. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Healy-Thibbitts Construction Co., S. F. Contract price, \$1,932.

Building Contracts Awarded

San Francisco

No.	Owner.	Contractor	Amt.
2018	Rainier	Morehouse	27000
2019	Same	Reed	32500
2020	Sherman	Collman	12330
2021	Eichler	Nelson	2250
2022	Perry	Ferry	500
2023	Byers	McCall	1000
2024	Sanford	Sanford	400
2025	McDonald	Selma	400
2026	Beckles	Smith	500
2027	Cox	Messe	700
2028	O'Connor	O'Connor	800
2029	Sarraille	Sarraille	2000
2030	Helling	Helling	400
2031	La Forest	La Forest	750
2032	Mauermann	Mauermann	1100
2033	Neil	Neil	1800
2034	Heyman	Heyman	1750
2035	Heyman	Heyman	1750
2036	Locke	Locke	750
2037	Hallett	Hallett	2400
2038	Lillis	Kirby	4500
2039	Sullivan	Conrad	19000
2040	Cump	Madonard	17000
2041	Battaini	Devencenzi	3700
2042	Zappettini	Devencenzi	8400
2043	Milwaukee Bwy.	Sparrow	2500
2044	Nold	Costello	2700
2045	Nichols	Johnson	3200
2046	Wallace	Holt	6018
2047	Trittenbach	Prout	5060
2048	Same	Bernstein	600
2049	Gruenberg	Malloch	4000
2050	Wyatt	Jensen	5000
2051	Everett	Montrouil	2100
2052	Hogan	Props	4750
2053	Mahoney	Nelson	2700
2054	Tickner	Miller	4000
2055	Scheff	Elvin	1790
2056	Capitani	Spence	1950
2057	McLaughlin	Gilmour	2000
2058	Nuttman	Coburn	13128
2059	Towne	Brandon	3300
2060	Nestori	Lagomarsino	6800
2061	Sterling	Main St. Iron	3018
2062	Poppiano	Deluca	3000
2063	Canepa	Sanguinetti	3300
2064	Albertazzi	Fassate	3000
2065	Cowell	Ratto	24000
2066	Holmberg	Olsen	4400
2067	Canepa	Sanguinetti	2000
2068	Deka	Bagge	1000
2069	Kambick	Selman	1500
2070	McLaughlin	McColgan	1600
2071	Sidoti	Caranza	2100
2072	Sylvia	Sylvia	2500
2073	Ham	Ham	2000
2074	Moller	Moller	12000
1075	Johnson	Johnson	2800
2076	Peters	Peters	4500
2077	Rushon	Rushon	5000
2078	Chambers	Chambers	2000
2079	Craemer	Lacey	3995
2080	Same	Atlas	1435
2081	Same	Wedel	1270

2082	Kaufmann	Rose	2225
2083	Payne	Zaro	2784
2084	Same	Marconl	3190
2085	Same	Heegol	1150
2086	Bowen	Drake	2675
2087	Schroder	Woodridge	2300
2088	Voelker	Voelker	800
2089	Texas Deleg.	Novelty	400

FRAME DWELLING

(2088) SE ALPHA & ARLETA. One story and basement frame dwlg. Owner....Mrs. Helen Voelker. Architect...None. Day's work. COST, \$800

ELECTRIC SIGN

(2089) SE SUTTER AND GOUGH. Electric sign. Owner....Texas Delegation of Rotary Club to Convention, Hotel Normandie, S. F. Architect...None. Contractor...Novelty Elec. Sign Co., 165 Eddy, San Francisco. COST, \$400

PLASTERING

(2018) W BRYANT bet. Alameda and 15th. All work for interior and exterior plastering for brewery building. Owner....Rainier Brewing Co. by Sound Constr. & Eng. Co., Hearst Bldg., S. F. Architect...Carl Siebrand, Arcade Bldg., Seattle. Contractor...C. C. Morehouse, 872 Folsom, San Francisco. Filed July 12, '15. Dated July 10 '15. On 1st of each month..... 75% Usual 35 days..... 25% TOTAL COST, \$27,000 Bond, none. Limit, Sept. 15. Forfeit, \$50. Plans and specifications filed.

(2019) TERRA COTTA, TILE AND Brick work on above. Contractor...Reed & White, 681 Market, San Francisco.

Filed July 12, '15. Dated July 10, '15. Payments same as above..... TOTAL COST, \$32,500 Bond, none. Limit, Sept. 10. Forfeit, \$50. Plans and specifications filed.

FRAME RESIDENCE

(2020) S JACKSON 127-6 E Buchanan S 127-8 1/4 W 27-6 N 7-8 1/4 W 10 N 120. All work except finish hardware, heating, painting, shades and electric fixtures for three-story and basement frame residence. Owner....Lucia H. K. Sherman, 2125 Jackson, San Francisco. Architect...J. R. Miller, Lick Bldg., San Francisco. Contractor...Collman & Collman, Sharon Bldg., S. F.

Filed July 12, '15. Dated July 10, '15. On 1st of each month..... 75% Usual 35 days..... 25% TOTAL COST, \$12,330 Bond, \$2131. Surety, Fidelity & Deposit Co. of Maryland. Limit, 55 days from July 14. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(2021) N WALLER 100 W Webster N 137-6xW 50. Alterations and moving, etc. for two-story and basement frame building. Owner....Wilhelmina Eichler, 324 Waller, San Francisco. Architect...H. Gelfuss & Son, 46 Kearny, San Francisco. Contractor...Emil Nelson.

Filed July 12, '15. Dated July 8, '15. Moved to rear of lot and foundations in place.....\$561 White coated..... 561 Completed and accepted..... 563 Usual 35 days..... 565 TOTAL COST, \$2250

Bond, \$1125. Surety, Massachusetts Bonding & Insurance Co. Limit, 50 days. Forfeit, \$10. Plans and specifications filed.

ALTERATIONS

(2022) E LA PLAYA 200 S Kirkham. Alter cafe. Owner....E. E. Perry, 2524 Lombard, San Francisco. Architect...Heiman & Schwartz, 14 Montgomery, S. F. Day's work. COST, \$500

ALTERATIONS

(2023) S CORTLAND 225 W Elsie. Alter and add to dwelling. Owner....Fred Byers, 128 Cortland, San Francisco. Architect...None. Contractor...John P. McCall, 47 Duncan, San Francisco. COST, \$1000

FRAME GARAGE

(2024) NO. 595 NINTH AVE. One-story frame garage. Owner....C. T. Sanford, Premises. Architect...Foulkes & Hildebrand, 1118 Crocker Bldg., S. F. Day's work. COST, \$400

FRAME DWELLING

(2025) W WISEMAN 25 S 20th. One-story and basement frame dwelling. Owner....Mrs. K. McDonald, 125 Wisconsin, San Francisco. Architect...None. Contractor...Robt. Selman, 559 Vermont, San Francisco. COST, \$400

ASPHALT PLANT

(2026) SW OCEAN AND TARA. Construction work for asphalt plant. Owner....Eaton & Smith, 407 11th, San Francisco. Architect...None. Day's work. COST, \$500

SAND AND GRAVEL BINS

(2027) E ALABAMA 116 S 15th. Sand and gravel bins. Owner....John Cox, Flat Iron Bldg., San Francisco. Architect...None. Contractor...Meesse & Gottfried Co., 656 Mission, San Francisco. COST, \$700

ALTERATIONS

(2028) No. 1611 REVERE. Alter barn into dwelling. Owner....Jane and Daisy O'Connor, Premises. Architect...None. Day's work. COST, \$800

FRAME STORE

(2029) SW BEACH AND GRANT Ave. One-story frame store building. Owner....M. J. Sarraille, SE Powell and Bay, S. F. Architect...P. F. De Martin, 2123 Powell, San Francisco. Day's work. COST, \$2000

ALTERATIONS

(2030) NO. 1927 McALLISTER. Alter restaurant.

Owner.....Louis Helling, Premises.
Architect...None.
Day's work. COST, \$400

ADDITION
(2031) E CLAYTON 30 N Haight. Add to flats.

Owner.....Mrs. C. S. Le Forest, 554 Clayton, San Francisco.
Architect...G. E. Gottschalk, Phelan Bldg., San Francisco.
Day's work. COST, \$750

ALTERATIONS
(2032) NOS. 2805-07 HARRISON. Cement floor, paint building and put in ice cold storage plant.
Owner.....C. Maumann, 513 Clay, San Francisco.
Architect...None.
Contractor..Nelson & Blankert.
COST, \$1100

FRAME DWELLING
(2033) W FORTY-FIFTH AVE 200 N Judah. One-story and basement frame dwelling.
Owner.....Neil Bros., 1243 45th Ave., San Francisco.
Architect...None.
Day's work. COST, \$1850

FRAME DWELLING
(2034) W TWENTY-THIRD AVE 300 N Fulton. One-story and basement frame dwelling.
Owner.....Oscar Heyman & Bro., 742 Market, San Francisco.
Architect...None.
Day's work. COST, \$1750

FRAME DWELLING
(2035) W THIRTY-NINTH AVE 160 N Fulton. One-story and basement frame dwelling.
Owner.....Oscar Heyman & Bro., 742 Market, San Francisco.
Architect...None.
Day's work. COST, \$1750

FRAME DWELLING
(2036) W TWENTY-FOURTH AVE 100 S Vincente. One-story and basement frame dwelling.
Owner.....Mary Ann Locke, 1107 Laguna, San Francisco.
Architect...None.
Day's work. COST, \$750

FRAME RESIDENCE
(2037) E EIGHTEENTH AVE 250 S Geary. Two-story and basement frame residence.
Owner.....Mary B. Hallett, 1265 7th Ave., San Francisco.
Architect...None.
Day's work. COST, \$2400

FRAME FLATS
(2038) W FIFTH AVE 50 S Anza S 25xW 95 O L 288. All work for two-story frame flats.
Owner.....Mary B. Lillis, 511 5th Ave. San Francisco.
Architect...C. W. Lynch.
Contractor..Jos. C. Kirby, 2152-A Market, San Francisco.

Filed July 13, 15. Dated July 12, 15.
Frame up\$1125
Brown coated 1125
Completed and accepted..... 1125
Usual 35 days..... 1125
TOTAL COST, \$4500
Bond, \$2250. Sureties, P. M. McDonald and Geo. A. Mitchell. Limit, 75 days. Forfeit, none. Plans and specifications filed.

FRAME FLATS
(2039) N SACRAMENTO 91-8 S of W Taylor — 120 W 27-6 S 120 E 27-6. Carpenter, painting, plumbing, electric and heating for two-story frame flats and for two-story frame apartments.

Owner.....Dollie E. P. Sullivan, 245 Leavenworth, S. F.
Architect...Arthur J. Laib, Lick Bldg., San Francisco.
Contractor..Henry Conrad, 180 Jessie, San Francisco.
Filed July 13, '15. Dated July 12, '15.
Frames up & ceiling joists on.....\$4750
Brown coated 4750
Completed and accepted..... 4750
Usual 35 days..... 4750
TOTAL COST, \$19,000

Bond, \$9500. Sureties, P. Parent and D. B. Macdonald. Limit, 100 days. Forfeit, none. Plans and specifications filed.

"C" WAREHOUSE AND FACTORY
(2040) S CLAY 57-6 W Stockton. All work for three-story and basement Class "C" warehouse and factory building.
Owner.....S. & G. Gump Co., 268 Post, San Francisco.
Architect...Milton Lichtenstein, 111 Ellis, San Francisco.
Contractor..Macdonald & Kahn, Rialto Bldg., San Francisco.
Filed July 13, '15. Dated July 12, '15.
Payments as work progresses 75%
Usual 35 days, 25%.....\$4250
TOTAL COST, \$17,000

Bond, \$5500. Surety, Massachusetts Bonding & Insurance Co. Limit, Oct. 30. Forfeit, none. Plans and specifications filed.

FRAME FLATS
(2041) S GREEN 60 W Montgomery W 20 S 69 E 15 N 30 E 5 N 39. All work except cement work, finish hardware, gas and electric fixtures for two-story and basement frame flats.
Owner.....G. Battaini, 573 Vallejo, San Francisco.
Architect...Paul De Martini.
Contractor..Devenenzi Bros. & Co., 1079 Union, San Francisco.
Filed July 13, '15. Dated July 12, '15.
Frame up\$925
Brown coated 925
Completed and accepted..... 925
Usual 35 days..... 925
TOTAL COST, \$3700

Bond, \$1850. Surety, L. Peirano. Limit 90 days from July 15. Forfeit, none. Plans and specifications filed.

FRAME FLATS
(2042) W TAYLOR 127 N Filbert 27-6 x90. All work for two three-story and basement frame flats.
Owner.....Rocco Zappettini & Luigi Filgoni.
Architect...Plans by Contractor.

Contractor..Devenenzi Bros. & Co., 1079 Union, San Francisco.
Filed July 13, '15. Dated July 12, '15.
Frames up\$2100
Brown coated 2100
Completed and accepted..... 2100
Usual 35 days..... 2100
TOTAL COST, \$8400
Bond, \$4200. Surety, L. Peirano. Limit, 90 days. Forfeit, none. Plans and specifications filed.

DRIILL WELLS, ETC.
(2043) NO. 468 TENTH. Drill a well to produce 75,000 gallons of subterranean water daily.
Owner.....Milwaukee Brewery of San Francisco.
Architect...None.

Contractor..John I. Sparrow & Floyd W. Elliott, 88 6th, S. F.
Filed July 14, '15. Dated July 12, '15.
Completed and accepted.....\$2000
Usual 35 days..... 500
TOTAL COST, \$2500
Bond, \$1250. Surety, Benj. Cohen and Thos. Ford. Limit, 30 days. Forfeit, none. Specifications only filed.

FRAME RESIDENCE
(2044) N COLLEGE AVE 225 W Mission being Lot 10 Blk 1 College Hill Tract. All work for one-story and basement frame residence.
Owner.....Alphonse Nold, 32 College Ave., San Francisco.
Architect...E. H. Denke, 1317 Hyde, San Francisco.
Contractor..Michael Costello and Bryan Peerick, 93 College Ave., San Francisco.

Filed July 14, '15. Dated July 12, '15.
Frame up\$525
Ready for plaster..... 525
Standing finish on..... 525
Completed and accepted..... 525
Usual 35 days..... 700
TOTAL COST, \$2799
Bond, \$1400. Sureties, Nellie and Teddy Costello. Limit, 90 days after July 15. Forfeit, \$3. Plans and specifications filed.

FRAME RESIDENCE
(2045) W TWENTY-SECOND AVE 125 N Balboa N 25xW 120. All work for two-story and basement frame residence.
Owner.....Kathern H. and Wm. Nicholson, 1037 Pierce, S. F.
Architect...Plans by Contractor.
Contractor..Johnson & Johnson, 818 14th, San Francisco.

Filed July 14, '15. Dated July 3, '15.
Roof on\$800
When plastered 800
Completed and accepted..... 800
Usual 35 days..... 800
TOTAL COST, \$3200
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME FLATS
(2046) S TWENTY-THIRD 155 E Valencia E 30xS 80. All work except hardwood floors, plumbing and concrete work for three-story frame flats.

Owner.....Margaret Wallace, 102 San Jose Ave., San Francisco.
Architect...Ernest U. Essman, 24th & Chattanooga, S. F. (not certificated).
Contractor..O. K. Holt, 3877 26th, S. F.
Filed July 14, 15. Dated June 26, '15.
Rough frame up.....\$1504
Brown coated 1505
Completed and accepted..... 1504
Usual 25 days..... 1505
TOTAL COST, \$6018

Bond, \$3009. Sureties, P. J. Sullivan and A. J. Bone. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCES
(2047) W TWENTY-FOURTH AVE 100 N Kirkham N 25xW 120.

W 24th Ave 125 N Kirkham N 25xW 120.
W 24th Ave 150 N Kirkham N 25xW 1-0.
All work except plumbing, wall beds, gas and electric fixtures, finish hardware, and shades for three one-story and basement frame residences.
Owner.....Alfred C. Trittenbach, 214 Front, S. F. and Elizabeth A. Trittenbach, 1933 Broderick, San Francisco.
Architect...None.
Contractor...J. Prout, 2020 Turk, S. F.
Filed July 14, '15. Dated ———.

Rafters on\$1265
1st coat plaster on..... 1265
Completed and accepted..... 1265
Usual 35 days..... 1265
TOTAL COST, \$5060

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

(2048) GAS AND WATER SUPPLY, drainage and sewer system on above.
Contractor...L. Bernstein, 1321 Buchanan, San Francisco.
Filed July 14, '15. Dated ———.

Roughing in done.....\$300
On production of final certificate of inspection from Board of Health 300
TOTAL COST, \$600

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME DWELING

(2049) W TWENTY-FIRST AVE 275 N California. Two-story and basement frame dwelling.
Owner.....R. Gruenberg, 718 Mission, San Francisco.

Architect...L. M. Hausmann, Sharon Bldg., San Francisco.
Contractor...J. S. Malloch, 110 Jessie, San Francisco.
COST, \$4000

BRICK STORE

(2050) S SUTTER 97-6 W Stockton. One-story and basement brick store.
Owner.....W. S. Wyatt, Care Oliver, 119 Montgomery, S. F.

Architect...None.
Contractor...G. P. W. Jensen, 320 Market, San Francisco.
COST, \$5000

FRAME DWELLING

(2051) W BRYANT 100 N Army. One and one-half-story and basement frame dwelling.
Owner.....H. Everett, 2563 Mission, San Francisco.

Architect...None.
Contractor...P. W. Montrouil, 270 Andover, San Francisco.
COST, \$2100

FRAME FLATS

(2052) N CLEMENTINA 180 W 4th. Three-story and basement frame (3) flats.
Owner.....Thomas Hogan.

Architect...None.
Contractor...W. Props, 1301 Gough, S. F.
COST, \$4750

FRAME DWELLING

(2053) W NINTH AVE 150 N Anza. Two-story and basement frame dwlg.
Owner.....Daniel J. Mahoney, 1407 Baker, San Francisco.

Architect...E. Oman.
Contractor...Nelson Bros., 515 Dolores, San Francisco.
COST, \$2700

FRAME FLATS

(2054) N EIGHTEENTH 30 W San Carlos. Two-story and basement frame (4) flats.
Owner.....Jos. Tiskner, 142 Maynard, San Francisco.

Architect...None.
Contractor...Wm. Miller, 49 Park, S. F.
COST, \$4550

FRAME FACTORY

(2055) N FOLSOM 125 E Fifth. One-story frame factory.
Owner.....Henrietta Scheff.

Architect...Jos. M. Cohen, 133 Clayton, San Francisco.
Contractor...Frank Elvin, 4017 18th, San Francisco.
COST, \$1790

FRAME DWELLING

(2056) E FORTY-FOURTH AVE 100 N Anza. One-story and basement frame dwelling.
Owner.....M. Capitani, 168 12th Ave., San Francisco.

Architect...E. J. Spence, 537 25th Ave., San Francisco.
Contractor...Spence & Walthall, 537 25th Ave., San Francisco.
COST, \$1950

BRICK GARAGE

(2057) S SHERIDAN 175 E 10th. One-story brick private garage.
Owner.....Mrs. E. McLaughlin, 59 Sheridan, S. F.

Architect...J. J. E. McCarthy.
Contractor...Geo. D. Gilmour, 2376 Howard, San Francisco.
COST, \$2000

FRAME BUILDING

(2058) W GUERRERO 100 S Dorland S 50 W 120-8 N 50-3 E 127-3 1/2 M B 79. All work except excavating, plumbing and electric work for three-story and basement frame building.
Owner.....W. J. Dowling and Jno. B. Nuttman, 627 Guerrero, San Francisco.

Architect...C. O. Clausen, Hearst Bldg San Francisco.
Contractor...Chas. Coburn.
Filed July 15, '15. Dated July 15, '15.

Frame up\$3282
Brown coated 3282
Completed and accepted..... 3282
Usual 35 days..... 3282
TOTAL COST, \$13,128

Bond, \$6564. Sureties, O. K. Holt and Nal Meinberger. Limit, 90 days. Forfeit, none. Plans and specifications filed.

APARTMENTS

(2059) S CALIFORNIA 137-6 W Taylor W 137-6xS 137-6. Brick and mason work for five-story and basement apartment building.
Owner.....Towne Realty Co.

Architect...None.
Contractor...Brandon & Lawson, Hearst Bldg. San Francisco.

Filed July 15, '15. Dated June 13, '15.
Brick work up to 3rd floor.....\$2908.00
Brick work completed and accepted 2908.25
Usual 35 days..... 1938.75
TOTAL COST, \$7755.00

Bond, \$3900. Surety, The Aetna Accident & Liability Co. Limit, 30 days. Forfeit, \$20. Plans and specifications filed.

FRAME STORE AND FLATS

(2060) SE MASON AND CHESTNUT E 68xS 25. All work except finish hardware, light fixtures and shades for three-story frame store and flats.
Owner.....A. Schivo and A. Nestorl, 516 Pacific, S. F.

Architect...Paul J. Capurro, 1844 Powell, San Francisco.
Contractor...S. Lagomarsino, 2115 Powell, San Francisco.
Filed July 15, '15. Dated July 8, '15.

Roof boards on\$1700
Brown coated 1700
Completed and accepted..... 1700
Usual 35 days..... 1700
TOTAL COST, \$6800

Bond, \$3400. Surety, National Surety Co. Limit, \$5. Plans and specifications filed.

WATER TUBE BOILER

(2061) NO. 56 JULIAN AVE. All work for "Badenhausen" water tube boiler.
Owner.....Sterling Laundry Co, Prem
Architect...None.

Contractor...Main Street Iron Works, 163 Main, San Francisco.

Filed July 15, '15. Dated July 9, '15.
1/2 on signing order.....\$1006.17
1/2 upon arrival of equipment at plant site 1006.17
Balance 30 days after boiler has been in operation..... 1006.17
TOTAL COST, \$3018.51

Bond, none. Limit, Sept. 15 or as soon as possible thereafter. Forfeit, none. Specifications only filed.

CONCRETE FOUNDATIONS

(2062) N UNION 65 W Leavenworth. Construct concrete foundations.
Owner.....S. Poppiano, 662 Broadway, San Francisco.

Architect...L. Traverso, 845 Union, San Francisco.
Contractor...R. Deluca, Jones & Lombard, San Francisco.
COST, \$3000

FRAME FLATS

(2063) S UNION 81 E Kearny. Three-story and basement frame (3) flats.
Owner.....C. Emelia Canepa, 369 Union, San Francisco.

Architect...None.
Contractor...Nicola Sanguientti, 46 Garibaldi, S. F.
COST, \$3500

FRAME FLATS

(2064) E CONNECTICUT 150 S 17th. Two-story and basement frame (2) flats.
Owner.....A. and F. Albedtazzl, 135 Connecticut, S. F.

Architect...Paul J. Capurro, 1844 Powell, San Francisco.
Contractor...David Fassate or Fassati, 146 Missouri, S. F.
COST, \$3000

FRAME APARTMENTS

(2065) W LARKIN 32-6 N Green. Three-story and basement frame (12) apartments.
Owner.....Isabella M. Cowell, 2 Market, San Francisco.

Architect...W. C. Mahoney, 415 Hearst Bldg., San Francisco.
Contractor...Ratto & Ratto, 232 Hartford, San Francisco.
COST, \$24,000

FRAME FLATS

(266) SW HARRIETT 75 S Harrison.
Two-story and basement frame (4)
flats.
Owner.....G. B. Holmberg, 152 Park,
San Francisco.
Architect...John E. McCarthy.
Contractor...A. E. Olson, 125 Jersey,
San Francisco.
COST, \$4400

FRAME FLATS

(267) S UNION 81 E Kearny (rear).
Two-story and basement frame (2)
flats.
Owner.....C. Emelia Canepa, 369
Union, San Francisco.
Architect...None.
Contractor...Nicola Sangüenttil, 46
Garibaldi, S. F.
COST, \$2000

FRAME AND DWELLING

(268) S TARAVALL 82-6 E 18th Ave.
Two-story and basement frame store
and dwelling.
Owner.....Andrew Doka, 18th and
Bryant, San Francisco.
Architect...None.
Contractor...Spencer B. Bagge, 1531
Shrader, San Francisco.
COST, \$1000

FRAME DWELLING

(269) E VERMONT 100 S Mariposa.
One and one-half-story and basement
frame dwelling.
Owner.....Frank Kanbick, 761 Ver-
mont, San Francisco.
Architect...None.
Contractor...Robert Selman, 559 Ver-
mont, San Francisco.
COST, \$1500

FRAME DWELLING

(270) NW ARMY AND FLORIDA.
One and one-half-story and base-
ment frame dwelling.
Owner.....P. McLaughlin, 1751 Ala-
bama, San Francisco.
Architect...None.
Contractor...E. J. McColgan, 1721 Ala-
bama, San Francisco.
COST, \$1600

FRAME DWELLING

(271) W LUCKY 171-6 N 26th. One-
story and basement frame dwlg.
Owner.....Gaetano Sidoti, 2949 Fol-
som, San Francisco.
Architect...None.
Contractor...G. Caranza & Bro., 374
Shotwell, San Francisco.
COST, \$2100

FRAME FLATS

(272) W TWENTIETH AVE 175 N
22nd. Two-story and basement frame
(4) flats.
Owner.....A. M. Sylvia, 371 30th Ave.,
San Francisco.
Architect...None.
Contractor...None.
COST, \$2500

FRAME FLATS

(273) E NINETEENTH AVE 150 S
Mary. Two-story and basement
frame (2) flats.
Owner.....L. B. Ham, 1643 Lake, S. F.
Architect...None.
Contractor...None.
COST, \$5000

FRAME RESIDENCE

(274) E JORDAN AVE 100 S Calli-
fornia. Two-story and basement
frame residence.

Owner.....J. W. Moller, 185 Steven-
son, San Francisco.
Architect...None.
Day's work. COST, \$12,000

FRAME DWELLING

(275) W TWENTIETH AVE 323 S
Geary. Two-story and basement
frame dwelling.
Owner.....Alfred Johnson, 2423 Cle-
ment, San Francisco.
Architect...None.
Day's work. COST, \$2800

FRAME DWELLING

(276) W SIXTEENTH AVE 200 S
Lake. Two-story and basement
frame dwelling.
Owner.....J. M. Peters, 1010 Baker,
San Francisco.
Architect...None.
Day's work. COST, \$4500

FRAME FLATS

(277) NW FULTON & NINTH AVE.
Two-story and basement frame (4)
flats.
Owner.....C. A. Rushton, 751 9th
Ave., San Francisco.
Architect...H. E. Harris, 432 Monad-
nock Bldg., San Francisco.
Day's work. COST, \$5000

FRAME DWELLING AND STORE

(278) W DIAMOND 75 N Chenery.
Two and one-half-story and base-
ment frame dwelling and store.
Owner.....Bernard F. Chambers, 9
Heyman Ave., S. F.
Architect...None.
Day's work. COST, \$2000

BRICK APARTMENTS

(279) S TURK 47-6 E Hyde E 60xS
102-6. Plumbing, gas fitting, pipe
covering for three-story and base-
ment brick apartments.
Owner.....O. A. Craemer, 110 Jessie,
San Francisco.
Architect...Koenig & Christiansen,
Humboldt Bk Bldg., S. F.
Contractor...E. V. Lacey, 249 9th, S. F.
Filed July 16, '15. Dated July 7, '15.
Roofing finished.....\$1479.50
Completed and accepted..... 1497.50
Usual 35 days..... 1000.00
TOTAL COST, \$3995.00

Bond, \$2000. Sureties, J. B. Reite and
P. W. Meherin. Limit, as soon as pos-
sible. Forfeit, \$10. Plans and speci-
fications filed.

(280) STEAM HEATING PLANT AND
oil burning plant and hot water tank
on above.

Contractor...Atlas Heating & Ventilat-
ing Co., 4th and Preelon,
San Francisco.
Filed July 16, '15. Dated July 2, '15.
Roughing in done.....\$375
Completed and accepted..... 700
Usual 35 days..... 360
TOTAL COST, \$1435

Bond, \$720. Sureties, R. N. Osborn and
C. A. Tuck. Limit, as soon as possible.
Forfeit, none. Plans and specifications
filed.

(281) ELECTRIC WORK, PHONE
work and bell work on above.

Contractor...Wedel Electric Co., Russ
Bldg., San Francisco.
Filed July 16, '15. Dated July —, '15.
Roughing in finished.....\$475
Completed and accepted..... 475
Usual 35 days..... 320

TOTAL COST, \$1270

Bond, \$625. Surety, Stephen Goldzieher
and Richard Quer. Limit, as soon as
possible. Forfeit, \$10. Plans and speci-
fications filed.

ALTERATION AND ADDITIONS

(282) NO. 321 GRANT AVE. Alter-
ations and additions to three-story
Class "C" building.

Owner.....John Gold and Leo. Kauf-
mann.
Architect...None.
Contractor...L. A. Rose, Monadnock
Bldg., San Francisco.

Filed July 16, '15. Dated July 8, '15.
Rough coat plaster done.....\$1100
Completed and accepted..... 568
Usual 35 days..... 557

TOTAL COST, \$2225

Bond, \$1112.50. Surety, Southwestern
Surety Insurance Co. Limit, 30 days
after Aug. 1. Forfeit, none. Plans
and specifications filed.

APARTMENTS

(283) NW SACRAMENTO & JONES
W 100xN 50. Plumbing, gas fitting,
sewer and hot water piping for
apartments.

Owner.....R. W. Payne, 116 Grant
Ave., San Francisco.
Architect...W. G. Hind, 46 Kearny,
San Francisco.

Contractor...George N. Zaro.
Filed July 16, '15. Dated June 5, '15.
Rough work done.....\$1392
Completed and accepted..... 696
Usual 35 days..... 696

TOTAL COST, \$2784

Bond, \$1400. Sureties, Mrs. B. Scholtz
and Martin Perich. Limit, 30 days for
rough work and 20 days for finishing
after notification. Forfeit, none. Plans
and specifications filed.

(284) LATHING AND PLASTERING
on above.

Contractor...J. Marconi, 737 Green-
wich, San Francisco.

Filed July 16, '15. Dated July 6, '15.
Brown coat on interior.....\$1000
1st coat on exterior..... 500
Completed and accepted..... 890
Usual 35 days..... 800

TOTAL COST, \$3190

Bond, \$1600. Surety, J. S. Guerin.
Limit, 15 days after notification for in-
terior and 6 days for white coat and
15 days for exterior. Forfeit, none.
Plans and specifications filed.

(285) PAINTING AND PAPER
hanging on above.

Contractor...F. J. Heegel & Co.

Filed July 16, '15. Dated July 9, '15.
Exterior 2nd coated.....\$143.75
Interior 1st coated..... 143.75
Interior 2nd coated..... 143.75
Exterior completed..... 143.75
Completed and accepted..... 287.50
Usual 35 days..... 287.50

TOTAL COST, \$1150.00

Bond, \$575. Sureties, C. Henry Pors-
land and William Laird. Limit, 20 days
after notification. Forfeit, none. Plans
and specifications filed.

GRADING, ETC.

(286) N POST 161-3 E Hyde N 137-6
x E 75-9. Grading and underpinning
for brick public garage.

Owner.....W. H. Bowen, 242 Sutter,
San Francisco.
Architect...M. I. Schwartz, 14 Mont-
gomery, San Francisco.

Contractor...H. E. Drake, 1333 Lincoln
Way, San Francisco.
Filed July 16, '15. Dated July 15, '15.
On completion\$2000
Usual 35 days..... 675

TOTAL COST, \$2675

Bond, \$1350. Surety, The Aetna Accident
& Liability Co. Limit, none. Forfeited, \$3. Plans and specifications, none

FRAME STORE AND FLATS

(2087) NW WASHINGTON & WEBSTER — 92-4½ W 27-6 S 92-4½ E 27-6. Concrete, carpenter, plumbing and plastering for two-story frame store and flats.

Owner.....John H. Schroder.
Architect...Foulkes & Hildebrand,
Crocker Bldg., S. F.

Contractor...L. C. Woodridge, 56 Apline
Terrace, San Francisco.
Filed July 16, '15. Dated July 12, '15.

Frame up and enclosed.....\$575
Brown coated 575
Completed and accepted..... 575
Usual 35 days..... 575

TOTAL COST, \$2300

Bond, \$1150. Sureties, Chas. Reinhart and G. L. Wayne. Limit, 90 days after July 9. Forfeited, \$5. Plans and specifications filed.

NOTICE OF NON-RESPONSIBILITY.

July 16, 1915—SW BEACH AND Grant Ave W 137-6xS 137-6. Moses Ellis, Trustee, as to improvements on leased property

NOTICE OF NON-RESPONSIBILITY.

July 13 1915—NE TWENTY-FOURTH and Sanchez E 100xN 114. Margaret Curtin as to improvements on leased property

July 12, 1915—E VAN NESS AVE 144-10 N Pierce N 58-2xE 145-3. Bertha B Bloss as to improvements on leased property

July 12, 1915—E VAN NESS AVE 86-7 N Pine N 58-3 E 145-3 S 7-4 W 7-9 S 50-11 W 137-6. Belle S Lilienthal as to improvements on leased property

INCORPORATIONS

Independent Cracker and Biscuit Co Capital Stock, \$25,000; subscribed, \$3; shares \$1 each. Directors—W. E. Schendel, M. J. Andrews, C. J. Hamilton, 1 share each. Place of business, San Francisco.

LEASE.

July 14, 1915—S GEARY 94-4 E 26th Ave E 24-4xS 100. Daisy E Dolan and Chas A Nance to Wong Sue. 5 years. \$40 per month, etc., with option to renew.

July 13, 1915—SE CALIFORNIA and Polk S 15 m or 1 by E 100. Peter Tautphaus to Nicholas Obrabovich 3 years. \$150 per month.

ARCHITECT'S CERTIFICATE.

Carl A. L. E. Siebrand has filed his certificate of architecture. Filed July 15, 1915.

COMPLETION NOTICES

San Francisco

June 26, 1915—E TWENTY-FOURTH Ave 150 S Anza S 25xE 120. William B Tibbals to whom it may concern.....June 21, 1915

July 1, 1915—S FELL 100 E Steiner E 37-6xS 137-6. Isabella J or Isabel J Murray to Herbert C Cameron.....June 21, 1915

July 1, 1915—N ELLIS 55 W Jones N 120xW 52-6. The Peter Windeler Co to Schrader Iron Works.....June 25, 1915

July 1, 1915—W SCOTT 37-8½ S Sacramento S 60xW 87-6. John V Campbell to whom it may concern.....July 1, 1915

July 1, 1915—W TWELFTH AVE 200 N Anza N 25xW 120. Jos C Kirby to whom it may concern.....July 1, 1915

July 1, 1915—E NEVADA 425 N Jarboe N 25xE 70. Arthur Lindberg to whom it may concern.....June 30, '15

July 2, 1915—N VALLEJO 73 E Fillmore E 32xN 137-6. Geo P Fuller to C C W Haun, June 22; Stockholm & Allyn.....June 29, 1915

July 2, 1915—E BARTLETT 190 S 21st S 25xE 90. Walter R Pease to John E Beck.....June 30, 1915

July 3, 1915—S ARMY 175 W Guerrero W 25xS 114. John and Eleanor J Nolan to J Gillogley & Son.....July 2, 1915

July 3, 1915—SE NATOMA 95 SW Third SW 20xSE 50. Susan M Burnham to Bay City Bldg Co, Inc.July 1, 1915

July 3, 1915—LOT 8 BLK 4 Crocker Amazon Tract. Martin Smith to whom it may concern.....July 3, 1915

July 3, 1915—N PINE 159-6 E Montgomery E 36xN 85. E W Hopkins to A Sayman.....June 28, 1915

July 3, 1915—S CALIFORNIA 137-6 W Taylor W 137-6xS 137-6. Towne Realty Co to Vulcan Iron Works.....June 29, 1915

July 6, 1915—LOT 18 BLK 23 Crocker Amazon Tract. Leon Schneider to McMullin Von Voorhies.....July 3, 1915

July 6, 1915—S MORAGA 87 W 48th Ave W 25xS 100. Alexander Neil to whom it may concern.....July 6, 1915

July 6, 1915—E CHURCH 85 N 29th S 29xE 80. Jno Donovan to Thos McCormick.....July 6, 1915

July 6, 1915—SW ELLIS & LARKIN S 49xW 87-6. Mary C and Joseph B Kennedy to John H Munster and Henry Bornholdt (as Munster & Bornholdt).....June 28, 1915

July 6, 1915—BLK BDED BY THIRD, Fourth, Townsend and King, Southern Pacific Co to E V Lacey.....June 26, 1915

July 7, 1915—N VALLEJO 73 E Fillmore E 32xN 137-6. George P Fuller to Frank J Klimm.....July 6, 1915

July 8, 1915—EXPOSITION SITE. Mrs Ell Hertzberg, Chairman Texas Commission to P. P. I. E. to Strehlow, Freese & Petersen.....June 30, 1915

July 8, 1915—SW HOWARD AND Ninth W 103xS 100. Jno J Foley, agent and John Tamony to whom it may concern.....June 30, 1915

July 8, 1915—E FLORIDA 59-9½ N Army 30x75. William Miller to whom it may concern.....July 8, 1915

July 9, 1915—S PACIFIC 47-6 E Hyde

E 22-6xS 65. Martina or M Scatena to D Francesconi.....July 3, 1915

July 9, 1915—LOT 25 BLK 40 Crocker Amazon Tract. J W Powers to J W Powers.....June 1, 1915

July 9, 1915—W MIRAMAR AVE 150 N Holloway Ave; Lot 48 Blk 15, Lakeview. Nicolo Porazzo to New Era Bldg Co, Inc.....June 26, 1915

July 9, 1915—SE PARIS 125 SW Excelsior Ave SW 25x100. Joseph N Buckley to New Era Bldg Co, Inc.....June 26, 1915

July 9, 1915—LOT 18 BLK 21 Crocker Amazon Tract. John Bjorkman to whom it may concern.....July 9, 1915

July 9, 1915—SW DIVISION AND Kansas S 260 W 200 N 191 NE to S Division E 57. John G Rapp to The Turner Co.....July 5, 1915

July 10, 1915—E GOUGH 55 S Green E 29x100. C A Hanaas to J B Reite.....July 9, 1915

July 10, 1915—W SEVENTH AVE 75 N Lake N 25 W 114 S 15 E 28 S 10 E 86. Sophie Grannis to whom it may concern.....July 9, 1915

July 10, 1915—E TENTH AVE 175 N Cabrillo. Marie Hoffman to H E & T W MacArthur.....July 9, 1915

July 10, 1915—W TAYLOR 137-6 N Sutter N 35-9xW 137-6. Biltmore Realty Co to James S Fennell.....July 2, 1915

July 10, 1915—NO. 2970 BROADWAY. Florence H Ehrman to Barrett & Hipp.....July 6, 1915

July 10, 1915—E BARTLETT 190 S 21st S 25xE 90. Walter R Pease to F E Hooper.....July 8, 1915

July 10, 1915—W TWENTY-EIGHTH Ave 125 N Ulloa N 170xE 120. Parkside Realty Co to Lawrence V Riddel.....July 8, 1915

July 10, 1915—E BEALE 137-6 N Mission 91-8x137-6. S S Parsons to McGowan & Butler.....July 9, 1915

July 12, 1915—S POST 170 W Larkin W 25xS 120. Walker Props to whom it may concern.....June 30, 1915

July 12, 1915—SW CALIFORNIA & Stockton S 68-9xW 117-6. Delmar Smith Clinton to whom it may concern.....July 8, 1915

July 12, 1915—SW CALIFORNIA & Stockton S 68-9xW 117-6. Delmar Smith Clinton to Reliable Painting Co, July 8; William Linden.....July 3, 1915

July 13, 1915—S MARKET 75 W 7th W 75 S 100 E 75 W 100. The Odd Fellows Hall Ass'n of S. F. to W A Rainey.....July 12, 1915

July 13, 1915—SE NATOMA 106 SW First SW 41 SE 80 NE 41 W to beg. Jno J McElroy to Nelson & Bauer.....July 12, 1915

July 13, 1915—N UTAH 125 N 24th N 25xW 90. Annie Joyce to Jno T Grace.....July 12, 1915

July 13, 1915—NW BUSH & MASON N 100xW 68-9. H A Voorman or Henry A Voorman to P A Palmer.....July 8, 1915

July 13, 1915—W TWENTIETH AVE 175 S Geary S 25x120. Daniel F Hurst to Johnston Co.....July 13, 1915

July 14, 1915—NW CALIFORNIA & Hyde W 87-6xN 87-6. Lena S Kalben, Geo G Katz, Gustave A Katz, Louis R Katz and Frieda P Sherwood to J C Hurley Co.....July 14, 1915

July 14, 1915—W SCOTT 63 N Turk 24-10x50. Giuseppe or Giuseppe and Louisa Rinaldi to John G Chase Jr.....July 14, 1915

July 14, 1915—S JOHN 114-6 E Mason

23x60, Chas Mangoot to O A Cracemer.....July 9, 1915
 July 14, 1915—W TWENTY-SIXTH Ave 325 N Lake N 25xW 120. Nina M Kergan to S A Born Bldg Co.....July 12, 1915
 July 14, 1915—W TWENTY-SIXTH Ave 325 N Lake N 25xW 120. Nina M Kergan to S A Born Bldg Co.....July 12, 1915
 July 15, 1915—S WALLER 60 E Schrader E 25xS 100. Schrader Est Co or The Schrader Estate Co to A Klahn & Son.....July 12, 1915
 July 15, 1915—E EIGHTEENTH AVE 25 S Geary S 25xE 82-6. Eleanor Hanson Baad to whom it may concern.....July 15, 1915
 July 15, 1915—TWENTY-EIGHTH Ave 225 S Taraval S 25xE 120. July 16, 1915—W BRYANT 200 S 19th S 26xW 100; No. 2132 Bryant. Louis Cabanne to Jean Ponsoer.....July 14, 1915
 July 16, 1915—NO. 729 HYDE. Laura E Pahl to Wm A Rainey. July 16, 1915
 July 16, 1915—LOT in Holy Cross Cemetery. Angelo Ferroggiaro to D Tosi and E Bernieri.....July 13, 1915
 July 16, 1915—E FILLMORE 125 N Sutter N 75 E 100 S 12-6 E 2-6 N 12-6 W 102-6. Eleanor M Owens to Gustaf Sandberg.....March 20, 1915
 July 13, 1915—NO. 525 MARKET. Crocker Estate Co to John R Cahill.....July 14, 1915
 Helen and Dorsey Luttrell to Parkside Home Bldg Co.....July 8, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

July 1, 1915—SW FILLMORE AND Moulton S 60xW 137-6. Pacific Bldg Materials Co vs George L Streshly, Gustave J Pates, Jno S Howell, Augustus Regoll, Francis D Bell, Thos P Crowley, Mary Crowley and J P Sweeney.....\$99.60
 July 1, 1915—N OAK 157-6 W Van Ness Ave W 89-9 N 120 E 65-7 — 40 E 21 S 80. United Materials Co vs The Young Men's Institute Hall Association and Fennell & Wand.....\$456.05
 July 1, 1915—E CORBETT AVE 28-2 SW Mono SW 28-2 E 132 N 22-7 W 128. Mission Lumber Co vs James J Flaherty and H Kessler.....\$447.23
 July 2, 1915—SE CORBETT AVE 28-2 SW Mono SW 28-2 E 132 N 22-7 W 128. Eureka Sash, Door & Moulding Mills vs James J Flaherty and H Kessler.....\$115.98
 July 3, 1915—S FELL 100 E Steiner E 37-6x137-6. H Ginsberg & Co vs Elizabeth J Murray and H C Cameron.....\$69.10
 July 3, 1915—N SUTTER 81 W Taylor N 137-6xW 56-6. The W F Boardman Co vs Clara M Clayton, Geo W Livingston, Josephine L Struve, Edwin P Gaffney and Willetta H Hendrickson.....\$338
 July 6, 1915—S FELL 100 E Steiner E 37-6xS 137-6. Herbert I Lauder vs Isabella J Murray or Isabel J Murray and Herbert C Cameron.....\$394
 July 8, 1915—E FIFTH AVE 155 N Lake N 45xE 120. Oscar W Thunberg vs I and Lena Moso.....\$516
 July 8, 1915—W FORTY-SIXTH AVE 200 N 1-7 N 25xW 120. F J King vs W A Fenwick.....\$287
 July 9, 1915—NE GEARY & MASON E 92-1xN 68-9. W P Fuller & Co

vs Joseph Grant, Geo B Seaman, Geo C Salch and L H Fielding.....\$352
 July 9, 1915—E FRONT 25-8 S Washington S 111-2xE 120. E B and A L Stone Co vs Thos H Price Co, E W Hopkins.....\$122.30
 July 9, 1915—NW FOURTEENTH Ave & Clement N 50 W 102-6 N 25 W 10 N 25 W 65 S 100 E 177-6. Vermont Marble Co vs Conservative Bldg & Investment Co.....\$190
 July 10, 1915—NE GEARY & MASON E 92-1xN 68-9. Loop Lumber Co vs Geo B Seaman (as American Studios).....\$80.89
 July 10, 1915—E FRONT 25-8 S Washington E 120 to Ceylon by S 111-2; No. 430 to 452 Front. L A Norris Co vs I Thomas and Edward W Hopkins.....\$140.97
 July 10, 1915—NE GEARY & MASON N 68-9xE 92-1. The Mission Marble Works vs George C Salch, L H Fielding and Geo B Seaman.....\$649
 July 10, 1915—SE EIGHTEENTH & Douglass E —S —. The Mission Marble Works vs John H McLaughlin, Wm Horstmeyer and Wm Horstmeyer Co.....\$68.50
 July 10, 1915—S FELL 100 E Steiner E 37-6xS 137-6. Pacific Hardware & Steel Co vs Isabel J or Isabella J Murray and Herbert C Cameron.....\$134.43
 July 10, 1915—SE EIGHTEENTH & Douglass E 25xS 75. A Seghieri & Bro, Inc vs John H McLaughlin and Wm Horstmeyer & Co.....\$87
 July 10, 1915—N SUTTER 81 W Taylor N 137-6xW 56-6. G Albert Lansburg, \$862.90; Thomas Day Co \$383.50 vs Clara M Clayton, Geo W Livingston, Josephine L Struve, Edwin P Gaffney and Willetta H Hendrickson.....\$108.40
 July 10, 1915—NE GEARY & MASON E 92-1xN 68-9. Loop Lumber Co vs Geo B Seaman (as American Studios).....\$108.40
 July 12, 1915—NE GEARY & MASON N 68-9xE 92-1. Inlaid Floor Co vs Geo B Seaman, Geo C Salch, L H Fielding and Grant Co.....\$120.66
 July 12, 1915—NE GEARY & MASON E 92-1xN 68-9. Pacific Hardware & Steel Co vs Geo B Seaman (as American Studios), Geo C Salch and L H Fielding and Grant Co.....\$73.03
 July 12, 1915—NE GEARY & MASON E92-1xN 68-9. Home Mfg Co, \$3795.70; Herring Mill, Inc, \$142 vs Grant Estate and Geo B Seaman.
 July 12, 1915—NE GEARY & MASON E 92-1 N 69-9 W 92-1 S to beg. Schrader Iron Works vs George C Salch, L H Fielding and Geo B Seaman.....\$75
 July 12, 1915—NO. 386 GEARY, Cor. Mason. Empire Sheet Metal Works vs Fielding Hotel and Geo B Seaman.....\$20
 July 12, 1915—NO. 386 GEARY NE Cor Mason; E 92-1xN 68-9. Monarch Iron Works vs Grant Co, Geo B Seaman, Geo B Salch and L H Fielding.....\$1066
 July 12, 1915—E HAMPSHIRE 175 S 22nd S 25xE 100. Mission Concrete & Mosaic Co vs John O'Hare and E F Grace.....\$160
 July 12, 1915—NE GEARY & MASON E 92-1xN 68-9. Felix Gross Co, \$150 National Lathing & Furring Co, \$14.65; Bradley & O'Reilly, \$1975.50 vs American Studios, Geo B Seaman and Joseph Grant.....\$1975.50
 July 13, 1915—E TWENTY-EIGHTH

Ave 265 N Anza N 75xE 120. Geo F Parker vs E F Miller.....\$20
 July 12, 1915—NE GEARY & MASON E 91-1xN 68-9. Russel G Seaman vs Joseph Grant, Geo B Seaman, George C Salch and L H Fielding.....\$220
 July 14, 1915—SE MASONIC AVE & Page S 25 E 90 N 25 W 90. N O Nelson Mfg Co vs Mrs John Sweeney and E M Delventhal.....\$246.07
 July 14, 1915—S FELL 100 E Steiner E 37-6xS 137-6. H E Drake vs Isabella J Murray and Herbert C Cameron.....\$126
 July 15, 1915—S FELL 100 E Steiner E 37-6xS 137-6. E A Howard & Co vs Isabella J or Isabel J Murray and Herbert C Cameron.....\$102
 July 15, 1915—W DEVISADERO 108-1 S Oak S 29-3xW 95. E Evans, \$175.9; A B Johnson, \$25 vs Lena and Isaac Jacobson and V Rosenbaum.....\$200


OAKLAND AND ALAMEDA COUNTY.

RESIDENCES—10, 1 story and base, frame, \$2,500 each. Berkeley, Alameda Co., Cal. Architects, Hutchinson & MacLean, 470 13th street, Oakland. Owner's name withheld. These dwellings have been designed for five and six room houses. Interiors will be finished in pine, redwood and hardwood veneer. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place in each living room. Mantels will be of tile and brick. Some tile wainscot will be used. Automatic water heaters are specified. Exteriors will be covered with rustic, shingles and cement plaster. Plans are being completed and the work will be carried on by Day Labor under the direction of the architects.

RESIDENCE—2 story and base, frame, \$8,000. Piedmont, Alameda Co., Cal. Architect, Louis M. Upton, 111 Ellis street, S. F. Owner, Mrs. George Hammer. The dwelling has been designed for an eight-room house with two baths, sleeping porch and basement garage. Interior will be finished in pine and hardwood with white enamel in the bed rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. An automatic water heater will be installed. Bath rooms will be finished in tile. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

RESIDENCE—1½ story and base, frame, \$3,000. Decota, Alameda Co., Cal. Architect, A. Silva, Centerville. Owner, Mr. Frietas, Decota. The dwelling will contain six rooms and bath. There will be a large open fire place and tile or brick mantel. Tile wainscot used in the living and dining rooms. Interior will be finished in pine and redwood. Hardwood floors will be staled. Exterior of the house will be covered with rustic and shingles. Plans are complete and work will be done by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$1,500. Oakland, Cal. Architect, none. Owner, C. M. MacGregor 470 13th street, Oakland. These dwellings will be erected on Mandana Boulevard west of Carleton, and each has been designed to contain eight rooms, bath and sleeping porch. Interiors



Structural Steel Contractors

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will be finished in pine, redwood and hardwood veneer. Hardwood floors will be used in the living room, dining rooms and reception halls. Plans provide for furnace heat and open fire places. Mantels will be of tile or brick. Bath rooms will be finished in tile. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$4,000. San Lorenzo, Alameda Co., Cal. Architects, Mau & Sprague, Macdonough Bldg., Oakland. Owner, J. P. Martin. The dwelling has been designed for a ten-room house with bath and sleeping porch. Interior will be finished in pine and redwood with some elm panels. Hardwood floors will be used in the principal rooms. Plans provide for open fire places and tile or brick mantels. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

RESIDENCE—1½ story and base, frame. Cost not stated. Oakland, Cal. Architect, Henry Shermund, Mills Bldg., S. F. Owner, Mrs. Clara M. Sadler. The dwelling will contain six rooms and bath, and will be erected on the east side of East 20th street near 23rd avenue. Interior finish will be of pine and redwood with some white enamel. Hardwood floors will be used in the principal rooms. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with shingles. Plans are complete and figures are now being taken.

RESIDENCE—1½ story and base, frame, \$3,000. Berkeley, Alameda Co., Cal. Architect, F. Holberg Reimers, 2125 Shattuck avenue, Berkeley. Owner, Mr. Campbell. The dwelling will be erected in Hopkins Terrace, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine and redwood. Hardwood floors will be used in the living room, dining room and reception hall. There will be a large open fire place in the living room. Mantel will be of tile or brick. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures will be taken at once.

COURT HOUSE REPAIRS—Cost not stated. Oakland, Cal. Architect, none.

Owners, Alameda County. All bids previously received for repairs to the County Recorder's office have been rejected and new figures are being called. Bids will be opened on July 26th. The work requires the following: Painting, electric work, plumbing and carpentry. Plans and specifications can be had from the office of the County Clerk.

FLATS—2 story and base, frame, Cost not stated. Oakland, Cal. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner's name withheld. The building will be erected near the Polytechnic school and has been designed to contain one small two-room flat and four flats of four rooms. All flats will have open air sleeping porches. Interiors will be finished in pine with some elm panels. Hardwood floors will be used in the living rooms. There will be open fire places and tile mantels. Bath rooms will have tile wainscot. Exterior of the building will be covered with cement plaster on metal lath. Plans are being prepared.

LODGE HALL—2 story and base, brick. Cost not stated. Berkeley, Alameda Co., Cal. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owners, Eagles Hall Association. The building will be erected at the corner of University and San Pablo avenues, covering an area of 50 by 100 feet. The first floor will be arranged for stores, a large and attractive lobby, ball room and kitchen. Upper floor will contain offices of the association and lodge rooms. Interior finish will be of pine and hardwood with some hardwood floors. There will be steam heat, an oil burning system and modern plumbing. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken. Bids will be opened on July 25th. Plans and specifications can be secured from the architect.

COLLEGE CLASS ROOMS—4 story and base. Class A construction, \$800,000. Berkeley, Alameda Co., Cal. Architect, John Galen Howard, 604 Mission street, S. F. Owners, University of California. Plans have been completed for the construction of the Benjamin Ide Wheeler Hall to be erected on the Campus grounds at the University of California, Berkeley, and the Regents are now calling for figures on the following parts of the work: Excavating and concrete, structural steel, steel erection, roofing and sheet metal work, lathing and plastering, marble and terrazzo work, carpentry and interior finish, plumbing, ornamental metal, elevator work and acoustic felt. Plans and specifications for the above mentioned work can be secured at the cashier's win-

dow at the office of the Regents after 9 A. M., Saturday, July 17th. A deposit of \$5 is required. Bids will be opened on August 9th at 11 A. M. An official proposals appears in another column of this issue.

STATION AND STORE—1 story, brick, \$6,000. Berkeley, Alameda Co., Cal. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, E. A. Heron. The building will be erected on the east side of Shattuck avenue near University, and has been designed for a local station and small store. Interior will be finished in pine and redwood. Patent store fronts will be used. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken.

STORE—1 story and base, brick. Cost not stated. San Leandro, Alameda Co., Cal. Architect, G. Armstrong, 1639 Alcatraz avenue, Berkeley. Owner, W. L. Duarte. The building will be erected on the east side of 14th street at the corner of Washington, and will cover an area of 42 by 100 feet. There will be several small stores. Interior finish will be of pine and redwood with some hardwood in the display windows. Patent store fronts are specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, Benj. F. Kopf, 1015 52nd avenue, Oakland. The dwelling has been designed for a six-room house with bath, and will be erected on 86th avenue. Interior will be finished in pine and redwood. Some hardwood floors will be used. There will be an open fire place and tile or brick mantel. Exterior of the house will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor.

Building Contracts Awarded

Oakland

No.	Owner	Contractor	Amt.
1324	Ellison	Arnold	550
1325	Jones	Peterson	850
1326	Cogliati	Cogliati	500
1327	Klein	Klein	2500
1328	West	Highland	2000
1332	Hart	Hart	450
1333	Kruse	Senner	600
1334	Nantino	Perona	425
1335	Leschinsky	Dickie	1900
1336	Hiaro	Hiaro	800
1343	Mattucco	Smith	600
2244	MacGregor	MacGregor	4250
1345	Same	Same	4250
1346	Pasowich	Bay Cabinet	450
1348	Lederer	Smith	2950
1349	Pac Shredded	McLaughlin	1700
1350	Duarte	Kopf	1600
1351	Martin	Jones	475
1352	Hollidge	Hollidge	2500
1353	Mills College	Owner	400
1354	Oakland	Dyer	15000
1355	Standard Bldg	Owner	2000
1357	Goldstein	Whitaker	2500
1362	Christ Science	Schmitt	850
1363	Prantzen	Prantzen	500
1364	Holloway	Holloway	1550
1365	Oakland	U S Metal	3925
1367	Miller	Miller	500
1368	Foss	Foss	5000

ADDITION

(1324) No. 5227 E-FOURTEENTH, Oakland, Addition.
Owner.....Tom Ellison, Premises,
Architect...None.

Contractor..N. F. Arnold, 1350 53rd Ave., Oakland.

COST, \$350

DWELLING

(1325) N EIGHTEENTH 82 W Kirkham, Oakland. One-story 4-room dwelling.

Owner.....N. A. Jones, 1640 8th, Okd.

Architect...None.

Contractor...A. J. Peterson, 1220 Union, Oakland.

COST, \$850

DWELLING

(1326) NO. 346 105TH AVE., Oakland.

One-story 4-room dwelling.

Owner.....Enrico Cogliati, 342 105th Ave., Oakland.

Architect...None.

Day's work. COST, \$500

DWELLING

(1327) S E-TWENTY-FOURTH 80 E 7th Ave., Oakland. One-story 6-room dwelling.

Owner.....Mathew Klein, 6511 Raymond, Oakland.

Architect...None.

Day's work. COST, \$2500

DWELLING

(1328) N THIRTY-FIFTH 300 W Webster, Oakland. Two-story 6-room dwelling.

Owner.....John West.

Architect...None.

Contractor...Gust Highland, 478 Moss Ave., Oakland.

COST, \$2000

ALTERATIONS

(1332) NO. 60 ALVARADO ROAD, Oakland. Alterations.

Owner.....H. H. Hart, Premises.

Architect...A. S. Bugbee, 1654 Washington, San Francisco.

Day's work. COST, \$450

DWELLING

(1333) E EIGHTY-FIRST AVE 160 S Olive, Oakland. One-story 4-room dwelling.

Owner.....Mrs. C. L. Kruse, 1617 81st Ave., Oakland.

Architect...None.

Contractor...G. Senner, 1617 81st Ave., Oakland.

COST, \$600

TANK FRAME

(1334) NO. 275 100TH AVE., Oakland.

Tank frame.

Owner.....P. Nautino, Premises.

Architect...None.

Contractor...John Perona, 4905 Telegraph Ave., Oakland.

COST, \$425

DWELLING

(1335) W RUTHERFORD 75 S E-22nd,

Oakland. One-story 5-room dwlg.

Owner.....Emil Leschinsky, 2055 Rutherford, Oakland.

Architect...None.

Contractor...E. B. Dickle, 2173 48th Ave., Oakland.

COST, \$1900

GREENHOUSES

(1336) W 105TH AVE 60 S Knight,

Oakland. Two greenhouses.

Owner.....K. Hilar, Premises.

Architect...None.

Day's work. COST, \$800

DWELLING

(1343) W TWENTY-SEVENTH AVE

400 S E-11th, Oakland. One-story 4-

room dwelling.

Owner.....D. Mattucio, 2625 E-11th,

Oakland.

Architect...None.

Contractor...G. F. Smith, 5920 Hayes, Oakland.

COST, \$600

DWELLING

(1344) N MANDANA BLVD. 700 W

Carlston, Oakland. Two-story 8-

room dwelling.

Owner.....C. M. MacGregor, 470 13th,

Oakland.

Architect...None.

Day's work. COST, \$4250

DWELLING

(1345) N MANDANA BLVD 650 W

Carlston, Oakland. Two-story 8-

room dwelling.

Owner.....C. M. MacGregor, 470 13th,

Oakland.

Architect...None.

Day's work. COST, \$4250

ALTERATIONS

(1346) NO. 515 FOURTEENTH, Oak-

land. Alterations.

Owner.....L. D. Passowith, Premises.

Architect...None.

Contractor...Bay City Cabinet Co., 1080 5th, Oakland.

COST, \$150

DWELLING AND GARAGE

(1348) LOT 29 BLK 2 Thousand Oaks

Tract, Oakland Tp. All work for one

story 5-room dwelling and garage.

Owner.....H. J. Lederer, 2121 Addi-

son, Berkeley.

Architect...None.

Contractor...Harry C. Smith, 2011 Francisco, Berkeley.

Filed July 14, '15. Dated June 30, '15.

Frame up 1/4

Brown coated 1/4

Completed and accepted 1/4

Usual 35 days 1/4

TOTAL COST, \$2950

Bond, none. Limit, 90 days after June

30. Forfeit, none. Plans and specifica-

tions, none.

EXCAVATING ETC.

(1349) TWELFTH, UNION, FOUR-

teenth and Poplar, Oakland. Excav-

ating for factory and out building.

Owner.....Pacific Coast Shredded

Wheat Company.

Architect...Hobart & Cheney, Crocker

Bldg., San Francisco.

Contractor...James L. McLaughlin, 244

Kearny, San Francisco.

Filed July 14, '15. Dated July 13, '15.

On 15th of each month 75%

Usual 35 days 25%

TOTAL COST, \$1700

Bond, \$850. Surety, American Surety

Co. Limit, August 1. Forfeit, none.

Plans and specifications filed.

DWELLING

(1350) NO. 1609 EIGHTY-SIXTH AVE,

being Lot 2 Blk "E" Moss Tract, Oak-

land. All work for one-story dwell-

ing.

Owner.....Manuel Silveira Duarte,

Oakland.

Architect...None.

Contractor...R. F. Kopf, 1015 82nd Ave., Oakland.

Filed July 14, '15. Dated July 10, '15.

Payments as owner sees fit....

TOTAL COST, \$1600

Bond, none. Limit, 60 days. Forfeit,

none. Plans and specifications, none.

REPAIRS

(1351) NO. 1515 HARRISON, Oakland.

Roof repairs.

Owner.....Mrs. Martin, Premises.

Architect...None.

Contractor...Fred G. Jones, 1217 Webster, Oakland.

COST, \$475

DWELLING

(1352) E BROADWAY 500 N Napa,

Oakland. One-story 7-room dwlg.

Owner.....Geo. H. Hollidge, 5926 Tafi Ave., Oakland.

Architect...None.

Days work. COST, \$2500

ALTERATIONS

(1353) MILLS COLLEGE, Oakland.

Alterations.

Owner.....Mills College.

Architect...None.

Day's work. COST, \$100

WAREHOUSE

(1354) QUAY WALL, Oakland. Steel

work for warehouse.

Owner.....City of Oakland.

Architect...None.

Contractor...Dyer Bros., 17th & Kansas, San Francisco.

COST, \$15,000

DWELLING

(1355) W VENTURA 300 N Sonoma,

Albany. One-story 5-room dwelling.

Owner.....Standard Bldg. Co.

Architect...None.

Day's work. COST, \$2000

DWELLING

(1357) W DESMOND 80 N 51st, Oak-

land. One-story 5-room dwelling.

Owner.....J. Goldstein, 1115 Pierce,

San Francisco.

Architect...None.

Contractor...W. A. Whitaker, 516 11th, Oakland.

COST, \$2500

DWELLING

(1358) W DESMOND 40 N 51st, Oak-

land. One-story 5-room dwelling.

Owner.....S. Hartman, 1113 Pierce,

San Francisco.

Architect...M. L. Newsom, 1748 Broad-

way, Oakland.

Contractor...W. A. Whitaker, 516 11th,

Oakland. COST, \$2500

HEATING AND VENTILATING

(1362) LOCATION NOT GIVEN. All

work for heating and ventilating ap-

paratus for frame church.

Owner.....Seventh Church of Christ

Scientist.

Architect...Wm. A. Newsom, Hewes

Bldg., San Francisco.

Contractor...George P. Schmitt, 422 E-

16th, Oakland.

Filed July 15, '15. Dated June 30, '15.

Completed except furnaces..... \$500

Completed and accepted..... 137

Usual 35 days..... 213

TOTAL COST, \$850

Bond, \$125. Surety, Fidelity & Deposit

Co. Limit, July 7. Forfeit, none. Plans

and specifications, none.

ADDITION

(1363) NO. 2318 THIRTY-FIFTH AVE

Oakland. Addition.

owner.....Mrs. Mary Frantzen, 1313
Howe, Oakland.
Architect...None.
Day's work. COST, \$500

DWELLING
(1361) E GROVE 65 S 12nd, Oakland.
One-story 4-room dwelling.
Owner.....Mrs. Dorothea Holloway,
1541 Webster, Oakland.
Architect...None.
Contractor...John T. Holloway, 1541
Webster, Oakland.
COST, \$1550

STEEL DOORS
(1365) QUAY WALL, Oakland. Steel
doors for warehouse.
Owner.....City of Oakland.
Architect...None.
Contractor...U. S. Metal Products Co.,
825 Market, S. F.
COST, \$3925

ALTERATIONS
(1367) NO. 2941 BROADWAY, Oakland
Alterations.
Owner.....Miller Creamery Co., Prem.
Architect...None.
Day's work. COST, \$550

FLATS
(1368) SW PARK BLVD AND E-19TH
Oakland. Two-story 14-room ats.
Owner.....C. C. Foss, 1242 1st Ave.,
Oakland.
Architect...None.
Day's work. COST, \$5000

Building Contracts Awarded

Berkeley.

No.	Owner.	Contractor	Amt.
1329	Boardman	Fisher	500
1330	Ala Hme Bldrs.	Wiley	3750
1331	Baird	Bowers	3450
1347	Bkly Dev	Patrick	4000
1356	Berkeley	Berkeley	400
1358	Hartman	Whitaker	2500
1359	Senn	Reed	3000
1360	Seeger	Riddell	5000
1361	Berkeley	Woods	2500
1366	Ahlin	Lord	500
1369	Hersam	Riddell	4112

ADDITION
(1329) SE ALVARADO & VICENTE,
Berkeley. Addition.
Owner.....W. F. Boardman, Premises.
Architect...None.
Contractor...G. A. Fisher, 2918 Domingo
Ave., Berkeley.
COST, \$500

DWELLING
(1350) W SILASTA 400 N Talac, Ber-
keley. Two-story 6-room dwlg.
Owner.....Alameda County Home
Bldrs., 1st Nat'l. Bank
Bldg., Berkeley.
Architect...W. H. Ratcliff, 1st National
Bank Bldg., Berkeley.
Contractor...J. M. Wiley, 1718 Hearst
Ave., Berkeley.
COST, \$3750

DWELLING
(1321) N WOOLSEY 400 E Dana, Ber-
keley. Two-story 10-room dwelling.
Owner.....Lida M. Baird, 2502 Dana,
Berkeley.
Architect...None.
Contractor...F. P. Bowers, 1818 Hearst
Ave., Berkeley.
COST, \$3450

DWELLING AND GARAGE
(1347) W SPRUCE 300 N Los Angeles,
being Lot 48 Blk 1, Berkeley Heights,

Berkeley. All work for two-story
dwelling and garage.

Owner.....Berkeley Development Co.,
Berkeley.
Architect...None.
Contractor...O. M. and H. G. Patrick,
2001 Hopkins, Berkeley.
Filed July 14, '15. Dated July 2, '15.
Frame up 1/4
Brown coated 1/4
Completed and accepted..... 1/4
Usual 35 days..... 1/4
TOTAL COST, \$4000

Bond, none. Limit, 90 days from date
of agreement. Forfeit, none. Plans
and specifications filed.

SHINGLE ROOF
(1356) NE MILVIA AND VIRGINIA,
Berkeley. Shingle roof.
Owner.....City of Berkeley.
Architect...None.
Day's work. COST, \$100

FACTORY
(1359) SE FIFTH AND PARKER, Ber-
keley. One-story factory.
Owner.....Senn Concentrator Co.
Architect...None.
Contractor...H. J. C. Reed, 935 Pardee,
Berkeley.
COST, \$3000

DWELLING
(1360) NW BUENA VISTA AND LA
Loma Ave., Berkeley. Two-story 10-
room dwelling.
Owner.....C. L. Seeger, 2247 Tele-
graph Ave., Berkeley.
Architect...None.
Contractor...Riddell Bldg. Service Corp.,
2247 Telegraph Ave., Bkly.
COST, \$5000

ARTIFICIAL STONE
(1361) RUSSELL, OREGON, McGEE &
Grant Aves., Berkeley. Artificial
stone for school.
Owner.....City of Berkeley.
Architect...W. H. Ratcliff Jr., 1st Na-
tional Bank Bldg., S. F.
Contractor...Mealy & Collins.
Sub-Contractor...John P. Woods.
Filed July 15, '15. Dated May 3, '15.
Monthly payments of..... 75%
Usual 35 days after completion and
acceptance of brick and stone work
as per contract of 1st party.... 25%
TOTAL COST, \$2500
Bond, limit, forfeit, none. Plans and
specifications, none.

ADDITION
(1366) NO. 1206 NEILSON, Berkeley.
Addition.
Owner.....Mrs. A. Ahlin, 3138 Ellis,
Berkeley.
Architect...None.
Contractor...Martin L. Lord, 1625 Grant
Berkeley.
COST, \$500

FRAME DWELLING
(1369) LOT 35, University Hill, Ber-
keley. All work for two-story 7-room
frame dwelling.
Owner.....E. A. Hersam, 2308 Le
Conte Ave., Berkeley.
Architect...None.
Contractor...Riddell Bldg. Service Cor-
poration, 2247 Telegraph
Ave., Berkeley.
Filed July 16, '15. Dated July 10, '15.
Frame up 1/4
Brown coated 1/4
Completed and accepted..... 1/4

Usual 35 days..... 1/4
TOTAL COST, \$4112
Bond, \$4112. Surety, Joseph R. Harker.
Limit, 90 days. Forfeit, none. Plans
and specifications filed.

Building Contracts Awarded

Alameda.

No.	Owner.	Contractor	Amt.
1337	Roth	Roth	2000
1338	Reichard	Reichard	450
1339	Alameda	Dufour	1233
1340	Howard	Brown	400
1341	Noble	Noble	1800
1342	Noble	Noble	1800

DWELLING
(1337) NO. — PACIFIC AVE., Ala-
meda. One-story 5-room dwelling.
Owner.....Conrad Roth, 2117 Pacific
Ave., Alameda.
Architect...None.
Day's work. COST, \$2000

ALTERATIONS
(1338) NO. 738 CENTRAL AVE., Ala-
meda. Alterations.
Owner.....T. Reichard, Premises.
Architect...None.
Day's work. COST, \$450

ALTERATIONS
(1339) CITY HALL, Alameda. Alter
tower.
Owner.....City of Alameda.
Architect...None.
Contractor...Wm. Dufour, 2326 Santa
Clara Ave., Alameda.
COST, \$1235

ADDITION
(1340) NO. 2065 SAN ANTONIO AVE.,
Alameda. Addition.
Owner.....P. Howard, Premises.
Architect...None.
Contractor...C. A. Brown, 2317 Alameda
Ave., Alameda.
COST, \$400

DWELLING
(1311) NO. 2517 NOBLE AVE., Ala-
meda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central
Ave., Alameda.
Architect...None.
Day's work. COST, \$1800

DWELLING
(1342) NO. 2510 NOBLE AVE., Ala-
meda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central
Ave., Alameda.
Architect...None.
Day's work. COST, \$1800

NOTICE OF NON-RESPONSIBILITY.

ALAMEDA COUNTY.

July 12, 1915—NE FIFTH AND CLAY
50x75, Okd. Eugene A de St. Ger-
main as to improvements on leased
property

COMPLETION NOTICES.

ALAMEDA COUNTY

July 1, 1915—NE 11.94 LOT 24 and
SW 28.12 Lot 25 Map McMillan
Tract, Okd. George W Nunes to
whom it may concern. June 30, 1915
July 1, 1915—NO. 156 HILLCREST
Road, being Lot 9 Blk 10, Clare-
mont Tract, Bkly. Alice Powell
Alvord to H F Wrampelmeier.....
June 10, 1915

July 1, 1915—LOT 117 Map Woodlawn Park, Okd. John E Murphy to whom it may concern...June 30, 1915

July 1, 1915—PTN LOTS 14, 15 AND 16 Blk "I" Map Sheridan Tract, Okd. Mary E Greenwood to C A Doss.....June 26, 1915

July 2, 1915—NE 10 LOT 32 and SW 30 Lot 33 Map Kelly Tract ptn Watson 100 acres, Okd. S G Rankin to whom it may concern.....June 30, 1915

July 2, 1915—W 30 LOT 26 and E 40.01 Lot 24 Blk 2 Map Rock Ridge Place, Okd. David Hadden to H F Wrampelmeier.....July 1, 1915

July 2, 1915—LOT 9 BLK "F" Map Kenwood Park, Okd. Lewis & Mitchell, Inc to R B Litton.....July 1, 1915

July 2, 1915—NO. 1612 SPRUCE, Bkly. Frank Dutra by James W Plachek to Frank Butta.....June 24, 1915

July 2, 1915—NO. 754 SANTA RAY Ave. being Lot 2 Blk "O" East Piedmont Heights, Okd. Sara M Gillespie to Erle Saxton.....June 23, '15

July 2, 1915—S MONTE VISTA AVE, bet Rio Vista and Walsworth, Okd. Mary T Reid to United Home Bldrs.....July 2, 1915

July 3, 1915—S CLEVELAND, being ptn Lot 3 Map Sbdvn Plot 12 Watson Tract, Okd. Martha E Lodge to whom it may concern.....July 2, 1915

July 3, 1915—S DONITA AVE, bet Blair and Oakland Aves, Oakland. Jessie Robertson to United Home Bldrs.....July 3, 1915

July 3, 1915—N NAVY AVE 82 E Broadway N 102x40, Okd. A H Settergreen to Arvid E Olson.....June 24, 1915

July 3, 1915—E Production FALLON street and S S. P. right of way and along First, Oakland. Sunset Lumber Co to John Vukovich and T M Andrich.....July 1, 1915

July 6, 1915—NE LAFAYETTE AND Eagle Ave 80x100, Ala. E D Fortmann to R Kneppeler.....July 1, 1915

July 7, 1915—LOT 26 BLK "K" Northbrae Terrace, Bkly. Herbert J Watt to F R Peake Co.....July 3, 1915

July 8, 1915—RET END ROCK SEAWALLS and fill and pier Terminal W shore line, City of Oakland, S F Bay. S F O T Railways to S F Bridge Co.....June 29, 1915

July 8, 1915—LOT 35x75 on E Richmond Ave 250 S 29th St., Okd. Justus Norris to whom it may concern.....July 1, 1915

July 9, 1915—NO. 3425 THIRTY-ninth Ave, Okd. James E Stewart to whom it may concern.....June 15, 1915

July 10, 1915—W FRANKLIN 113 N 14th W 40xN 74, Okd. Realty Syndicate Co to Schnebly, Hostrawser & Pedgrift.....July 1, 1915

July 10, 1915—S RICH 561.44 W Webster W 40xS 110, Okd. W S Montgomery to whom it may concern.....July 9, 1915

July 10, 1915—LOT 2 BLK 3 4th Ave Heights, Okd. D O McKellips to E W Woodard.....

July 10, 1915—MOUNTAIN VIEW Cemetery, Alameda County. Henrietta Farrelly to F D Donahue.....July 10, 1915

July 10, 1915—NW ELLITA AVE & Bellevue Ave N 120 W 120 SE 147.69 E 47.58, Okd. Florence M Pearson and Amanda Smith to Alfred Peterson.....July 9, 1915

July 10, 1915—NW ELLITA AVE & Bellevue Ave N 120 W 120 SE 147.69 E 47.58, Okd. Ada M Ayers to Alfred Peterson.....July 9, 1915

July 10, 1915—LOT 13 BLK 24 Map Lakeside Tract, Adams Pty, Okd. C S Cherry to Nelson & Carlson.....July 9, 1915

July 10, 1915—W 40 LOT 26 and E 35 Lot 27 Map Crocker Highlands, Okd. Cora H Shores to whom it may concern.....July 10, 1915

July 12, 1915—LOT 151 Map Piedmont By-the-Lake, Okd. Kate Carothers Paul to S J Bertelsen.....July 10, 1915

July 13, 1915—NW ELSTON AVE & SW E-35th NW 125xSW 37.25, Okd. Mrs Ora M St. John to whom it may concern.....Completed —

July 13, 1915—LOTS 23 AND 24 BLK 4, Regents Park No. 4, Albany. Anna M Werner to Gustaf Johanson.....July 10, 1915

July 13, 1915—LOT 16 BLK 19 Map Northbrae, Albany. W N Taylor to whom it may concern.....July 3, 1915

July 13, 1915—LOT 15 BLK 4 Map Martin Kellogg Pty, Bkly. Vera W Mulford to John W Jessiman.....July 8, 1915

July 14, 1915—S 40 LOT 24 BLK 16, Thousand Oaks, Oakland Tp. Wm C Mason to whom it may concern.....July 14, 1915

July 14, 1915—NO. 470 FORTY-SECOND, being N 42nd 577 E Telegraph Ave, Okd. James Dolan to Oliver Legault.....July 7, 1915

July 14, 1915—S CARLTON 40 E Mahel E 40x132-6, Bkly. Theodor M Person to whom it may concern.....July 12, 1915

July 14, 1915—NE CARLTON AND S. P. Co's Railway Tracks, Berkeley. Bryon Jackson Iron Works to McGovern & Jones.....July 12, 1915

July 15, 1915—W MCGEE AVE 100 S Delaware, being No. 1810 McGee Ave, Bkly. Lillian E Betzner to Ben Pearson.....July 14, 1915

July 15, 1915—LOT 3 BLK "B" Map Oakland Highlands, Oakland. A B and Augusta E Chase to A B Chase.....July 12, 1915

July 15, 1915—E WALKER PLACE 100 S Derby, Bkly. Florence L (M) Givens to Carl Ericson.....July 14, '15

July 15, 1915—SE THIRD AVE 105 SW E-15th SW 70xSE 150, Okd. William C Gilmour to whom it may concern.....June 28, 1915

LIENS FILED

ALAMEDA COUNTY.

July 8, 1915—E INYO 151.17 N Marin Ave, being Lot 16 Blk 19 Map Northbrae Tract, Bkly. Sunset Lumber Co vs J G and W N Taylor.....\$206.84

July 3, 1915—LOT 33 BLK "C" Map 4th Ave Terrace, Okd. Walter F Lloyd (Boulevard Mill & Lumber Co) vs Torrence S Peterson, Cecelia and Joseph Dodd Simpson.....\$407.25

July 9, 1915—LOT 32 BLK 5 Regents Park Tract No. 7, Oakland Tp. Stege Lumber & Hardware Co vs John Doe Doyle and H J Sattlin (as Doyle & Sattlin), Walter S Mann and John Doe and Mary Green.....\$59.15

July 9, 1915—E TELEGRAPH AVE bet 56th and 58th; being No. 5422 Telegraph Ave, Okd. Wallace J

Hiddle vs George T Dunlap, John Doe Anderson, Richard Doe and C D Clink and Gus Sawyer.....\$170

July 10, 1915—NW COR. VINE AND Josephine W 45xN 100, Bkly. Geo H Tay Co vs Hull Plumbing Co and Cora M Lewis.....\$109

July 10, 1915—LOT 16 BLK 19 Map Northbrae, Bkly. I L Cavasso vs W N and J G Taylor.....\$41.93

July 10, 1915—E SPRING 155 N Eunice N 45xE 135, Bkly. George H Tay Co vs Hull Plumbing Co and Lillian G Lyman.....\$138.60

July 13, 1915—E CHESTNUT 205-11 S 21st S 50xE 132, Okd. P M Nielsen vs Ben and Harry Drochetz and George H Lydixsen.....\$60.25

July 14, 1915—LOT 16 BLK 19 Northbrae Tract, Bkly. Sunset Hardware Co vs J G and W N Taylor.....\$33.80

July 15, 1915—LOT 16 BLK 19 Map Northbrae Tract, Bkly. Pacific Mfg Co vs J G Taylor.....\$202.40

RELEASE OF LIENS

ALAMEDA COUNTY.

July 15, 1915—S TWENTY-SECOND 360 E Webster E 51xS 162, Okd. W Delacour (Delacour Art Glass Wks) \$117; B C White, \$567.52; R H Chamberlain, \$164.90; Marshall & Stearns Co, \$143.45; D Miller ...

SAN JOSE AND THE SANTA CLARA VALLEY.

RESIDENCE — 2 story and base, frame. Cost not stated. San Mateo, San Mateo Co., Cal. Architect, Sylvain Schnaitacher, 233 Post street, S. F. Owner, Edward Livingston. The dwelling will be erected on El Cerrito road, and has been designed for a large and attractive suburban home. A separate garage is included in the work. The dwelling will contain 12 rooms, 3 baths and sleeping porches. Interior finish will be of pine, hardwood and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat, a hot water circulating system and vacuum cleaning. Bath rooms will be finished in tile. There will be open fire places and tile and brick mantels. Exterior of both the garage and dwelling will be covered with cement plaster on metal lath. Plans are now being prepared.

RESIDENCES—3, 1½ story and base, frame, \$2,000 to \$3,000. Redwood City, San Mateo Co., Cal. Architect, none. Owner, Harry G. Putman, Redwood City. These houses have been designed to contain from six to seven rooms, bath and sleeping porch. Interiors will be finished in pine and redwood, some hardwood floors will be used. There will be open fire places and tile or brick mantels. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior will be covered with rustic shingles and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

Bridge—Steel and concrete. Cost not stated. Sallinas, Monterey Co., Cal. Engineer, County Surveyor Cozens, Sallinas. Owners, Monterey County,

Plans and specifications for the San Lucas steel bridge prepared by County Surveyor Cozzens have been approved and adopted by the Board of Supervisors and bids have been advertised for, to be opened on August 3rd. Plans, specifications and full information may be had from the County Surveyor at Salinas.

SEWER CONSTRUCTION — \$31,000. San Bruno, San Mateo Co., Cal. Engineer, Town Engineer, San Bruno. Owners, Town of San Bruno. The Board of Trustees are now taking bids for the construction of sewers in certain streets. Plans and specifications may be had from the City Engineer at San Bruno.

ROAD REPAIRS—\$7,000. Hollister, San Benito Co., Cal. Engineer, County Surveyor, Hollister. Owners, San Benito County. The County Surveyor, at the last meeting of the County Supervisors, presented his estimate on the cost of repairing the Tres-Pinos-Palmdes road. The distance being four and one-half miles, width 14 feet, gravel 6,300 cubic yards, grading \$1-000, making a total of \$7,000. Action will be taken by the board at their next meeting.

HIGHWAY CONSTRUCTION — Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The county Surveyor has been directed by the San Mateo County Supervisors to prepare plans and specifications for a boulevard leading along the summit of the Coast Range from the Half Moon Bay-San Mateo road to Kings Mountain, west of Woodside. On completion and adoption of the plans bids on the work will be called.

Contracts Awarded.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete, \$7,272. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, C. J. Meyerholz & Son, San Jose. Contract price, \$7,272. price, \$14,216.

BRIDGE—Reinforced concrete, \$7,272. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, C. J. Meyerholz & Son, San Jose. Contract price, \$7,272.

BUILDING CONTRACTS

SANTA CLARA COUNTY.

ALTERATIONS

NO. 235 HOBSON, San Jose. Alterations and repairs.

Owner.....H. Stringfellow and H. Storr, 217 S-4th St., San Jose.

Architect.....None.

Day's work.....COST, \$8000

WAGON SHED

VINE AND SAN FERNANDO STS., San Jose. Wagon shed.

Owner.....Chebre & Mellet, Prem.

Architect.....None.

Contractor.....Delmastro & Son. COST, \$8000

DRYING SHED

NO. 466 N-EIGHTEENTH ST., San Jose Drying shed.

Owner.....V. Valenti, Premises.

Architect.....None.

Day's work.....COST, \$4000

GARAGE

JOSEPHA AND PARK AVE., San Jose.

Garage.

Owner.....Sam Searrio, Premises.

Architect.....None.

Day's work.....COST, \$4000

COTTAGE

E SECOND near Martha St., San Jose.

Six-room cottage.

Owner.....J. N. Rossich, 34 Fountain St., San Jose.

Architect.....C. McKenzie, Bank of San Jose Bldg., San Jose.

Contractor.....P. E. Peterson. COST, \$2431

ALTERATIONS

NO. 230 BASSETT ST., San Jose. Alterations.

Owner.....California Seed Growers' Association, Premises.

Architect.....None.

Day's work.....COST, \$4000

COTTAGE

LOT 12, bet. Washington and Empire Sts., San Jose. Four-room cottage.

Owner.....F. M. Bargas, 1st & Santa Clara, San Jose.

Architect.....None.

Day's work.....COST, \$1500

BAKE OVEN

S-FIRST, bet. San Salvador and William, San Jose. Bake oven.

Owner.....W. J. Temple.

Architect.....None.

Contractor.....A. Tinnelli, Los Angeles. COST, \$1500

ADDITION

FOURTH AND LEWIS STS., San Jose. Addition to warehouse.

Owner.....A. A. Harlan, Premises.

Architect.....None.

Day's work.....COST, \$1000

FILLING STATION

MARKET AND SAN ANTONIO STS., San Jose. Filling station.

Owner.....Shell Oil Co., 343 Sansome St., San Francisco.

Architect.....None.

Day's work.....COST, \$600

ADDITIONS

NO. 306 W-SAN SALVADOR ST., San Jose. Addition and alteration.

Owner.....G. Bianchi, 268 W-San Salvador, San Jose.

Architect.....None.

Contractor.....F. Savio, 44 N-River St., San Jose. COST, \$400

SAN MATEO COUNTY.

BUNGALOW

LOT 21 BLK 25, Easton Addition No. 2, Easton. All work for concrete and frame one-story 4-room and bath bungalow.

Owner.....Mary Fitzpatrick.

Architect.....C. H. Bessett, 343 29th Ave., San Francisco.

Contractor.....William G. McDiarmid, 2528 Mission, S. F.

Filed July 8, '15. Dated June 28, '15.

Frame up.....\$500

Brown plastered.....600

When completed.....400

Usual 55 days.....500

TOTAL COST, \$2000

Bond, none. Limit, 60 days. Forfeit, none. Plans and specifications filed.

RESIDENCE AND GARAGE

HOWARD ROAD, Stanford Park, North Palo Alto. All work for frame residence and garage to conform with outside appearance of house.

Owner.....Mrs. Ella Ewell Lyon, Palo Alto.

Architect.....Maxwell G. Bugbee, Lick Bldg., San Francisco.

Contractor.....Lloyd Douglas, Stanford Park and W. S. C. Stevens, San Mateo.

Filed July 13, '15. Dated July 6, '15.

Roof shingled.....\$650

When plastered.....650

When completed.....650

Usual 35 days.....650

TOTAL COST, \$2600

Bond, \$1500. Sureties, W. P. Gray and James G. Mason. Limit, 60 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED ACCEPTED

July 9, 1915—LOT 20 BLK 1 Sub "A" Wellesley Park, Redwood City.

Redwood City Realty Co to whom it may concern.....July 7, 1915

July 9, 1915—LOT 44 BLK 4 Crocker Estate Tract Sub. No. 1, Daly City.

Mike Samperi to Charles Carlson.....June 30, 1915

July 14, 1915—LOT 8 BLK 21 City of Burlingame. Thos H Bowlen to whom it may concern.....May 15, 1915

July 15, 1915—LOT 5 BLK 22 Redwood Highlands, Redwood City.

Redwood Highlands Co to whom it may concern.....July 13, 1915

July 15, 1915—LOT 4 BLK 2, San Mateo Park Sub 1, 2 and 3, San Mateo.

Edgar Sinsheimer to Myrl R Crane.....June 29, 1915

July 15, 1915—LOT 22 BLK 28, Redwood Highlands, Redwood City.

Redwood Highlands Co to whom it may concern.....July 13, 1915

July 15, 1915—SE ¼ LOT 10 AND Lot 12 Blk 40, Redwood Highlands.

Redwood City, Redwood Highlands Co to whom it may concern.....July 13, 1915

July 15, 1915—LOT 16 BLK 22, Redwood Highlands, Redwood City.

Redwood Highlands Co to whom it may concern.....July 13, 1915

MARIN, CONTRA COSTA AND SONOMA COUNTIES

BRIDGES—3, stone and concrete. Cost not stated. Napa, Napa Co., Cal.

Engineer, County Surveyor, Napa. Owners, Napa County. Plans have been completed and are now out for figures for three stone arch bridges to be erected on creeks on the road leading into the Pope Valley. Bids will be opened on July 27th. Plans and specifications can be secured from the engineer.

HIGHWAY CONSTRUCTION — Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Ralph R. Arnold, Martinez. Owners, Contra Costa County. The plans and specifications prepared by the County Surveyor are now complete and ready for approval for the construction of the first three miles of permanent concrete road to be built in Contra Costa County as part of the boulevard system.

The plans call for a concrete road and macadam shoulder on each side, making the road 22 feet wide. On the adoption of the plans bids will be called.

ROAD CONSTRUCTION, BULKHEADS, CULVERTS, ETC.—Cost not stated. San Rafael, Marin Co., Cal. Engineer, County Surveyor, San Rafael. Owners, Marin County. Plans have been completed and figures will be opened on August 3rd for regrading and improving a portion of the Point an Pedro road and for the construction of embankments, rip-rap, paving, timber bulkheads, pile bulkheads, ditches and culverts therefor, all in road District No. 1, Marin County.

STREET PAVING AND SEWER—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Plans are complete and bids will be opened on July 26th for paving certain streets with Richmond Standard macadam, and also for laying a 6-inch pipe sewer in several blocks. Plans can be secured from the City Engineer.

STREET PAVING—\$12,200.51. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. John Ward, Richmond, submitted the lowest bid for paving 10th street from Barrett to Pennsylvania and will probably be awarded the contract.

STREET IMPROVEMENTS—Cost not stated. San Anselmo, Marin Co., Cal. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Plans prepared by the Town Engineer for the improvement of Pine street, Cedar street and San Anselmo avenue, have been approved by the trustees and bids will soon be called. At the same meeting a resolution of intention for the extension of Cedar street was also adopted.

SEWER EXTENSIONS—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. The City Engineer has been ordered by the Council to prepare plans and specifications for the big sewer project in the annexed district. The work covers the town of Stege, East Shore Park, Coleman-Pullman, Central-Pullman, Central Richmond, Walls Addition, Pullman Townsite, Coleman Park and Bay View Park. On completion and adoption of the plans bids will be called for.

SEWER CONSTRUCTION—Cost not stated. Petaluma, Sonoma Co., Cal. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. Plans have been completed and figures are now being taken for the construction of a 4-inch ironstone pipe sewer in B street. There will be one brick manhole and a number of Y branches. Bids will be opened on August 2nd. Plans can be secured from the City Clerk.

Contracts Awarded.

RESIDENCES—20, 1 story and base, frame, \$2,500 each. Martinez, Contra Costa Co., Cal. Architect, none. Owners, Shell Oil Co. Contractors, Gutleben Bros., New Call Bldg., S. F. Contract price, \$2,500 each.

NAPA, NAPA CO., CAL.—Bridge, stone construction, \$1,659.50. Engineer, County Surveyor, Napa. Owners, Napa County. Contractors, A. C. Martini & Co., Napa. Contract price, \$1,659.50.

MARYSVILLE, YUBA CO., CAL.—Bridges, 3, reinforced concrete, \$14,216. Engineer, County Surveyor, Marysville. Owners, Yuba County. Contractors, Jenkins & Wells, Sacramento. Contract price, \$14,216.

BRIDGE—Stone construction, \$1,659.50. Napa, Napa Co., Cal. Engineer, County Surveyor, Napa. Owners, Napa County. Contractors, A. C. Martini & Co., Napa. Contract price, \$1,659.50.

BRIDGES—3, reinforced concrete, \$14,216. Marysville, Yuba Co., Cal. Engineer, County Surveyor, Marysville. Owners, Yuba County. Contractors, Jenkins & Wells, Sacramento. Contract price, \$15,000.

RESIDENCE—2 story and base, frame, \$15,000. Arbuckle, Colusa Co., Cal. Architect, Chester Cole, Chico. Owner, Jos Hahn, Sr., Arbuckle. Contractor, H. Anderson, Oakland. Contract price, \$15,000.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

BUNGALOW

PTN LOTS 5 AND 9 BLK 63, Official Map of City of Pittsburg. All work for four-room bungalow.

Owner.....C. A. Hooper & Co., Balboa Bldg., San Francisco.

Architect....R. P. Haydock, Pittsburg. Contractor...G. W. Nickell & R. H. Old, Pittsburg.

Filed July 12, '15. Dated July 10, '15.

Floor joists laid.....	\$350
Roof completed.....	350
Completed and accepted.....	350
Usual 25 days.....	375

TOTAL COST, \$1425

Bond, \$750. Sureties, M. H. Dunnigan and B. P. Lanteri. Limit, 90 days from date of contract. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

CONTRA COSTA COUNTY.

RECORDED	ACCEPTED
July 3, 1915—BLK 67, City of Pittsburg. Pittsburg Grammar School Board to Seibert Co.....	June 23, 1915
July 8, 1915—STATE HIGHWAY. Bridge over Garrity Creek. Supervisors of Contra Costa County to Karl M. Neilson.....	July 6, 1915

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

RESIDENCE—1 story and base, frame, \$2,000. Fresno, Fresno Co., Cal. Architect, none. Owner, A. D. Trively, 791 Callich street, Fresno. The dwelling has been designed to contain five rooms and bath. Interior will be finished in pine and redwood. Some hardwood floors will be used. Tile wainscot will be used in the bath room. There will be an open fire place in the living room. Mantel will be of tile. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

CHURCH—2 story and base, frame, \$12,000. Oakdale, Stanislaus Co., Cal. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owners, First Methodist Episcopal Church of Oakdale.

The building has been designed in the Spanish type and will contain, besides a large auditorium, Sunday school rooms and pastor's study. Interior will be finished in pine and ornamental plaster. Modern ventilating system will be installed. Art glass windows are specified. Exterior of the building will be covered with cement plaster on metal lath. Plans are nearly complete and figures will be called for shortly.

NORMAL SCHOOL, SEWER—\$4,000. Fresno, Fresno Co., Cal. Architect, State Architect, George B. McDougall, Sacramento. Owners, State of California. A sewer system will be installed in the Fresno Normal School, the City Council having granted permission to connect the sewer with the city mains. The sewer will have a six-inch main in Elmhurst avenue, branch on to Olive avenue for about 100 feet and connect with the city main at the alley between Van Ness and Carmel avenues. The work is estimated to cost between \$3,000 and \$4,000. Bids on the work will be called for immediately.

BRIDGE—Reinforced concrete. Cost not stated. Madera, Madera Co., Cal. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, Madera County. The bridge will be erected over the Fresno River at D street, and will be 270 feet long. Plans have been completed and figures are now being taken. The opening date has not been set as yet. Plans can be secured from the engineers.

GAS PIPE LINE—Cost not stated. Fresno, Fresno Co., Cal. Engineer, none. Owners, Parlier Winery, Fresno. Permission has been granted to the Parlier Winery of this city to lay pipes along the county roads between Sanger, Del Rey, Parlier, Reedley and to the county line at Dinuba. It is the intention of the winery directors to supply gas to all these small towns.

Contracts Awarded

MODESTO, STANISLAUS CO., CAL.—Bridges, 4, reinforced concrete. Costs as follow. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Contractor, F. F. Fernandez, Hayward, \$3,607, two bridges over Wild Cat Creek. Ross Construction Co., Sacramento, two bridges over irrigation laterals, \$9,420.

BRIDGES—4, reinforced concrete. Costs as follow. Modesto, Stanislaus Co., Cal. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Contractor, F. F. Fernandez, Hayward, \$3,607, two bridges over Wild Cat Creek. Ross Construction Co., Sacramento, two bridges over irrigation laterals, \$9,420.

STREET PAVING—\$18,810.37. Los Banos, Merced Co., Cal. Contractors, Worswick Paving Co., Modesto. Contract price, \$18,810.37.

BRIDGE—Reinforced concrete. Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Plans and specifications for the Roberts Ferry bridge east of Waterford eight miles have been adopted by the County Supervisors and the County Clerk has been instructed to advertise for bids on the work. Plans and specifications may be had from the County Surveyor.

BUILDING CONTRACTS

FRESNO COUNTY.

RESIDENCE

N ¼ OF SEC. 18-13-22, Fresno. All work for two-story residence.

Owner.....May A. and Nellie A. Hamilton.

Architect...None.

Contractor...W. D. Stephenson.

Filed July 12, '15. Dated July 7, '15.

Roof in place.....\$750

Upon completion.....Balance

TOTAL COST, \$1496

Bond, \$1000. Sureties, J. G. Good and

Geo. G. Carr. Limit, Sept. 1, 1915.

Forfeit, \$5. Plans and specifications filed.

SCHOOL

PTN LOT 3 SEC 18, 16-20, Fresno. All work except heating and ventilating for High School Building.

Owner.....Caruthers Union High School District.

Architect...E. J. Kump, 227 Rowell Bldg., Fresno.

Contractor...Geo. R. Shannon.

Filed July 12, '15. Dated June 12, '15.

On 1st of each month.....75%

Usual 35 days.....Balance

TOTAL COST, \$17,773

Bond, \$1773. Surety, Pacific Coast

Casualty Co. Limit, 120 days. For-

feit, none. Plans and specifications filed.

HEATING AND VENTILATING ON above.

Contractor...Kiernan & O'Brien, 1754 Mission, San Francisco.

Filed July 12, '15. Dated June 12, '15.

Payments same as above.....

TOTAL COST, \$1885

Bond, \$1131. Surety, Fidelity & De-

posit Co. of Maryland. Limit, when

building completed. Forfeit, none.

Plans and specifications filed.

LIENS FILED

FRESNO COUNTY.

RECORDED AMOUNT

July 12, 1915—LOTS 28, 29 BLK 74.

Fresno. O J Roehling, \$56; Pacific

Mfg Co, \$333 vs J Jarmagian and

A W Anderson.....

July 12, 1915—LOTS 15, 16 BLK 3.

College Addition, Fresno. Berger

Mfg Co. of California vs John G

Porter et al.....\$80

July 12, 1915—LOTS 28, 29 BLK 74.

Fresno. Lewis Electric Co vs V

Jarmagian.....\$203

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

BRIDGE—Steel and reinforced concrete, \$75,000 to \$150,000. Oroville, Butte Co., Cal. Engineer, none. Owners, Butte County. Officials and residents of Oroville are urging the State Highway Commission to demand the construction of another bridge across the Feather River near Oroville. It is the intention of the Oroville officials to have the Highway Commission make the demand on the county to build the structure.

RESIDENCE—2 story and base, frame. Cost not stated. Stockton, San Joaquin Co., Cal. Architect, F. Holberg Reimers, 2125 Shattuck avenue, Berkeley. Owner, Dr. Goodman. The dwelling will be erected in Tuxedo Park, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine, redwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

CITY HALL—4 story and base. Class A construction, \$175,000. Sacramento, Cal. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, City of Sacramento. The building will be erected at the southeast corner of 6th and H streets, covering a large area. Construction will be fireproof throughout. The building will contain offices for the various city officials, council chambers and city jail. Interior will be finished in pine and hardwoods with some metal trim. There will be steam heat, oil burning system, vacuum cleaning and metal window sash and frames. Ornamental plaster work is specified. Exterior of the building will be faced with pressed brick, trimmed with terra cotta and cut stone. Plans are being prepared.

FIRE HOUSE—2 story and base, brick and frame. Cost not stated. Stockton, San Joaquin Co., Cal. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owners, City of Stockton. The building will be erected on

South California street and will be arranged for two pieces of equipment and living quarters. Interior will be finished in pine. Some hardwood floors will be used. Plans provide for steam

E. H. Williams

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heat and modern plumbing. Exterior will be faced with tapestry brick. Plans are complete and figures are being taken. Bids will be opened on July 27th. Plans and specifications can be secured from the architect.

FIRE HOUSE—1½ story and base, brick and frame. Cost not stated. Stockton, San Joaquin Co., Cal. Architect, W. B. Thomas, Yosemite Bldg., Stockton. Owners, City of Stockton. The building will contain space for two pieces of apparatus and living quarters. Interior finish will be of pine throughout. There will be a central heating system and hot water supply. Special plumbing and electrical work is specified. Exterior will be faced with pressed brick. Plans are complete and figures are being taken. Bids will be opened on July 27th. Plans and specifications can be secured from the architect.

STORE ALTERATIONS—Brick construction. Cost not stated. Stockton, San Joaquin Co., Cal. Architect, William B. Thomas, Yosemite Bldg., Stockton. Owners, Smith & Lang. The building to be altered is located at the southwest corner of Main and San Joaquin streets. Included in the work will be new interior finish, plumbing, painting, electric work and plaster work. Plans are now being prepared.

BRIDGE—Reinforced concrete, \$3,500. Sacramento, Cal. Engineer, City Engineer Miller, Sacramento. Owners, City of Sacramento. Plans have been completed for a reinforced concrete bridge 50 feet long which will be erected over Arcade Creek in Del Paso Park. Bids will be called for at once.

BRIDGES—Timber and concrete. Cost not stated. Sonoma, Tuolumne Co., Cal. Engineer, County Surveyor, Sonoma. Owners, Tuolumne County. The County Supervisors have rejected all bids submitted for the construction of the proposed new road in Road District No. 4, as all received were above the engineer's estimate. As a result of this rejection the bids for building all bridges on this road were also rejected. New bids will probably be called later.

BRIDGE—Steel suspension. Cost not stated. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Plans are complete and figures are now being taken for the construction of a cable suspension bridge over Trinity River in Road District No. 5. Bids will be opened on July 30th. Plans and specifications can be secured from the County Clerk.

STREET PAVING, SEWERS, CURBS, ETC.—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. At the last meeting of the City Council resolutions of intention were passed for the improvement of several streets, one being the improvement of North El Dorado street from North street to Wyandotte street; Maple, Ash and Walnut and Sperry avenue, from North El Dorado street to Sperry Park. Another was for the improvement of North Commerce and North Center streets from Ash to Wyandotte street and Ash and Maple from North El Dorado to Sperry Addition. The other was for North Commerce and North Center streets from North street to Ash, and Walnut and Elm streets from

North El Dorado to Sperry Addition. Concrete curbs and gutters are to be put in and the roadway to be paved with asphalt concrete.

STREET PAVING—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans and specifications for macadamizing and otherwise improving portions of Jackson, Clay, Van Buren, Monroe, Madison and Commerce streets, were ordered at the last meeting of the City Council.

STREET—PAVING—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans have been completed and figures will be opened on July 27th for furnishing of the labor and materials and doing the work for paving with asphalt concrete (Topeka specifications) portions of Weber and Miner avenues, Market, Commerce, Sonoma, Church, Washington, Sutter and San Joaquin streets.

STREET IMPROVEMENT—\$10,305.10. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has passed a resolution of intention for the paving and improving of the northwesterly, southerly and central roads of the new city park, west of Yosemite Terrace by grading all of said roads, paving the northwesterly road with oil macadam and graveling a 20-foot strip along the center of the other two roadways.

WATER MAINS AND PAVING—Cost not stated. Dunsmuir, Siskiyou Co., Cal. Engineer's name not given. Owners, Town of Dunsmuir and California-Oregon Power Co. The California-Oregon Power Company which furnishes water to the town of Dunsmuir, has contracted for a new water main to be laid on Florence avenue, Dunsmuir, at a cost of \$10,000. Florence avenue is shortly to be paved and other improvements made to connect with the state highway, which is now being graded from Dunsmuir to Weed and to connect with the new concrete bridge at the northern outskirts of the city.

STREET PAVING AND SEWERS—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Plans are complete and figures will be opened on July 27th for paving with asphalt and laying sewers in certain streets in the Oak Grove addition. Plans can be secured from the City Engineer.

IRRIGATION PROJECT—Cost not stated. Alturas, Modoc Co., Cal. Engineer not selected. Owners, Cowhead Irrigation Project. A party of Minneapolis and Wisconsin capitalists have departed for a trip of inspection over the Cowhead Irrigation proposition in the Suprise Valley, this county. If the enterprise appeals to them, it is announced they represent abundant capital to finance it completely and bring nearly 50,000 acres of land on the east side of the lake under irrigation. The party was headed by G. A. Gorder of Albert Lea, Minn., accompanied by ten others from various points in Wisconsin and Minnesota.

IRRIGATION PROJECT—\$250,000. Paradise, Butte Co., Cal. Engineer, C. S. Compton, Paradise, owners, Paradise Water Users' Association. Civil Engineer C. S. Compton has completed estimates and a preliminary survey of

the reservoir site and main canal for the proposed gravity irrigation district, and has taken the matter up with the Paradise Water Users' Association. The system could be constructed in two units, according to Compton. The first by building the dam up to the 75-foot contour of the proposed reservoir. Water from this unit would then irrigate 1,500 acres at a cost of about \$75,000. After the territory in which the water is to be used has developed, the second unit could be installed. The second unit would be constructed by raising the dam to the 145-foot contour. Such a dam would back the water up in the reservoir so that it would cover about 700 acres. The two units would then be capable of furnishing a supply of water to the whole ridge. Engineer Compton estimates that the two units and distributing system would cost approximately \$250,000, or \$25 an acre for 10,000 acres. A bond issue will be voted to raise funds for the construction of the proposed system.

Contracts Awarded.

SCHOOL—2 story and base, frame, \$3,090. Lathrop, San Joaquin Co., Cal. Architects, Young & Jeffery, Wolfe Bldg., Stockton. Owners, Golden West School District. Contractor, Charles Anderson, Stockton. Contract price, \$3,090.

SCHOOL—1 story and base, frame, \$18,000. Courtland, Sacramento Co., Cal. Architect, P. J. Herold, Forum Bldg., Sacramento. Owners, Bates Union School District. Contractors, G. W. Martin & Son, 1217 19th Sacramento, general construction, \$14,096. Hately & Hately, Sacramento, plumbing and heating, \$3,886.

SEWER CONSTRUCTION—Cost as follows. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, McCleuds Addition to A. Teichert & Son, Ochsner Bldg., Sacramento. Contract price, \$6,968.35. E. C. Hamlin, San Jose, sewers in southern portion of city. Contract price, \$3,101.75.

STREET IMPROVEMENT—\$6,939. Eureka, Humboldt Co., Cal. Engineer, City Engineer, Eureka. Owners, City of Eureka. Contractors, Elsmore & Jacobs, Eureka. Contract price, \$6,939.

BUILDING CONTRACTS

SACRAMENTO COUNTY.

SCHOOL
LOT OWNED BY DILLARD SCHOOL District near Dillard Station on Central California line, Sacramento. All work for school building. Owner.....Dillard School District. Architect.....None.
Contractor, Manuel A. Frates, 1728 S St., and Joseph A. Lucas, 1604 V St., Sacramento.
Filed July 13, '15. Dated June 31, '15.
COST, \$2393

REPAIRS
NO. 615 E ST., on Lot 6 Bld D, E, 6th and 7th Sts., Sacramento. Repair roof and fire damages to one and one half-story frame building. Owner.....Southern Pacific Co., 50 K St., Sacramento
Architect.....None.
Day's work COST, \$500

FRAME RESIDENCE

NO. 320 TWENTY-SIXTH, Lot 38 New Era Park in Blk C, D, 25th and 26th, Sacramento. One-story frame residence.

Owner.....T. J. Crabbe, Yuba City.

Architect...None.

Day's work. COST, \$1750

FRAME RESIDENCE

NO. 2112 O ST., (rear), on E ½ Lot 2 Blk Q, R, 21st and 22nd, Sacramento. One-story 5-room frame residence.

Owner.....J. Gustavson, 1718 U St., Sacramento.

Architect...None.

Contractor...W. R. Saunders, 2810 I St., Sacramento.

COST, \$1658

SAN JOAQUIN COUNTY.

SCHOOL

ON SONORA ROAD, Nightingale. All work for two-room and basement school.

Owner.....Wm. Hollenbeck, Clerk of Board Montezuma School District.

Architect...None.

Contractor...C. R. Petzinger, 229 South Sutter, Stockton.

Filed July 8, '15. Dated.....

Concrete and joists in place and lumber on job.....\$1200.00

Rough frame ready for roofing and rustic.....800.00

Building enclosed ready for plastering.....714.75

Plastering and exterior painting completed.....1000.00

Usual 35 days.....1238.25

TOTAL COST, \$4953.00

Bond, \$2477. Sureties, J. C. Keys and Thomas Connolly. Limit, 60 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

SACRAMENTO COUNTY.

RECORDED ACCEPTED

July 15, 1915—ROAD at Glannvale. (grading for spur track and road).

Frank G Drum and Warren Olney Jr, receivers of property of Western Pacific Railway Co to Palmer & McBride.....July 7, 1915

COMPLETION NOTICES

SAN JOAQUIN COUNTY.

RECORDED ACCEPTED

June 22, 1915—NW FREMONT AND Aurora, Stockton. Stockton Board of Education to French & Zink.....June 12, 1915

June 29, 1915—LOT BDED BY VINE, San Joaquin, North and California. Stockton. High School Board of Education to Chirhardt & Nystedt.....June 25, 1915

June 29, 1915—MADISON ST., bet Park and Flora; also Lindsay, bet Sierra Nevada and East, Stockton. Stockton Board of Education to The Pacific Blower & Heating Co.....June 25, 1915

July 7, 1915—YOSEMITE TERRACE, Stockton. Merren G and R M Morton to U H Chain and the Miller Hays Co.....June 25, 1915

LIENS FILED

SACRAMENTO COUNTY.

RECORDED AMOUNT

July 14, 1915—W ½ LOT 6, W, X, 23d, and 24th, Sacramento. Frances A McIntyre vs William Morris.....\$113.25

July 13, 1915—W ½ LOT 6, W, X, 23rd and 24th Ais, Sacramento. Enough-Winchell Hardware Co vs William Morris.....\$56.39

June 30, 1915—LOTS 1 AND 2 BLK 8, West Del Paso Heights, Sacramento Oak Park Lumber & Milling Co vs J E Westoby and Hesperian Investment Co.....\$195.65

RECORDED AMOUNT

July 8, 1915—W ½ LOT 2, C, D, 30th and 31st Sts., Sacramento. J C Hobrecht vs William M Morris.....\$15.15

RELEASE OF LIENS

SACRAMENTO COUNTY.

RECORDED AMOUNT

June 26, 1915—S ½ LOT 2 AND LOTS 3 to 8 inclusive Blk 17, Galt. H Hayes to S T Merrill.....

LOS ANGELES AND SOUTHERN CALIFORNIA.

STORES AND OFFICES—2 story and base, reinforced concrete. Cost not stated. Calexico, Imperial Co., Cal.

Architect, Sam Zimmer, Calexico. Owner, Max Harris. The building will cover a site 100 by 100 feet, and has been designed for four small stores on the first floor. Upper floor will contain 31 offices. Foundations and walls have been designed for additional stories. Interior will be finished in pine and redwood. A cement floor will be used. Patent store fronts are specified. Marble and tile bases will be used. Exterior of the building will be faced with cement plaster. Plans are complete and figures are being taken.

BRIDGE—Reinforced concrete. Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, San Luis Obispo County. Engineers Leonard & Day are now issuing plans and specifications for the concrete bridge to be erected over the San Luis Obispo Creek, near San Luis Obispo. Bids close August 3rd at 10 o'clock. Contractors desiring to bid on this work should apply for plans and specifications at the offices of engineers.

BRIDGES—2, steel and reinforced concrete. Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. At the last meeting of the County Supervisors plans and specifications prepared by the County Surveyor for the construction of a 34-foot span reinforced concrete I-beam bridge over the Chorro Creek, about four miles from the city of San Luis Obispo, and for a 12-foot span concrete slab bridge or culvert at the "Ferrasi Dairy" on the Stowe Tract, about eight miles from San Luis Obispo, both on the San Luis Obispo and San Simeon public road, were adopted and bids were ordered called. Plans and specifications were also adopted for a 22-foot span, reinforced concrete, I-beam bridge near the "Cerin" ranch, and for a 6-foot arch bridge or culvert

near the D. McKeen ranch, each about 2½ miles from San Luis Obispo on the Buckley road, were also adopted. Bids on both structures close August 3rd at 10 a. m.

Contracts Awarded.

BRIDGE—Reinforced concrete, \$2,245. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractor, E. J. Hunt. San Luis Obispo. Contract price, \$2,245.

BRIDGE—Steel and reinforced concrete, \$21,700. Miles Station, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractors, Gutleben Bros., New Call Bldg., S. F. Contract price, \$21,700.

SEWER CONSTRUCTION — \$20,717. Santa Barbara, Santa Barbara Co., Cal. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractors, Eggart & Ukovisia, Los Angeles. Contract price, \$20,717.

PORTLAND AND OREGON

SUNDAY SCHOOL—2 story and base, reinforced concrete, \$15,000. Portland, Ore. Architects, Tourtelotte & Hummel, Rothchild Bldg., Portland. Owners, First Methodist Church of Portland. The building will be erected at the corner of 12th and Taylor streets, covering an area of 60 by 100 feet. Each floor will be arranged for a number of class rooms, library and offices. Interior will be finished in pine and hardwood with some maple floors. Plans provide for steam heat and vacuum cleaning. Some art glass windows will be used. Exterior of the building will be faced with cement plaster. Plans are complete and figures are being taken.

CITY HALL—2 story and base, brick, \$25,000. Tillamook, Ore. Architect, Charles H. Burgraff, Albany. Owners, City of Tillamook. The building will cover an area of 52 by 100 feet. The fire department will occupy the basement and a portion of the first floor. City offices, council chamber and library will occupy the balance of the first floor. Second floor will be arranged for an auditorium, offices and club room. Interior will be finished in pine. There will be a central heating system. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken. Bids will be opened on July 26th.

DETENTION HOME—2 story and base, brick and steel, \$25,000. Portland, Ore. Architects, Doyle & Patterson, Worcester Bldg., Portland. Owners, City of Portland. The building will be arranged for offices, juvenile court rooms, judges room and library. There will be kitchen equipment, dormitories and dining halls. Interior will be finished in pine. Plans provide for steam heat, a hot water system and vacuum cleaning. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans have been completed and figures will be called for shortly.

WAREHOUSE—1 story, reinforced concrete. Cost not stated. Portland, Ore. Architect, Engineering Department, Portland. Owners, City of Portland. The building will be erected on property near Municipal Dock No. 1

The structure will be 320 feet long and 176 feet wide. Construction will be fireproof with concrete floors and walls and a four-ply asbestos roof. Plans provide for metal window sash and frames and an automatic sprinkler system. Exterior of the building will be faced with cement plaster. Plans are complete and figures are being taken. Bids will be opened on July 25th.

JETTY WORK—\$176,570.90. Portland, Ore., Engineers, United States Engineers, Couch Bldg., Portland. Owners, United States Government. Bids opened show the Miami Company (A. C. U. Berry), Selling Bldg., Portland, low at \$176,570.90 for the construction of the north and south jetties at the mouth of the Siuslaw River. The north Jetty will extend out about 500 feet and the south Jetty over 200. The work is to be let in one general contract to include the driving of the piling, placing and delivering the rock.

VIADUCT—Steel and reinforced concrete. Cost not stated. Portland, Ore., Engineers, Portland Dock Commission, Portland. Owners, City of Portland. Plans and specifications having been completed, the Dock Commission of this city has authorized the calling for bids to be received on July 25th for the construction of a viaduct to be built at the foot of 17th street at the county ferry right-of-way. The structure will be 20 feet wide and 180 feet long.

Contracts Awarded

SCHOOL—1 story and base, brick, \$74,897. Portland, Ore., Architect's name not given. Owners, City of Portland. Contractor, J. S. Winters, Couch Bldg., Portland. Contract price, \$74,897.

SEATTLE AND WASHINGTON

DETENTION HOME—4 story and base, brick, \$75,000. Seattle, Wash. Architects, Bebb & Gould, Denny Bldg., Seattle. Owners, United States Government. The building will be erected at the corner of Western avenue and Union and will cover an area of 60 by 120 feet. The structure has been designed for a detention home for the immigration service and will contain offices, dining rooms, dormitories and detention cells. Interior will be finished in pine. There will be metal window sash and frames. Plans provide for steam heat, elevator service, hot water system and vacuum cleaning. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are now being prepared.

HOTEL—3 story and base, brick, \$50,000. Seattle, Wash. Architects, Somervell & Putnam, White Bldg., Seattle. Owner, F. E. Welty, New York Bldg. The building will be erected at the corner of Sixth avenue and Spring street, covering an area of 60 by 120 feet. The building has been designed to contain 100 guest rooms and a number of public and private baths. Interior will be finished in pine. There will be steam heat and a hot water system. Tile wainscot and composition floors will be used in the bath rooms. Exterior will be faced with pressed brick. Plans are complete and in the hands of the owner who is taking figures on the work.

PUBLISHING OFFICES—4 story and base, reinforced concrete, \$50,000. Seattle, Wash. Architects, Bebb & Gould, Denny Bldg., Seattle. Owners, Puget Sound News Co. The building will be erected at the corner of Second and Virginia streets, covering an area of 45 by 108 feet. There will be the general offices and subscription department on the first floor. Upper floors will contain editorial rooms, offices and composing rooms. Mechanical department will occupy the basement. Plans provide for freight and passenger elevators, steam heat and hot water supply. Exterior of the building will be faced with cement plaster trimmed with terra cotta. Plans are nearly complete and figures will be called for shortly.

LODGE BUILDING—4 story and base, steel and reinforced concrete, \$125,000. Butte, Montana. Architects, Link & Haire, Butte, Montana. Owners, Knights of Columbus. The building will occupy a corner site covering an area of 65 by 100 feet, and will have a complete steel frame, reinforced concrete walls and floors. The entire structure will be occupied by the organization. Interior finish will be of pine and hardwood with hardwood floors. Plans provide for steam heat, elevator service, a hot water system and vacuum cleaning. Marble and tile wainscot and bases are specified. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and figures are being taken.

Contracts Awarded

APARTMENT HOUSE—4 story and base, reinforced concrete, \$100,000. Seattle, Wash. Architect's name not given. Owners, Kreilshelmer Bros. Contractor, Isham B. Johnson, 3528 Evanston avenue, Seattle. Contract price, \$100,000.

IRRIGATION PLANT—\$600,000. West Okanogan, Wash. Engineer's name not given. Owners, West Okanogan Irrigation District. Contractors, Guthrie-McDougal & Co., Pittcock Block, Portland, Ore. Contract price, \$600,000.

REAL GERMAN OPINION GAGGED.

Fatherland Powerless in Grasp of Bureaucracy, Says Prof. E. R. Hedrick.

"It would be amusing if it were not desperate to note the puerile faith which English and Some American papers display in the reports and editorials published in German newspapers," says Prof. E. R. Hedrick of the University of Missouri in a striking letter to the New York Evening Post.

Professor Hedrick writes "in defense of the real Germany," which lies helpless behind the thick veil of imperial censorship; and the fact that he holds a degree from the University of Göttingen and is a member of the Deutsche Mathematiker Vereinigung would seem to lend weight to his words.

Professor Hedrick mentions having a German-born friend, holding a position of prominence in this country, who recently received a letter from his brother in Germany "begging him not to believe what the German papers are printing about the conditions and opinions in Germany." The professor also observes that he finds it difficult to imagine an intelligent German express-

ing "in cold words in a German newspaper his real opinion of the invasion of Belgium or of the sinking of the Lusitania."

Professor Hedrick writes further, in part:

I claim that Germany has had little to say about her government, that she has been highly suspicious of that government, and that she is responsible for the recent acts of which we disapprove only in that she has not yet exerted herself to alter that government. I claim that no reasonable opportunity now exists for reliable expression of German opinion, and that the real Germany is as humane, as trustworthy, and as honorable as is any nation. Those who are leading men to think otherwise are enemies of Germany, whether they frankly avow it or whether they stand for and seek the favor of the present government of Germany. * * *

It was a German, and by no means an Englishman, who forced the German government to announce in the Reichstag long before the war that under no conceivable circumstances would the German army invade Belgium if other powers did not.

It was a German who expressed the rottenness of a clique which disgraced German court circles a few years ago.

Real Germans as well as Alsatlans voiced protests that were as dangerous as they were futile against the arbitrary acts of German military offices in Alsace.

Yet the government which stands in reality not for the Kaiser so much as for the whole bureaucracy of Berlin and Prussia has been retained. In defense of Germany, he it said that any real alteration would not be so easy a matter as in England or in America.

While revolutions would not be strictly necessary in Germany, it is true that serious changes in the organic law would be necessary before even an unfavorable majority would secure any effective change of policy, or any such change in the real rulers as happens regularly in England.

LEASE.

July 19, 1915—NO. 110 FILLMORE E. line bet Golden Gate Ave and Turk. Arthur H Cousins to Abe Cohn. 2 years. \$45 per month.

WOODS WE USE IN OUR TOYS.

"It must not be considered that dolls are the only wooden toys in the manufacture of which American industry has been progressing," says the Southern Lumberman. "Among the toys made in this country from American woods are toy animals, blocks, boats, cannon and forts, children's chairs, circus sets, dolls, doll furniture, games, Christmas tree holders, swing jumpers, children's pianos, pastry sets, babies' play yards, toy shooting galleries, hobbyhorses, popguns, toy wagons, toy autos and wheelbarrows. Basswood is the principal material for wooden toys and for wooden parts of metal toys. Next to basswood, sugar maple, beech, birch and white pine are the principal woods used for toys. The amount of woods used annually in the United States for toy manufacture is nearly 29,000,000 feet."

CHINESE COMMERCE AND LABOR COMMISSIONER.

Dr. Ming-feng Young, who has come to the United States as a commissioner of the Chinese Ministry of Agriculture and Commerce for commercial and

Lower the flag, which will remain in this country for a year and will, during that time, have a permanent address at 315 West Twelfth Street, Kansas City, Mo. The Department of Commerce, through the Bureau of Foreign and Domestic Commerce and its branch offices, plans to co-operate as fully as possible with Dr. Young, and will be glad to communicate to him any questions concerning Chinese matters or will endeavor to arrange, while he is visiting any of the cities wherein a branch office of the bureau is located, to have him put in touch with inquirers there.

The National Americanization Day Committee has sent out a printed circular to make July 1, 1915, an Americanization Day; that is to emphasize the fact that the people who live in this country and enjoy the privileges of its government owe allegiance to its flag. The idea is a good one, for since the outbreak of the war in Europe it has been brought home to many of us the fact that there are a lot of hyphenated Americans among us who look upon this country as a place to make a living in and in the event of war it would be a secondary consideration. So the European countries consider their subjects always subject to their call no matter if they have renounced allegiance to their mother country and have sworn allegiance to the United States.

This country would be a great deal better off if some of its hyphenated Americans would return to the country they came from. For those who came to make their lot with us and help in the upbuilding of its institutions and share in its responsibilities the doors will be ever open. But the doors should be kept open just as wide for those who live here and hold their allegiance to foreign countries to clear out at any time and the sooner they do the better for all concerned.

SAVE!

The lesson that war in Europe must be paid for in America is being driven home to us daily. One thing that must be realized at once, with due effect upon Congress, is that the rate of governmental expenditure must be reduced, if the nation is not seriously to feel the effect of war imposition. Figures published June 23, by the treasury department show that not only have the customs duties greatly decreased from the income of last year, but that the total is many millions of dollars less than the lowest estimate made last winter by the experts of the administration in figuring how much the treasury would suffer. At the present rate of income and outgo, the United States will shortly be bankrupt if the war lasts the estimated three years.

There are of course but two possible alternatives for Congress. Either taxes must be increased, or the estimates of public expenditures must be greatly reduced. Congress made some little attempt during the last session to economize, but the effort was resisted by the great mass of the majority members, who had promised money for home expenditures and felt they must make good to their constituents.

In the face of a world crisis, the demand for economy must be made absolute. Not a single new line of public expenditure should be undertaken. Only such inaugurated undertakings should be continued as are imperative because of the possibility of losing the funds already spent. The limit of possible efficiency in handling the means not at the disposal of the administration should be used. This is the time for the Democratic majority, now in control of Congress, to conform rigorously to those rules of economy which the opposition platforms have been using against the Republican administration for sixteen years.—Fresno

PRIZES AWARDED TO GEOLOGICAL SURVEY AND BUREAU OF MINES.

The preliminary list of awards by the Panama-Pacific International Exposition gives the Department of the Interior collective exhibit one grand prize. The exhibit of the Geological Survey receives one grand prize, four medals of honor, five gold medals, six silver medals, and two bronze medals. The Bureau of Mines receives one grand prize, six medals of honor, three gold medals, and three silver medals.

DISCOVERED BY ACCIDENT.

Fuller's earth was discovered in Florida in 1893 through mere accident. An effort was made to burn brick on the property of the Owl Cigar Co., near Quincy; the effort failed, but an employee of the company called attention to the close resemblance of the clay used to the German fuller's earth. Florida is now the leading State in the production of fuller's earth, having reported for 1914 more than 75 per cent of the total quantity and value.

ROAD MODELS.

Many Kinds of Roads Illustrated by Models—Construction of a Split-Log Drag.

The exhibit of road models shown for the first time in 1909 by the Office of Public Roads of the department at the Alaska-Yukon-Pacific Exposition has been in active service ever since. Hundreds of thousands of people have seen these models at a dozen or more of the big agricultural expositions, and they have traveled much of the length and breadth of the United States on demonstration trains. A comprehensive exhibit is now being made at the Panama-Pacific Exposition at San Francisco, Cal. People who have seen these miniature model roads not only appreciate the beneficial effects of improved roads but at the same time understand the methods of their construction. In order that these models may have a still greater usefulness, they have been photographed and form the basis of illustrations of a new United States Department of Agriculture Bulletin No. 220, "Road Models."

The models, as a rule, are constructed on a scale of 1 inch to a foot, so that each model is one-twelfth the size of the actual road which it represents. Among the later methods of road building which are pictured and described are the brick, concrete, asphalt-block, macadam, sand-clay, gravel, and earth roads. Still other models show the

processes of maintenance, resurfacing, and bituminous macadam construction by the mixing and penetration methods. Recent additions to the series illustrate road location and roadside treatment, drainage, strengthening unstable foundations, etc.

The history of road construction, dealing with the early methods employed in Italy and France, is followed with discussions and illustrations of the most modern ways of road building. With the widely varying conditions in the United States the scope of road building is necessarily large, and in many sections roads must be constructed largely of the material at hand. The bulletin, Road Models, is applicable to a wide range of conditions.

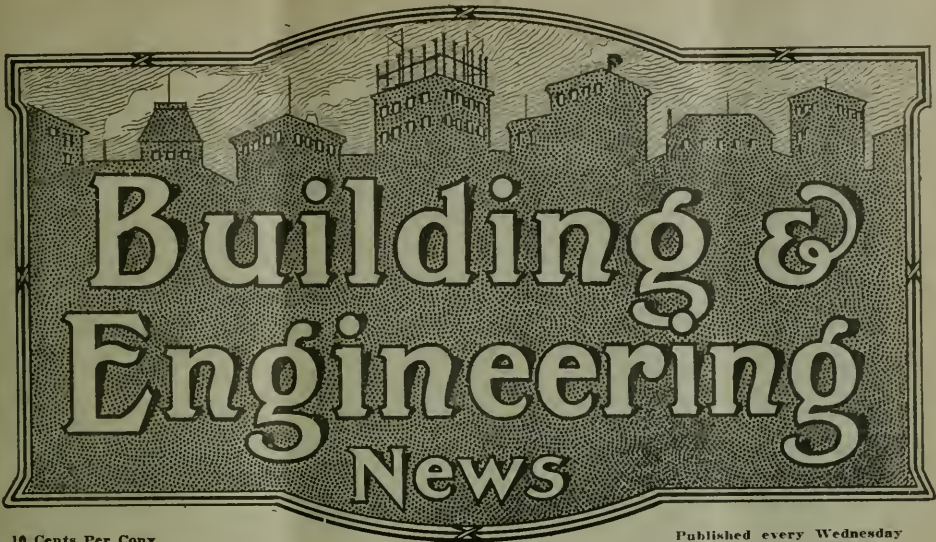
In the section dealing with earth roads the subject of the split-log drag is treated as follows: A suitable drag can be made from a log 7 or 8 inches in diameter and from 6 to 8 feet long. It should be carefully split and the halves, with the flat sides vertical and facing to the front, connected by stakes. The halves, though of the same length, are joined so that one end of the rear half is from 16 to 20 inches nearer the center of the road than the corresponding end of the front half. An ordinary trace chain and a set of double-trees are then attached in such manner that when the horses move forward the drag will be pulled along the road at an angle of about 45 degrees, with the forward end nearest the ditch in order to move the earth toward the road center.

The drag should be light enough to be lifted by one man. The best material is dry red cedar, though red elm and walnut are excellent, while box elder, soft maple, elm, or willow are superior to oak, hickory, or ash. A platform is usually placed on the cross stakes to strengthen the drag and furnish a place for the driver to stand. After a little practice a man can learn how best to shift his weight so as to make the drag cut, spread, and pack the earth properly.

Filling the ruts by dragging up one side of the road and down the other is all that should be undertaken the first time, but this should be repeated after each heavy rain. As a mile of road can be dragged in a few hours, this method of maintenance is simple and inexpensive. If the drag is used in conjunction with the road machine, fairly good earth roads can be built for 50 cents per mile in some parts of the country. At this rate a mile of earth road can be dragged once a month for \$6 annually. Some remarkable results have been accomplished with the drag without the aid of the road machine. Farmers' Bulletin 597, "The Road Drag and How to Use It," deals fully with this subject. Copies of this publication will be sent free to persons applying to the Editor and Chief of the Division of Publications, U. S. Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

A wireless message sent from Honolulu to Japan, a distance of 3400 miles, completes the wireless girdle of the earth.

There are 566,000 telephones listed in the new telephone directory for New York City.



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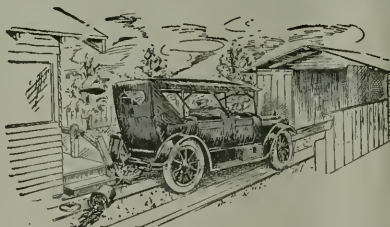
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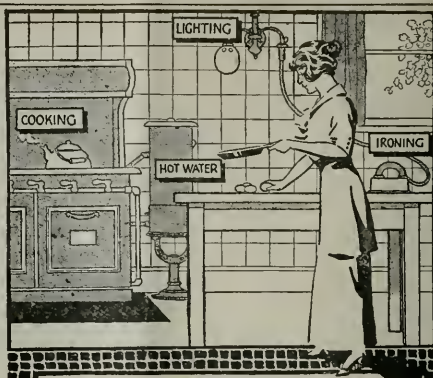
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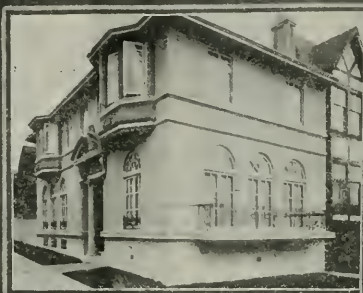
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Building and Engineering News

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of the Pacific Coast.

Issued Weekly, \$3.00 per year

San Francisco, July 28, 1915

Fifteenth Year, No 28

The growth of the city of Los Angeles has necessitated large and frequent bond issues for the school system enabling it to keep pace with the growth of the city. The people of Los Angeles, divided on many questions, are a unit on the question of the necessity for keeping up the public school system. This was shown in a striking way last fall, when, in a time of general dullness and financial retrenchment, the voters of the city gave an overwhelming indorsement to the \$4,600,000 school bond issue.

Of this huge appropriation \$3,000,000 was intended for new elementary schools and \$1,600,000 for high schools. No immediate market being found for the issue as a whole, the bonds were segregated into amounts covering individual building projects. The plan has been entirely successful, each school having been provided for as it has come up for consideration.

Today, less than a year after the bond election, the Board of Education can point with pride to the fact that that arrangements have been made for the financing of every building contemplated in the city school program, including, with additions to old structures, sixty separate undertakings. Fourteen of the new buildings, including the splendid new Franklin High School in Northeast Los Angeles, are now under way. Contracts have been awarded for several more and bids are being taken for others.

Conservation of flood waters in Los Angeles County will soon take on large dimensions as the tentative work done last fall has proven a success.

The county built five test check dams in a half-mile side canyon leading into Haynes canyon last fall and in the heaviest rains the storm waters never reached the canyon mouth. Now the county will have 340 of these dams built at an average cost of \$13 each to test their value next winter.

"If this scheme works as well, as it is believed it will, the work will be extended generally through the mountains, building check dams and scarifying the mountains to hold the storm waters, reforestate the mountains and canyons and while eliminating the devastating flow of storm waters into the valley.

This work in Haynes canyon, which is tributary to the great Tejuca canyon, consists of a series of 340 test "check dams" to catch and hold the flow of storm waters. These dams, built at intervals of from 50 to 300 feet, prevent devastating flow of storm waters into the valley, and the water remains in the canyon.

"This project is the beginning of a great comprehensive

enterprise to cost between \$3,000,000 and \$4,000,00, for which the county will probably ask the people of the county to approve a bond issue."

The viaducts over the Los Angeles River will not be left to die a natural death in any committee, for the Los Angeles City and County Viaducts Association has been formed and is hot on the trail of councilmen and supervisors to see that the dangerous grade crossings are eliminated and the viaducts built. The president of this association is rather explicit in his statements, for he says: "There can be no shirking this proposition and each councilman and supervisor should feel a personal moral obligation to see that nothing is left undone to secure the separation of grade crossings at the earliest possible moment.

The estimated cost of the six viaducts as planned is \$4,260,000, which, when it is considered that the total amount is to be divided among seven interests does not present such an insurmountable problem. Suppose the city's share to be \$1,065,000 and one or perhaps two viaducts to be constructed a year, the amount respectively is only \$177,500 or \$355,000 which is considerably less than it takes to provide the two-platoon system for the firemen of the city and which the people so readily voted.

The viaduct system is as essential to the industrial district when expansion is considered as it is to the people generally, as the council has gone on record as opposing additional spur tracks privileges at street crossings until such time as the grade crossing problem is taken care of.

A motor road to the summit of Mt. Whitney is the newest project launched by the Southern California Auto Club.

Associated with the Automobile club, in the project will be the Los Angeles Chamber of Commerce, the State Highway Commission, the State Board of Control, the State Forestry Service, Kern County and the Los Angeles County Highway Commission. Not only will the normal support and influence of the Automobile club and the other organizations be given to the work, but active co-operation in a pull together movement will be given by the various officials.

In August a party composed of representatives of each of the named organizations, of various civic bodies of Southern California, personal representatives of Governor Johnson and expert engineers will leave Bakersfield in a body to cover the proposed route of the new road. This party will go by automobile as far as Weldon, fifty miles from Bakersfield and from that point the ascent of the mountain will be made with pack mules.

Long Beach Concrete Pipe Sewer And Disposal Plant.

By George Nelson, C. E.

The phenomenal growth in the uses of Portland cement concrete during the last ten years is evidenced in the Long Beach Outfall and Intercepting Sewer and Disposal plant now being completed by Bent Brothers, Engineering contractors of Los Angeles. Olmsted and Gillelen of Los Angeles were the consulting engineers for the work.

Long Beach, under the Hatch mayoralty, voted \$340,000 for the building of an outfall sewer system. According to what has been spent and estimates of the amount required to complete the system, its final cost will be \$331,994, leaving a balance of \$8,006.

The city pays the general contractors, Arthur S. Bent

States and is located close to the ocean shore, a 36-inch cast iron pipe taking the effluent out.

The disposal plant is being built by The Sanitation Corporation of New York.

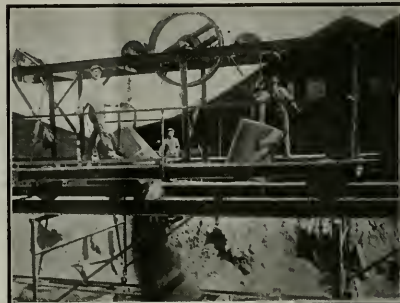
The unit prices for the work are as follows:

10-inch concrete pipe	\$0.88
12-inch concrete pipe	1.02
18-inch concrete pipe	1.57



Trenching with Parsons Machine 54 inches wide and 20 feet 6 inches deep.

Company, \$215,193.06. The ocean outlet, contract for which was awarded to the Mercereau Bridge and Construction Co., costs \$29,007. The contract with Sanitation Corporation of New York for the sewage disposal incinerator, calls for \$39,400. To Olmsted & Gillelen, Los Angeles, who drew the plans and are supervising engineers, is allowed \$20,000. Long Beach bought incinerator



Potter Trench Machine—Buckets of excavated material being dumped on the completed sewer.

20-inch concrete pipe.....	1.73
22-inch concrete pipe	2.40
24-inch concrete pipe	2.20
27-inch concrete pipe	2.92
30-inch concrete pipe	3.56
33-inch reinforced concrete pipe	5.00
48-inch reinforced concrete pipe	6.05
Manholes	50.00

Excavation.

The materials encountered in excavation were clay, sand and gravel, blue sticky clay and quicksand, in all about 110,000 cubic yards. The clay was excavated with a Parsons Trench Excavator digging holes 20.5 feet deep, 8 feet long and 5 feet wide, and followed up by a Potter Trench Machine which took out everything below 20 feet and also the tunnel sections. It consists of a hoisting engine and



Potter Trench Machine handling excavation in a trench 27 feet deep.

and settling plant sites from the Los Angeles Dock and Terminal Co for \$6,000. To the O'Melveny house of Los Angeles bond attorneys was paid \$340 for an opinion on the bonds.

Scope of Work.

- (1) Main outfall 48-inch pipe.
- (2) Signal Hill Interceptor 33-inch and 27-inch pipe.
- (3) Seventh Ward Interceptor 18-inch pipe.
- (4) Belmont North Branch Interceptor 30, 24, 20, and 12-inch pipe.
- (5) Belmont South Branch Interceptor 22, 18, 12, and 10-inch pipe.

The disposal plant is of the Riensch-Wurl rotating type screen and is the first of its kind completed in the United



Laying 45-inch Reinforced concrete pipe.

car with two cable drums for lowering into the trench the two buckets each of 5-8 yard capacity used for taking up the earth; this car runs on steel rails on top of a frame work situated on top of the ditch and straddling it and being itself on wheels running on rails laid on regular ties laid across the ditch. It can be moved by the hoisting engine along with it as the excavation progresses; the ex-

bordering this alley and backdoors and back porches had to be boarded up. The excavation depth varied from four feet to thirty feet with an average depth of thirteen feet.



Laying 48-inch Reinforced concrete pipe under difficulties.



Excavation 54 inches wide and 23 feet deep for 33-inch Reinforced concrete pipe sewer in an alley 10 feet wide.

excavated material can be used for backfilling over the completed pipe which follows the excavation very closely.

Where strata of sand and gravel were encountered open cut was resorted to using both machines.

Excavation of the blue sticky clay was accomplished by hand and the quicksand was handled by means of power siphon pumps keeping the trench free from water and



Laying 30-inch concrete sewer pipe in trench 12 feet deep.

enabling the men to work therein and lay the pipe as in ordinary moist sand trench.

One alley ten feet wide where the trench is 23 feet deep and 54 inches wide and the space between the ditch and the houses and fences about 33 inches wide the spoil banks in some instances reached the top of the one-story houses



Backfilling with Waterloo power trench filler.

Pipe and Pipemaking.

There is 2,640 feet of 10-inch machine made concrete pipe.

There is 6,138 feet of 12-inch machine made concrete pipe.



Concrete pipe machine, operator preparing to tamp the bell of a 22-inch glazed cement sewer pipe.

There is 8,381 feet of 18-inch machine made concrete pipe.

There is 2,532 feet of 20-inch machine made concrete pipe.

There is 7,989 feet of 22-inch machine made concrete pipe.

There is 1,320 feet of 24-inch machine made concrete pipe.



Carting away 30-inch concrete pipe from storage yard.

There is 1,145 feet of 27-inch machine made concrete pipe.

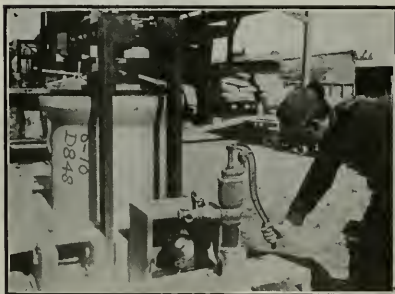
There is 16,267 feet of 30-inch machine made concrete pipe. All of the bell and spigot type, made in 21-2 foot lengths.

There is 5,000 feet of 33-inch hand made reinforced concrete pipe.

There is 12,000 feet of 48-inch hand made reinforced concrete pipe. All made in three-foot lengths



California Glazed Cement Pipe Co., Long Beach
Plant—Storage Yard.



Testing 30-inch Glazed Cement Sewer Pipe for water tightness—Gauge shows 42 lbs.—This pipe is less than 30 days old, has a $2\frac{1}{2}$ inch shell and is not reinforced or treated.



Foundation and pump pits of Long Beach Sewage Disposal Plant.



Foundation and pump pits with chimney started.

All pipe 30-inch and under was made on the Thomas-Hammond New Model Mixing and Pipe Making Machine and is exceptionally dense and hard.

All factory-made pipe going into the system was tested



Erecting concrete chimney for incinerator in connection with disposal plant.

at the factory. The 10-12-18-20-22-24-30-inch sizes stood forty pounds pressure without seepage or fracture.

All cements used in October, November, December, 1914, and to January 10, 1915, were tested by Captain Milner in his field laboratory. From January 10 to date the Robert W. Hunt Company of Los Angeles has been making the cement tests.

For all sizes from 10-inch to 30-inch the mixture was 1 part of cement to 3 parts of aggregate; the aggregate



Frame of building for Sewage Disposal Plant, showing chimney completed and incinerator partly constructed.

being mixed about one-half sand and one-half rock, or so as to make the densest mixture possible of the materials at hand. For the reinforced pipe the mixture was one part of cement, two parts of sand and four parts of

ock. The sizes of the shell was:
1-inch thick for 10-inch pipe.
1 inch thick for 12-inch pipe.
1 1-2 inch thick for 18-inch pipe.



By pass channel in Disposal Plant.

1 3-4 inch thick for 20-inch pipe.
1 7-8 inch thick for 22-inch pipe.
2 inches thick for 24-inch pipe.



Main channel through which sewage flows to screen

2 1-4 inches thick for 27-inch pipe.
2 1-2 inches thick for 30-inch pipe.
3 3-4 inches thick for 33-inch pipe.
5 inches thick for 48-inch pipe

Reinforcements: Electrically welded spirals quarter inch and three-eighths inch wires with four space bars of corresponding size, all according to load on top of pipe.



Incline foundation for the Riensch-Wurl Screen, Sewage Disposal Plant.

Spiral coils manufactured by the Electric Welding Company of Pittsburgh were shipped from the east collapsed, space bars inserted and tied with Curry tier in the field.

Disposal Plant.

The disposal plant is of the Riensch-Wurl Rotating Screen Type, which is new in this country, but has been in successful operation in a number of German and other Continental European cities for several years.



Bottom view of steel frame work of Riensch-Wurl Screen—Shows brushes which keep screen clean.

The foundation, screen pit, pump pit, the building and the chimney are all built of concrete. The effluent after having passed the screen is pumped out into the ocean through the 1,100 feet long outlet pipe, which is of cast iron, bell and spigot joints with an occasional specially cast joint to better conform to the ocean bottom. The pipe is laid on reinforced concrete piles driven into and flush

with the ocean bottom, and held in place by reinforced concrete piles driven on each side and close to the pipe. A 36-inch motor driven tide control valve prevents the ocean from backing up into the plant during high tide.

Two 8-inch centrifugal pumps, each of a capacity of 1,000 gallons a minute lifts the effluent from the pump pit into the outlet pipe.

Each pump is directly shaft connected to the motor which is situated upon the floor level of the building.

The screen is suspended in the screen pit at an angle of fifteen degrees and completely closes the canal and intercepts all the solids in the sewage.

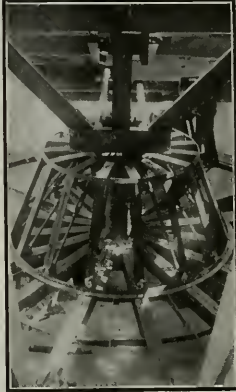
The rotation of the screen brings a portion of it above water where it is brushed clean with a set of rotating brushes which in turn deposit the sludge in buckets that take it to the high temperature oil burner incinerator

direction of municipal works. He supervised the spending of millions of dollars by the city of St. Louis. Other incidental expenses are itemized in the following list:

Robert W. Hunt Company for testing cement, \$334.82; oil tank house, made of concrete, \$215; 150 feet of 12-inch concrete pipe, at \$1.10, \$165; hauling earth for back fill \$600; 5,900 pounds of steel at 5 cents, \$295; 37,947 feet of lumber at \$35 per thousand, \$1,328; 1,708 cubic yards of concrete at \$6.50, \$11,102; Southwest Contractor, \$10; Graves & Hersey, \$10.

These items, added to the above \$309,940.06, carry the total to \$327,299.88. Below are figures as to the estimate requisite to completion of the system:

Electric lights at incinerator, \$300; improvement of incinerator grounds, \$700; lavatory at incinerator, \$290; to the Robert W. Hunt Company for testing concrete, \$350; requisitions, \$54.12; extra concrete, \$400; inspection \$2,600.

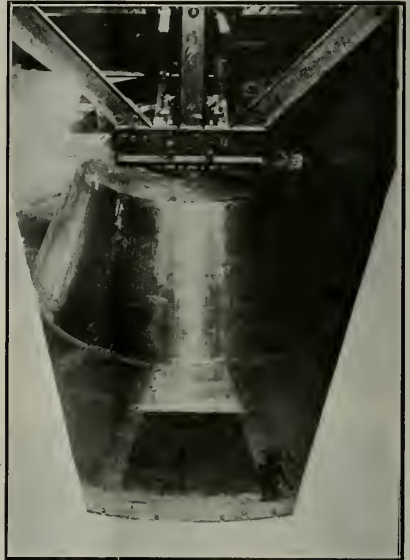


Top view of frame work of
Riensch-Wurl Screen.

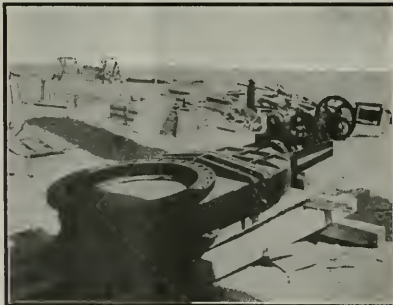
where it is consumed. A temperature of from 1,500 to 2,000 degrees Fahrenheit is maintained in the incinerator.

The complete plant at Long Beach costs \$39,400, and is able to take care of the sewage of a city of 50,000 people.

Riensch-Wurl screens are now being installed in Brook-



Riensch-Wurl screen in place.



36-inch Tide Control Valve for Outlet.

lyn, New York; Cleveland, Ohio; Rochester, New York; Daytona, Florida, and several other towns in the east.

Costs.

Inspection costs \$3,300. The chief inspector for the city is Captain A. N. Milner, whose military title was won in government service. Captain Milner retired from the federal service and for some years has been engaged in

Addition of those estimated items to the fixed charges above quoted carries the total cost of the new sewer system to \$331,994.

While the total allowances, as above quoted, are \$215,193.06 to the Bents and \$29,007 to the Mercereaus, the amounts paid them to date are only \$123,352.21 and \$10,920, respectively. Olmsted & Gillelen are also being paid on installments, their remuneration to be liquidated in full only after completion and final acceptance of the system.

The sewer is 68 per cent complete to date, 57.1-2 per cent of the pipe is laid; 75 per cent of all the necessary pipe is made; the incinerator is 90 per cent completed; the 36-inch cast iron ocean outlet of 1,100 feet in length is 75 per cent completed. Here's an idea as to the material used:

Cement, 35 carloads, or 7,000 barrels; sand, 75 carloads; gravel, 150 carloads; brick, 3 carloads; steel, 3 carloads; lumber, 4 carloads; machinery, 2 carloads; tools, 1 carload; steel forms, 1 carload; total, 275 carloads.

For labor and teams the payroll last month, June, was \$18,000. Of the money paid out for labor 94 per cent was to Long Beach labor and of the money paid for teams all was for Long Beach teams.

ADVANCE NEWS

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$14,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owners, J. Risso and G. Obertelli. The building has been designed to contain eight apartments of three rooms each with bath, and will be erected at the corner of 11th and Noe streets. Interior will be finished in pine throughout. Hardwood floors will be used in the principal rooms. Gas steam radiators are specified. Wall beds will be used. There will be a hot water supply. Bath rooms will have tile floor and wainscot. Marble wainscot will be used in the entrance. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$12,000. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owner, George W. Mensor. The building will be erected on the south side of Washington street east of Steiner, and has been designed to contain six apartments of four rooms and bath. Interior will be finished in pine with some Philippine mahogany. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be steam heat and a hot water system. Bath rooms will have tile floors and wainscot. Wall beds are specified. Marble and tile will be used in the entrance. Exterior will be covered with cement plaster on metal lath. Plans are complete and the owner is taking figures.

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$8,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name not given. The building will be erected at the corner of Union and Stockton streets, and has been designed to contain a store and seven small apartments. Interior will be finished in pine and redwood. There will be wall beds and private baths. Exterior of the building will be covered with rustic and shiplap. Plans are now being prepared. Further mention will be made of the work.

FRESNO, FRESNO CO., CAL.—Apartment house, 2 story and base, frame, \$20,000. Architect, Henry F. Starbuck, Rowell Bldg., Fresno. Owner, Jacob Richter. The building will be erected at the corner of Merced and P streets, and has been designed to contain a total of twenty suites of two and three rooms. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. Plans provide for a central heating system and hot water supply. Bath rooms will be finished in tile. Wall beds are specified. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

SAN FRANCISCO—Apartment house, 4 story and base, brick and steel, \$25,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, Theo E. Rulfs, 1167 Pine street, S. F. The building will be erected on the east side of Hyde street south of Sutter, covering an area of 25 by 86 feet. Interior will be arranged for a number of two and three room suites with baths and wall beds. Interior finish will be of pine and elm panels. Hardwood floors will be used in the living and dining rooms. There will be an automatic elevator, steam heat and a hot water system. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance lobby. Exterior of the building will be faced with pressed brick. Plans are being prepared.

Contracts Awarded

OAKLAND, CAL.—Apartment house, 3 story and base, reinforced concrete, \$35,000. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owner, Mrs. Carrie B. Rousseau. Contractor, N. P. Anderson, 320 Market street, S. F., general construction; J. A. McNaughton, Oakland, grading; R. Mas sagli & Co., 2298 Turk street, S. F., concrete work. Bids are now being taken for the plumbing and heating.

BATH HOUSES.

WHITE SULPHUR SPRINGS, NAPA CO., CAL.—Bath house, 1 and 2 story and base, hollow tile, \$20,000. Architect, Frank S. Holland, 100 Haight street, S. F. Owner's name withheld. The building will contain the mud baths, reception room, attendants' quarters and lounging rooms. Interior will be finished in pine, white enamel and metal. There will be a large amount of special plumbing and steam heating equipment. Exterior will be faced with cement plaster. Plans are complete and figures will be called for at once.

BONDS

MARICOPA, KERN CO., CAL.—Sealed bids will be received by the Clerk of the Supervisors until August 1th for the purchase of bonds in the sum of \$15,000. The proceeds of the sale will be used in the construction of a school building.

Bids will also be received on the same date for the purchase of the bonds of the Conley High School District, amounting to \$50,000, to provide for the construction of a new school for the district.

SAN FRANCISCO—With the issuance of \$2,500,000 of two-year 5 per cent gold notes to be dated September 1, 1915, and to mature September 1, 1917, the Spring Valley Water Co. has taken its first step to finance the extension of the water mains in the districts that have suffered for lack of water since the fire. It is proposed to retire

the issue of \$1,000,000 gold notes that fall due on December 1, 1915. The remainder of the fund gained from the sale of the present issue will be expended in the construction of the Calaveras dam and the extension of the mains in the city.

FORTUNA, HUMBOLDT CO., CAL.—On July 31st an election will be held in Fortuna to decide the question of issuing and selling bonds of \$24,000 to provide funds for the purchase of a site and the erection of a new school building. From present indications the issue will carry by a large majority.

SACRAMENTO, CAL.—The Sacramento Good Roads Association, recently organized, are planning a campaign to secure 4,000 members with the intention to work for better business conditions and good roads for Sacramento County.

CALEXICO, IMPERIAL CO., CAL.—July 31st is the date set for the election to vote bonds of \$60,000 to provide funds for repairing the city grammar school and for the erection of another school building which will cost approximately \$20,000.

VEGA JOINT SCHOOL DISTRICT, SANTA CRUZ CO., CAL.—An election will be held on August 10th in the Vega Joint High School District of the Counties of Monterey, Santa Cruz and San Benito, to vote bonds of \$8,000 with which to erect and equip a new school building.

ARBuckle, COLUSA CO., CAL.—The Supervisors have called an election for August 4th to vote on the proposition of forming a lighting district.

REDONDO, LOS ANGELES CO., CAL.—The proposed bond issue in the sum of \$144,225 for the purpose of purchasing the Redondo Beach water system failed to carry at a special election held here recently.

BREA, CAL.—The Board of Trustees of the Brea School District is planning the purchase of a five-acre site for a new school building. Bonds will be voted for the building shortly.

PASO ROBLES, SAN LUIS OBISPO CO., CAL.—An election will soon be called to vote bonds of \$40,000 for the purchase of sites and the erection of new schools.

TAFT, KERN CO., CAL.—Bonds of \$60,000 to provide for the erection of a new school building will be sold by the County Supervisors on August 4th.

VENTURA, VENTURA CO., CAL.—The Board of Supervisors has set August 24th as the date when the voters of the county will decide on the question of issuing and selling bonds of \$1,000,000 with which to build a system of roads 108.54 miles long. The system of roads will be divided into sixteen units, ranging from a mile and one half to fourteen miles in length. All the road is to be macadamized 16 feet wide, and about 30 miles of the system will be asphalt macadam. A system of drainage will also be included in the work. The Ventura Commissioners are A. C. Hardison, H. H. Eastwood and Wm. McGuire.

DINUBA, TULARE CO., CAL.—Papers calling for a special bond election for the erection of two schools costing \$13,000 are now being prepared in the District Attorney's office at Visalia.

HILLSBOROUGH, SAN MATEO CO., CAL.—Bonds of \$40,000 were voted last week for the completing of the city's road system. An election was also held to decide the question of issuing bonds of \$30,000 to provide for the erection of a high school building. The city engineer has been instructed to prepare plans and specifications for completing the road system. As yet no architect has been selected to design the proposed school.

BRIDGES AND DAMS

OROVILLE, BUTTE CO., CAL.—Bridges, 3 steel and concrete. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. Plans and specifications for two of eight bridges Butte County will build on the state highway between Chico and Nelson have been adopted by the Supervisors. The longest, 300 feet, will cross Butte Creek. The eight will cost \$40,000.

RED BLUFF, TEHAMA CO., CAL.—Bridges, 3 timber and concrete. Cost not stated. Engineer, County Surveyor Red Bluff. Owners, Tehama County. At the last meeting of the County Supervisors the Clerk was instructed to advertise for bids to be received on August 2nd at 10 a. m. for construction of concrete and steel bridges across Sand Slough, Samson Slough and the Paynes Creek Slough, in Road District No. 3. Further information, together with plans and specifications may be had from the County Surveyor.

UKIAH, MENDOCINO CO., CAL.—Bridge repairs, concrete. Cost not stated. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Plans and specifications prepared by the County Surveyor for the repairs on the Pudding Creek bridge have been adopted and bids for the work have been ordered called. Further information, together with the plans and specifications, may be had from the County Surveyor.

OROVILLE, BUTTE CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. Plans have been completed and figures are now being taken for the construction of a reinforced concrete bridge over Edgar Slough on the line of the state highway between Nelson and Chico. Plans and specifications can be secured from the office of the County Surveyor. Bids will be opened on August 1th.

REDDING, SHASTA CO., CAL.—Bridge, steel and timber, \$20,000. Engineer, County Surveyor, Redding. Owners, Shasta County. Plans for a new bridge across the Sacramento River at Kennett have been adopted by the Supervisors and bids will be taken until August 21st. The bridge is to be a combination steel and wooden structure and is to span the river just above the depot. It will be three spans of 200 feet each, with approaches 80 feet in length at each end.

PLACERVILLE, EL DORADO CO., CAL.—Bridge, steel and concrete, \$12,000. Engineers, A. V. Saph and C. B. Rushmer, Rialto Bldg., S. F. Owners, El Dorado County. Plans and specifications have been completed for the construction of a steel bridge with reinforced concrete approaches to be erected over the South Fork of the

American River at Coloma. The main span will be 162 feet long. Bids are now being taken and will be opened by the Board of Supervisors on August 16th. Plans and specifications can be secured from the office of the County Clerk.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Jetty, earth and concrete. Cost not stated. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. The County Supervisors have directed the Surveyor to prepare plans and specifications for the construction of a jetty or such other improvements as may be necessary to confine the water of the Santa Maria River in the channel of said river under the Santa Maria bridge at the Santa Maria River crossing.

FRESNO, FRESNO CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Fresno. Owners, Fresno County. Plans have been completed and figures are now being taken for the reinforced concrete bridge to be erected over Fish Slough on the Elkhorn grade. Bids will be opened for this work on August 4th. Plans and specifications can be secured from the office of the County Clerk.

MODESTO, STANISLAUS CO., CAL.—Bridge, steel and concrete. Cost not stated. Engineer, County Surveyor E. H. Annear, Modesto. Owners, Stanislaus County. Stanislaus County will build a new bridge across the Tuolumne River eight miles east of Waterford on the road to the La Grange country. Plans and specifications for the structure have been adopted by the Board of Supervisors. Bids will soon be taken.

MARTINEZ, CONTRA COSTA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Bids are now being taken by the County Supervisors for the construction of a bridge across Pacheco Slough, also for 1,100 feet of trestle. The bridge will have concrete piers and will be 65 feet in width.

MARTINEZ, CONTRA COSTA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor Ralph Arnold, Martinez. Owners, Contra Costa County. County Engineer Ralph Arnold has completed plans and specifications for the construction of a bridge over Peyton Slough and has presented them to the Supervisors who will consider them at their next meeting, when bids will probably be called.

SANTA ROSA, SONOMA CO., CAL.—Bridges, 2, reinforced concrete. Cost not stated. Engineer, County Surveyor, Santa Rosa. Owners, Sonoma County. Bids will be opened on August 12th for the construction of a reinforced concrete bridge over Maacama Creek, and for a similar structure on the Petaluma and Santa Rosa road. Plans can be secured from the office of the County Clerk.

MARTINEZ, CONTRA COSTA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, City Engineer, Martinez. Owners, City of Martinez. Plans are complete and figures will be opened on August 4th for the construction of two reinforced concrete bridges in the city of Martinez. Included in the work will be the re-

removal of steel girders in the Main street bridge. The bridges can be bid on a whole or separately. Plans can be secured from the office of the City Clerk.

MARTINEZ, CONTRA COSTA CO., CAL.—Bridge and flume construction. Cost not stated. Engineer, City Engineer, Martinez. Owners, City of Martinez. The City Trustees have instructed the City Attorney to immediately prepare for the calling of bids for the construction of a concrete flume across the creek at Main street and for the construction of a concrete bridge over the creek at Ferry street. The bids will include the amount necessary to straighten out the bend in the creek at Ferry street. The flume on Main street will be 77 feet long, 30 feet wide and 11 feet high. The new Ferry street structure will increase the width of the creek crossing from 16 to 50 feet, thus making it as wide as the street. Bids on the work close August 3rd.

REDWOOD CITY, SAN MATEO CO., CAL.—Bridge construction. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Bids will be opened on August 2nd for the construction of a timber bridge over Robinson Creek at Station 436x50, a timber trestle over White Horse Creek at Station 557x50 and a timber trestle over Gazos Creek at Station 476x20 on the Pescadero to Santa Cruz County line road, known as Route 3, Division 3, of the San Mateo County Highways.

MARTINEZ, CONTRA COSTA CO., CAL.—Trestle, reinforced concrete and pile. Cost not stated. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Plans are complete and figures are now being taken for a combination reinforced concrete and timber trestle. Bids will be opened on August 16th. Plans can be secured from the County Surveyor's office. The Supervisors have accepted two sets of plans for this work. One a combination reinforced concrete pile trestle, and the other for pile trestling without concrete, and the Board of Supervisors desires bids on each set of specifications.

BERKELEY, ALAMEDA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be opened on August 3rd for a reinforced concrete bridge over Cordones Creek. The bridge will be 106½ feet long and 40 feet wide. Plans and specifications can be secured from the City Engineer.

Contracts Awarded

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridge, reinforced concrete, \$18,900. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractors, Munoz & Munoz, Central Bldg., L. A. Contract price, \$18,900.

TOLT, KING CO., WASH.—Bridge, steel and concrete, \$27,522. Engineer, County Surveyor, Seattle. Owners, King County. Contractor, M. P. Zindorf, Alaska Bldg., Seattle. Contract price, \$27,522.

HANFORD, KINGS CO., CAL.—Bridge, reinforced concrete, \$6,000. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractor, S.

G. Smartt, Bakersfield. Contract price, \$6,000.

EUREKA, HUMBOLDT CO., CAL.—Bridge, reinforced concrete, \$2,450. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractor, Frank H. Green, Eureka. Contract price, \$2,450.

UKIAH, MENDOCINO CO., CAL.—Bridge, reinforced concrete, \$6,000. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Contractor, V. M. Price. Contract price, \$6,000.

NAPA, NAPA CO., CAL.—Bridge repairs, \$1,819. Engineer, Town Engineer, Napa. Owners, Town of Napa. Contractor, William M. Coffield, Napa. Contract price, \$1,819.

SHASTA CO., CAL.—Bridge, reinforced concrete, \$28,235. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Contractors, Ross Construction Co., Sacramento. Contract price, \$28,235.

SHASTA CO., CAL.—Bridge, 2, reinforced concrete, \$5,450. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Contractor, F. Rolandi, S. F. Contract price, \$5,450.

CHURCHES

WILMINGTON, LOS ANGELES CO., CAL.—Church and rectory, 1 and 2 story, frame, \$20,000. Architect, Albert C. Martin, Higgins Bldg., L. A. Owners, Roman Catholic Church. The church will cover an area of 50 by 140 feet and, besides the main auditorium, which will seat 400 people, there will be Sunday school rooms and a parish hall. The rectory will contain eight rooms, baths and sleeping porch. Interior of both the church and rectory will be finished in pine. Some hardwood floors will be used. There will be open fire places and tile mantels. Exteriors will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

TURLOCK, STANISLAUS CO., CAL.—Church, 1 story and base, brick, \$10,000. Architect, C. C. Edburg, Turlock. Owners, First Church of Christ, Scientist. The building will have a seating capacity of 600 people. Sunday school rooms and reading rooms are also provided. Interior will be finished in pine with some ornamental plaster. Art glass is also specified. Exterior will be faced with pressed brick veneer. Plans are being prepared.

SAN RAFAEL, MARIN CO., CAL.—Mausoleum, 1 story, reinforced concrete and stone, \$10,000. Architects, Cunningham & Poltice, First National Bank Bldg., S. F. Owner, A. W. Foster. The building has been designed in the classic style and will contain six receptacles. Interior will be finished in stone and ornamental plaster. There will be modern plumbing and electric work. Exterior of the building will be faced with granite. Plans are nearly complete and figures will be called for shortly.

Contracts Awarded.

SAN FRANCISCO—Church, 1 story and base, frame. Cost not stated. Architect, C. O. Clausen, Hearst Bldg., S. F. Owners, Swedish Baptist Church. Contractor, M. S. Show, 2201 Larkin street, S. F. Contract price not stated.

DIXON, SOLANO CO., CAL.—Church, 1 story and base, frame and brick, \$14,950. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Roman Catholic Church. Contractor, Charles P. Rose, Dixon. Contract price, \$14,950.

COURT HOUSES.

MODESTO, STANISLAUS CO., CAL.—Court house alterations and repairs. Cost not stated. Architect, none. Owners, Stanislaus County. Bids will be opened on August 11th for extensive alterations and repairs, including painting, plastering, interior finish and electric work at the County Court House. Plans and specifications can be secured from the County Clerk at Modesto.

FACTORIES AND WAREHOUSES

OAKLAND, CAL.—Factory, 4 story and base, reinforced concrete, \$75,000. Architect, Louis P. Hohart, Crocker Bld., S. F. Owners, Shredded Wheat Biscuit Co. Segregated figures are being taken on all parts of this work except the excavating, which has already been awarded to James P. McLaughlin, 244 Kearny street, S. F. Bids will be opened on August 2nd. Plans and specifications can be secured from the architect.

OAKLAND, CAL.—Factory, 2 story, frame, \$5,000. Architect's name not given. Owners, California Cotton Mills Co., Oakland. The building will be erected on East 22nd avenue south of Railroad avenue, and will cover a considerable ground area. Interior will be finished in pine. There will be a large amount of special machinery installed. Exterior will be covered with brick veneer and rustic. Plans are complete and in the hands of the owners who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Storage warehouse, 3 story and base, reinforced concrete. Cost not stated. Engineer, Edward L. Soule, Rialto Bldg., S. F. Owners, Bekins Van and Storage Co., Oakland. The building will be erected on San Pablo avenue near 21st street and will be fireproof. Interior will be arranged for small private storage vaults and public space. There will be automatic sprinklers, elevator service and metal window sash and frames. The Turner system of reinforced concrete construction will be used. Exterior will be faced with cement plaster. Plans are in the hands of Martin Bekins, Oakland, who will let segregated contracts.

Contracts Awarded.

SAN FRANCISCO—Factory, 4 story and base, reinforced concrete, \$199,000. Architect, Engineering Department American Can Co., New York City. Owners, American Can Co. Contractors, Lindgren & Co., Monadnock Bldg., S. F. Contract price, \$199,000.

MARTINEZ, CONTRA COSTA CO., CAL.—Converter pump house, 1 story, steel and concrete. Cost not stated. Engineer, Engineering Dept. Shell Oil Co., 313 Sansome street, S. F. Owners, Shell Oil Co. Contractors, Gutleben Bros., New Call Bldg., S. F. Contract price not stated.

FIRE HOUSES AND JAILS.

Contracts Awarded.

OAKLAND, CAL.—Detention home, 4 story and base, reinforced concrete, \$75,000. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, Alameda County. The following contracts have been awarded by the Alameda County Supervisors for the four-story and basement reinforced concrete Detention Home under bids opened on July 19th: Excavating and concrete work, J. V. Westerlund, 320 Market street, S. F., \$12,984. Carpentry work, W. D. Henderson, Monadnock Bldg., S. F., \$14,963. Ornamental iron work, C. Frauneder, 335 8th street, Oakland, \$2,540. Plastering, Schenbly, Hostrawser & Pedgriff, 6th and Jackson streets, Oakland, \$6,592. Sheet metal work, Yager Sheet Metal Works, 3309 Chestnut street, Berkeley, \$2,838. Roofing, Paraffine Paint Co., 34 First street, S. F., \$443. Hardware, Maxwell Hardware Co., 1320 Washington street, Oakland, \$1,247. Painting, D. Zelinsky & Son, 564 Eddy street, S. F., \$2,856. Plumbing, Frederick W. Snook Co., 596 Clay street, S. F., \$3,964. Electric work, Rex Electric Construction Co., Monadnock Bldg., S. F., \$1,698. Marble work, Duneeen Marble Works, 40th and Grove streets, Oakland, \$2,549. Heating and ventilating, Carl T. Doell, 427 21st street, Oakland, \$3,284. Elevator work, Otis Elevator Co., Bay and Stockton streets, S. F., \$1,990.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$6,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner's name not given. The building will be erected on Oak street near Fillmore, and has been designed to contain two residential flats of six rooms each. Interiors will be finished in pine, oak and white enamel. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Both flats will be provided with sleeping porches. Exterior will be covered with cement plaster and brick veneer. Plans are being prepared.

SAN FRANCISCO—Flats, 3 story and base, frame, \$4,500. Architect, none. Owner, Thomas D. Quigley, 1590 8th avenue, S. F. The building has been designed to contain three modern flats and will be erected on the south side of Minna street east of Julia. Interior finish will be of pine and redwood. There will be an open fire place in each living room. Mantels will be of tile. Imitation tile wainscot will be used in the bath rooms. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Flats, 3 story and base, frame, \$5,000. Architect, Charles Carlson, 200 Gates street, S. F. Owner, George B. Gilmour, 2376 Howard street. The building will be erected on the east side of Howard street north of 16th, and has been designed to contain three flats of five rooms each. Interiors will be finished in pine with some hardwood panels. Hardwood floors will be used in the principal rooms.

There will be an open fire place in each living room. Mantels will be of tile or brick. Imitation tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and shiplap. Plans are complete and the work will be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$6,500. Architect, none. Owner, C. S. Allred, 150 Onondago avenue, S. F. The building will be erected on the south side of Union street west of Steiner, covering an area of 27 by 80 feet. There will be four small flats. Interior finish will be of pine and redwood with some hardwood veneer. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Flats and store, 3 story and base, frame, \$8,500. Architect, Carl Gelifuss, 46 Kearny street, S. F. Owner, Anna R. Wissman. The building will be erected at the southeast corner of Clement and 24th streets and will contain a store on the first floor and flats above. The flats have been designed for offices for doctors and dentists and will be finished in pine and white enamel. Hardwood floors will be used in the principal rooms. In the rear of the building a garage to contain three machines has been provided for. There will be open fire places and tile or brick mantels. Bath rooms will be finished in tile and white enamel. Exterior of the building will be covered with cement plaster. Plans are complete and figures are being taken.

SAN FRANCISCO—Flats and stores, 3 story and base, frame, \$6,000. Architect, C. Fantoni, 916 Kearny street, S. F. Owner, Caetano Ciampa, 114 Madrid. The building will be erected on Brazil and has been designed to contain two stores and three flats. Interior will be finished in pine throughout. Some hardwood floors will be used. There will be open fire places and tile or brick mantels. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and figures are being taken.

OAKLAND, CAL.—Flats, 2 story and base, frame, \$5,000. Architect, none. Owner, C. C. Foss, 1242 First avenue, Oakland. The building will be erected at the southwest corner of Park Boulevard and East 19th street, and has been designed to contain fourteen rooms, which will be arranged in three flats. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Automatic water heaters will be installed. Bath rooms will have tile wainscot. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name not given. The building will be erected on the south side of Norton street near Mission, and will contain two flats of five rooms each. A basement garage is also provided. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Imitation tile will be used in the bath rooms. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO—Flats, 3 story and base, frame, \$7,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name not given. The building will be erected near the corner of Union and Hyde streets and has been designed to contain three flats of five rooms each and a basement garage. Interior will be finished in pine with some hardwood floors. There will be an open fire place in each living room. Mantels will be of tile or brick. Bath rooms will be finished in tile. Automatic water heaters will be installed. Marble wainscot will be used in the entrance. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO—Flats, 3 story and base, frame, \$6,500. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name not given. The building will be erected on the west side of Mission street near 28th and will contain four flats and two stores. Interior will be finished in pine and redwood. Some oak floors will be used. Patent store fronts are specified. There will be an open fire place and tile mantel in each living room. Exterior of the building will be covered with rustic and shiplap. Plans are now being prepared.

GOVERNMENT WORK & SUPPLIES

Transportation of Coal.

The following bids were received at the bureau of supplies and accounts, Navy Department, Washington, D. C., for the transportation of a cargo of coal from Hampton Roads to the naval coaling depots at Tiburon, Cal.; San Diego, Cal.; Puget Sound, Wash.; Cavite, and Olongapo, P. I.:

Bowring & Co., Puget Sound, \$5.95, Tiburon, \$5.95; San Diego, \$5.95.

D. R. Dearborn & Co., Puget Sound, \$5.55 and \$5.25; Tiburon, \$5.55 and \$5.25; San Diego, \$5.55 and \$5.25.

Houlder, Weir & Boyd, Puget Sound, \$8.85; Tiburon, \$5.85; San Diego, \$5.85.

McCall-Dinning Co., Cavite, P. I., \$10.

J. H. Winchester & Co., Puget Sound, Tiburon, \$5.95; San Diego, \$7.

Wittenberg Coal Co., Puget Sound, \$5.97; Tiburon, \$5.97; San Diego, \$5.97.

Crow Indian School, Mont.

The contract for constructing a brick school house at the Crow Indian School, Mont., has been awarded to Gaymont & Co., Billings, Mont., at \$21,250.

Gate Bodies and Frames.

Award has been made under authority from the Secretary of the Interior to Hardie-Tynes Manufacturing Co., of Birmingham, Ala., for furnishing slide gate bodies and gate frames for reservoir outlets at Kecheelus dam, Yakima storage unit, Washington, and Sherburne Lake dam, St. Mary storage unit, Milk River project, Montana, the estimated price for the gates and gate structures being \$7,276, f. o. b. cars, Birmingham, Ala.

Naval Supplies.

Bids will be opened August 10 by the bureau of supplies and accounts, Navy Department, Washington, D. C., for furnishing the following supplies: Schedule 8539.

Steam Engineering.

Class 1. Mare Island—Refrigerating plants for deliveries as follows:

- Bid A—Mare Island.
- Bid B—F. o. b. works.

Schedule 8540.

Steam Engineering.

Class 2. 15 pumps and condensers for delivery as follows:

- Bid A—Mare Island.
- Bid B—F. o. b. works.

Schedule 8541.

Steam Engineering.

Class 3. Puget Sound—Furnishing and installing sand-blast outfit at the navy yard, Puget Sound, Wash.

Public Building Policy Changed.

An order has been issued by Secretary McAdoo to the supervising architect's office putting into force his policies with reference to the construction of post offices and federal buildings. The new order seeks to establish a rational system of uniformity and business economy in the construction of government buildings and to get away from the old "hit and miss" system that has cost the government many millions of dollars.

Under the old system buildings were constructed to fit whatever appropriation congressmen were able to get for their towns, practically regardless of whether or not the building was adapted to the actual conditions and requirements of the locality and the government service. As a result of this system, small villages often got costly and elaborate stone structures where they were not needed and other localities less fortunate and where increased facilities were greatly needed were given inadequate buildings or none at all. Under this system Congress authorized by the score post office buildings costing from \$50,000 to \$150,000 in towns where the total receipts of the post office would not pay for the maintenance of the building when erected.

Secretary McAdoo proposes hereafter to construct in a locality such a building as local conditions and the present and future needs of the service demand and not to be governed entirely by the size of the appropriation. By application of this method it is believed that hundreds of thousands of dollars will be saved in the construction of buildings already authorized by Congress, but not yet reached by the architect's office.

For the past two years the Treasury Department has been following the

same general business policy in the purchase of post office sites. The public buildings act of March 4, 1913, authorized the purchase of 303 public building sites in various parts of the country. To date only 136 of that number have been acquired, and in the purchase of these sites the department's invariable policy has been to acquire sites only in towns where a post office is actually needed and not to pay one dollar more for the property than it is actually worth. As a result of this policy, the government has acquired 136 parcels for \$571,775 less than the amount Congress authorized to be paid.

Sheridan, Wyo., Repairs.

The contract for repairs to driveway, etc., at the U. S. post office, Sheridan, Wyo., has been awarded to O. M. Walsh at \$890.

HOTELS.

Contracts Awarded

OAKLAND, CAL.—Municipal wood-yard hotel and office, 3 story and base, brick, \$12,477. Architect, J. J. Donovan, Dalziel Bldg., Oakland. Owners, City of Oakland, Contractor, William A. Newsom, Sharon Bldg., S. F. Contract price, \$12,477.

FRESNO, FRESNO CO., CAL.—Hotel and stores, 2 story and base, brick, \$60,000. Architects, Coates & Traver, Rowell Bldg., Fresno, and Head Bldg., S. F. Owners, Olender Bros, 1833 Tulare street, Fresno. Contractors, Riggs & Palmer, 1908 Fresno street, Fresno. Contract price, \$60,000.

LIBRARIES.

DINUBA, TULARE CO., CAL.—Library, 1 story and base, brick, \$8,000. Architects, Bowen & Davis, McKenzie Bldg., Fresno. Owners, Town of Dinuba. The building has been designed in the classic style and will cover an area of 32 by 60 feet. There will be a large reading room, office and stack room. Metal book stacks are specified. A central heating system will be installed. Interior will be finished in pine with maple floor. Exterior of the building will be faced with pressed brick. A clay tile roof is specified. Plans are complete and figures will be called for at once.

LOS ANGELES, CAL.—Library, 1 story and base, brick or hollow tile, \$35,000. Architect, W. H. Dodd, Marsh-Strong Bldg., L. A. Owners, City of Los Angeles. The building will be erected at the corner of First and Chicago streets, covering an area of 100 by 80 feet. There will be two large reading rooms, stack room and office for the librarian. Interior will be finished in hardwood with hardwood floors. Hollow tile interior partitions and metal window sash and frames are specified. There will be steam heat, oil burning furnace and vacuum cleaning. Metal book stacks are specified. Exterior of the building will be faced with grey pressed brick trimmed with terra cotta. A clay tile roof will be used. Plans are complete and figures are being taken. Bids will be opened on August 20th.

POST OFFICES

GRAND JUNCTION, COLO.—Post office, 1 story and base, brick, stone and concrete. Cost not stated. Architect, Oscar Wenderoth, Washington, D. C. Owners, United States Government. Revised plans for this building have been completed and figures are again being taken. The building will be finished in pine and hardwood. There will be considerable amount of tile and marble work. Plans provide for steam heat. Exterior will be faced with pressed brick or stone. Plans can be secured from either the Custodian of the site at Grand Junction or from the Supervising Architect. Bids will be opened on August 24th.

RESIDENCES.

SAN FRANCISCO—Residences, 2, 1 1/2 story and base, frame, \$1,500 each. Architect, none. Owner, Lazar Aydukovich, 1238 Hollister street, S. F. These two houses will be erected on the east side of 46th avenue north of Judah, and each has been designed for a five-room house with bath. Interior will be finished in pine and redwood. There will be an open fire place in the living room. Mantels will be of tile and brick. Exterior of the houses will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are being purchased.

SAN FRANCISCO—Residences, 6, 2 story and base, frame, \$10,000 each. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. These dwellings will be erected in Forest Hill and each will contain eight rooms, two baths and sleeping porches. Interiors will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living and dining rooms and reception halls. There will be furnace heat and open fire places. Mantels will be of brick and tile. Bath rooms will be finished in tile. There will be vacuum cleaning and hot water circulating systems. Exteriors will be covered with cement plaster on metal lath and brick veneer. Plans are now being prepared.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$3,000 each. Architect, none. Owner, P. Algot Nelson, 4333 19th street, S. F. These two houses will be erected on the north side of Lawton west of 9th avenue and each has been designed to contain seven rooms and bath. Interiors will be finished in pine with home hardwood veneer and white enamel. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architect, none. Owners, Nelson Bros., 515 Dolores street, S. F. The dwelling will be erected on the east side of 18th avenue south of Geary street, and has been designed for a six-room house

with bath and sleeping porch. Interior will be finished in pine, redwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residences, 10, 1 and 2 story and base, frame, \$3,000 to \$7,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. These houses, which have been designed to contain from seven to eight rooms, will be erected in Lincoln Manor. Each will have a sleeping porch. Interiors will be finished in pine and hardwood with white enamel in the bed rooms. There will be open fire places and tile or brick mantels. The more expensive homes will have furnace heat. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exteriors will be covered with rustic, shingles and cement plaster on metal lath. Plans are now being prepared.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$2,500. Architects, Verrick & Smith, Blake Bldg., Oakland. Owner, John Michels. The dwelling has been designed to contain six rooms and bath. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are being prepared and when complete the work will be done by Day Labor.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$3,000. Architect, M. L. Newsom, 1748 Broadway, Oakland. Owner, C. A. Werede. The dwelling has been designed for a six-room house with bath and sleeping porch and will be erected in Fourth Avenue Terrace. Interior finish will be of pine and hardwood with some white enamel. Hardwood floors will be used in the living and dining rooms. There will be furnace heat and open fire place. Mantel will be of tile or brick. An automatic water heater will be installed. Tile floor and wainscot will be used in the bath room. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor.

OAKLAND, CAL.—Residences, 2, 2 story and base, frame, \$1,250 each. Architect, none. Owner, C. M. MacGregor, 470 12th street, Oakland. These two houses will be erected on the north side of Mandana Boulevard east of Paloma, and each will contain seven rooms and bath. Interiors will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms and reception halls. There will be furnace heat and open

fire places. Mantels will be of tile. Tile wainscot will be used in the bath rooms. Plans provide for automatic water heaters. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$3,200. Architect, M. L. Newsom, 1748 Broadway, Oakland. Owner, Mr. Anderson. The dwelling will be erected in Rockridge Park, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, T. J. Crabbe, Yuba City. The dwelling has been designed for a five-room house with bath. Interior will be finished in pine throughout. Some oak floors will be used. There will be a large open fire place and tile or brick mantel. Imitation tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and the work will be done by Day Labor.

FRESNO, PRESNO CO., CAL.—Residence, 1 story and base, frame, \$1,500. Architect, none. Owner, Conrad Kinzel, Fresno. The dwelling will be erected at 445 F street and has been designed for a five-room house with bath and sleeping porch. Interior will be finished in pine and redwood. There will be an open fire place and tile mantel. Exterior will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, T. J. Houwelling, 506 Cheney street, S. F. The dwelling will be erected on Sprague street east of Naylor, and has been designed for a six-room house with bath. Interior will be finished in pine throughout. Hardwood floors will be used in the principal rooms. There will be an open fire place and tile or brick mantel. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, Gus A. Brown, 123 Carl street, S. F. Owner, S. F. and L. A. Realty Co., Foxcroft Bldg. The dwelling will be erected on the west side of 15th avenue south of Pacheco, and has been designed to contain six rooms and bath. Interior will be finished in pine throughout. Hardwood floors will be used in the living room, dining room and reception hall. There will be an

open fire place and tile or brick mantel. Exterior of the dwelling will be covered with shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,000. Architect, none. Owner, A. R. Lapham, 511 12th avenue, S. F. The house has been designed to contain seven rooms, bath and sleeping porch, and will be erected on the west side of 21st avenue south of Clement. Interior will be finished in pine and elm. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, steel and brick, \$100,000. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Andrew Welch, Jr. The house will be erected on Broadway between Broderick and Baker streets, and when complete will take its place among the finest homes in the city. There will be in the neighborhood of twenty rooms, a number of baths and sleeping porch. Interior finish will be of hardwoods and white enamel. Hardwood floors will be used throughout except in the bath rooms which will be finished in tile and marble. There will be a central heating system, probably hot water, vacuum cleaning and dumb waiters. Mantels will be of marble and tile. Exterior of the house will be faced with pressed brick trimmed with terra cotta. Plans are now being prepared.

SAN LORENZO, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$4,000. Architects, Mau & Sprague, MacDonald Bldg., Oakland. Owner, J. P. Marlin. The dwelling will contain ten rooms and bath. Interior will be finished in pine throughout. Some hardwood floors will be used. There will be open fire places and tile or brick mantels. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$3,500. Architects, F. R. Peake Co., 2127 University avenue, Berkeley. Owner's name not given. The dwelling has been designed for a seven-room house and will be erected on Mariposa north of Terrace Walk. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living room, dining room and reception hall. There will be open fire places and tile mantels. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,000. Architect, Albert Farr, Foxcroft Bldg., S. F. Owner, Stewart Smith, Mission Bank, S. F. The dwelling will be erected on the east side of 7th avenue near Lake, and has been designed for an eight-

room house with bath and sleeping porch. Interior will be finished in pine and hardwood. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster. Plans are being prepared.

Contracts Awarded

BEVERLY HILLS, LOS ANGELES CO., CAL.—Residence, 2 story and frame and plaster. Cost not stated. Architects, Milwaukee Building Co., Wright & Callender Bldg., L. A. Owner, King C. Gillette. Contractors, Milwaukee Building Co., Wright & Callender Bldg., L. A. Contract price not stated.

BURLINGAME, SAN MATEO CO., CAL.—Residence, 2 story and base, frame, \$5,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, A. L. Elford. Contractor, D. Charles Scanlan, Burlingame. Contract price, \$5,000.

LOS ANGELES, CAL.—Residence, 2 story and base, brick and frame. Cost not stated. Architects, Montgomery & Montgomery, Trust and Savings Bldg., L. A. Owner's name not given. Contractor, Charles H. Thompson, Shoreham Apts., L. A. Contract price not stated.

SCHOOLS.

SAN FRANCISCO—School auditorium, 2 story and base, brick and steel. Cost not stated. Architect, William C. Hays, First National Bank Bldg., S. F. Owners, Wilmerding School of Industrial Arts. The building will be erected on Potrero avenue, between 16th and 17th streets, and has been designed for a large auditorium and meeting halls. Interiors will be finished in pine throughout. There will be a central heating system, probably steam heat. Modern plumbing and electric work will be installed. Exterior of the building will be faced with pressed brick. Plans are being prepared. This is the first of several new buildings which will be erected for the Wilmerding School.

OAT SCHOOL DISTRICT, TEHAMA CO., CAL.—School, 1 story, frame. Cost not stated. Architect, none. Owners, Oat School District. Plans for a one-story frame building containing two rooms have been completed and are now out for figures. Bids will be opened on August 2nd at 2 p. m. Plans and specifications can be secured from A. N. Norcott, Trustee, at Red Bluff.

BEAVERTON, ORE.—School, 1 story and base, brick and hollow tile, \$23,000. Architects, Tourtellotte & Hummel, Rochebld Bldg., Portland. Owners, City of Beaverton. The building will contain eight class rooms, an auditorium, departments of domestic science and manual training and a large gymnasium. Interior will be finished in pine with maple floors in the class rooms. There will be steam heat, modern school plumbing and program clocks. Exterior of the building will be faced with pressed brick. Plans are now being prepared.

SEASIDE, ORE.—School, 2 story and base, brick or hollow tile, \$33,000. Architect, Ernest Kroner, Worcester Bldg., Portland. Owners, City of Seaside. The building will contain eight class rooms, library, an auditorium, office and manual training and domestic science departments. Interior will be finished in pine with maple floors in the class rooms. There will be steam heat, a program clock system, vacuum cleaning and modern school plumbing. Exterior of the building will be faced with pressed brick or cement plaster. Plans are now being prepared.

MONMOUTH, ORE.—School, 2 story and base, \$50,000. Architect, John V. Benes, Chamber of Commerce Bldg., Portland. Owners, State of Oregon. The building has been designed for a State Normal School, and will cover an area of 128 by 84 feet. The first floor will contain an auditorium seating 240 people, three class rooms, offices and rest rooms. The second floor has been arranged for four class rooms, art and music departments and library. Manual training rooms and domestic science department will occupy the basement. Interior will be finished in pine with maple floors. Plans provide for steam heat, vacuum cleaning, program clocks and modern school plumbing. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken.

SUNNYSIDE SCHOOL DISTRICT, TULARE CO., CAL.—School completion, frame. Cost not stated. Architect, F. W. Griffin, First National Bank Bldg., Porterville. Owners, Sunnyside School District. Plans and specifications have been completed for the alterations and work necessary to complete the Sunnyside School. Bids are now being taken and will be opened on August 2nd. Plans can be secured from the architect.

MARICOPA, KERN CO., CAL.—School, 1 story, frame. Cost not stated. Architect, Thomas B. Wiseman, 1933 Chester avenue, Bakersfield. Owners, Maricopa Union High School. The building will be in the nature of an addition to the present school and will contain three class rooms and study hall. Interior will be finished in pine with some maple floors. There will be steam heat. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are being taken. Bids will be opened on July 30th.

LOS ANGELES, CAL.—School, 1, 2 and 3 story, brick. Cost not stated. Architects, Netham & Cline, Brockman Bldg., L. A. Owners, City of Los Angeles. The building will be known as the Lincoln High School and will be erected on North Broadway. The auditorium will cover an area of 110 by 100 feet and will seat 1500 people. The library building will be three stories, covering an area of 93 by 88 feet, and the music building, a two-story structure covering an area of 51 by 110 feet. Interiors will be finished in pine with maple floors. There will be considerable marble and tile work and ornamental plaster. Plans provide for steam heat, modern school plumbing, vacuum cleaning and program clocks. Exterior will be faced with cement plaster. Roofs will be of clay

tile. Plans are complete and figures are being taken.

REDONDO BEACH, LOS ANGELES CO., CAL.—School, 1 story and base, brick, \$50,000. Architect, L. B. Pemberton, Auditorium Bldg., L. A. Owners, Redondo Beach Grammar School District. The building will cover an area of 213 by 187 feet and will contain eight class rooms, office, an auditorium seating 450 people and two play rooms. Interior will be finished in pine. Maple floors will be used in the class rooms. Plans provide for steam heat, oil burning furnace and modern school plumbing. Exterior of the building will be faced with ruffled brick. Plans are now being prepared.

LOS ANGELES, CAL.—School, 1 story and base, brick. Cost not stated. Architects, O. P. Dennis and H. H. Hewitt, Fay Bldg., L. A. Owners, City of Los Angeles. The building will be erected on the 21th street lot, and has been out for figures recently. All bids were rejected and plans are now being revised. New bids will be called for shortly.

LOS ANGELES, CAL.—School, 2 story and base, brick, \$30,000. Architects, Jeffery & Schaefer, Citizens' National Bank Bldg., L. A. Owners, City of Los Angeles. This building has recently been out for figures but all bids were rejected and plans are now being revised. New bids will be called for shortly. The building will be erected on the Annandale School site.

SATICOY SCHOOL DISTRICT, VENTURA CO., CAL.—School 1 story, brick and frame. Cost not stated. Architect, G. S. Bliss, Thomas Bldg., Santa Barbara. Owners, Saticoy School District. The building will be partly of brick and partly of frame construction. Interior will be finished in pine with some maple floors. Separate bids are being taken for the general construction, heating, plumbing, electric work and painting. Plans can be secured from the architect. Bids will be opened on August 2nd.

Contracts Awarded

OAKLAND, CAL.—Portable schools, frame, \$6,480. Architect, none. Owners, City of Oakland. Contractor, J. R. Faulkes, 9828 East 11th street, Oakland. Contract price, \$6,180.

ANGELES MESA, LOS ANGELES CO., CAL.—School, 1 story and base, reinforced concrete, \$22,500. Architect, Thomas Franklin Power, Higgins Bldg., L. A. Owners, Angeles Mesa School District. Contractors, The Mann-Knox Construction Co., Delta Bldg., L. A. Contract price, \$22,500.

EL CENTRO, IMPERIAL CO., CAL.—School, 1 story and base, frame, \$53,381. Architect, Fred T. Harris, Holt Bldg., El Centro. Owners, City of El Centro. Contractors, Long Beach Construction Co., Long Beach. Contract price, \$53,381.

SEWERS, STREET WORK & WATER SYSTEMS.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Sewer construction, \$9,842.09. Eng. neer, City Engineer, Santa Cruz. Bids opened for the construction of the National street sewer show A. J. Tobin of Santa Cruz box at \$9,842.09. All bids were taken under advisement.

BERKLEY, ALAMEDA CO., CAL.—Bridge, reinforced concrete. Cost not

stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. A resolution approving the construction of a new bridge over Cordomies Creek in Walnut street has been approved by the City Council. Bids on the work will soon be called for.

BAKERSFIELD, KERN CO., CAL.—Water tank and tower, steel. Cost not stated. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. Bids are now being received at the office of the City Manager for a steel tower and 5,000 gallon tank to be erected at Beale Park for the water system there.

MODESTO, STANISLAUS CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Modesto. Owners, City of Modesto. Preliminary steps have been taken by the City Council to provide for the paving of L street between 7th and 9th. Bids will be called for on this work when the plans and specifications have been approved.

FRESNO, FRESNO CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Fresno. Owners, City of Fresno. Plans have been completed and figures are now being taken for the construction of a 16-inch sewer in El Dorado street. Brick manholes and Y branches are included in the work. Plans can be secured from the office of the City Clerk. Bids will be opened on August 2nd.

VISALIA, TULARE CO., CAL.—Street paving, concrete curbs and gutters. Cost not stated. Engineer, City Engineer, Visalia. Owners, City of Visalia. Bids will be received by the Board of Trustees up to 5 p. m. of August 4, 1915, for paving and constructing concrete curbs and gutters in West Main street from Encina avenue to Conyer street in accordance with plans and specifications on file in the office of the City Engineer. Certified check or bond for 10 per cent is required. Ida Markham is City Clerk.

SAN RAFAEL, MARIN CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, San Rafael. Owners, Marin County. At the last meeting of the County Supervisors bids were ordered called to be received on August 3rd for constructing a piece of road in District One, across the marsh near McNear's Point. Bids are to be received for four different specifications, and the Board will decide which is the best after the bids are received. One specification calls for the necessary fill with a 12-inch rock rip-rap; another calls for pile bulkhead; another for a bulkhead composed of rock each containing a cubic yard and one for embankment obtained from any source. Further information may be had from the County Surveyor at San Rafael.

MARTINEZ, CONTRA COSTA CO., CAL.—Lighting system. Cost not stated. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Plans and specifications have been adopted by the County Supervisors for a lighting district known as Crockett-Crotona and Valona lighting district, and the Clerk of the Board was ordered to advertise for bids for furnishing and installing lights in accordance with plans.

SAUSALITO, MARIN CO., CAL.—Sewer system, \$12,500. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Plans and specifications for adequate sewerage in South Sausalito have been approved by the Board of Trustees. The sewage from all that portion of Sausalito in the watershed between the boundary lines of the Sausalito Land and Ferry Co. and the Sausalito Bay Land Co. will be collected in the Main street and the Water street sewers and carried 125 feet out into the bay by a cast iron pipe outlet. Plans are on file at the office of the Town Engineer. Bids will be called for shortly.

NAPA, NAPA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Napa. Owners, City of Napa. The City Council has adopted resolutions providing for sewer work in Nursey, Vallejo and Juarez streets. Bids for the work will soon be called for.

NAPA, NAPA CO., CAL.—Street work. Cost as follows. Engineer, City Engineer, Napa. Owners, City of Napa. Bids for doing certain street work on First street have been taken under advisement by the Council and a contract will probably be awarded at the next meeting. The following bids were received: F. E. Burge, \$1,915; Geo. Errington, \$2,191.65.

REDWOOD CITY, SAN MATEO CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The County Surveyor has been instructed to prepare plans and specifications for a road from Moss Beach to Montara and from Farrelone to Martini's. On completion and approval of the plans bids will be called for.

REDWOOD CITY, SAN MATEO CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer, Redwood City. Owners, Redwood City. Plans and specifications providing for the paving of Main and East Bradford streets have been adopted by the City Trustees. The work will probably be done under private contract. The specifications call for a reinforced concrete base and a Topeka wearing surface.

REDWOOD CITY, SAN MATEO CO., CAL.—Highway work. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Plans are complete and figures will be opened on August 2nd for the following work: For grading and partly macadamizing 14,825 miles of highway, located in the Fifth Road District of San Mateo County, beginning at a point in the center of the present county road from Pescadero to the Santa Cruz County line. The work has been figured before, bids being opened on July 12th. Plans and specifications can be secured from the office of the County Surveyor.

SALINAS, MONTEREY CO., CAL.—Road grading, \$9,050. Engineer, County Surveyor, Salinas. Owners, Monterey County. Bids have been opened for the grading of the Monterey-Castroville road, a distance of approximately 11 miles in length, extending from the Huerta del Rey lagoon at Seaside to the Neponset bridge. The Engineer's estimate is \$9,050 and the lowest bid was that of L. G. Hare, Salinas, at \$6,728. The next low bid was Ruth-

ven & Serano, Monterey, at \$9,352. Bids were taken under advisement.

MAYFIELD, SANTA CLARA CO., CAL.—Street improvements. Cost not stated. Engineer, City Engineer, Mayfield. Owners, City of Mayfield. Plans and specifications for the paving of all principal streets of Evergreen Park and College Terrace have been ordered. The streets to be improved are Palo Alto and Amherst avenues in College Terrace and all streets running at right angles to the state highway in Evergreen Park. The work will probably be done under the Vrooman act or the Act of 1911. The City Engineer has been instructed to plan for an 18-foot roadway in the middle of each street of the same quality as the state highway, the rest of the street to be graded to the curb line.

HOLLISTER, SAN BENITO CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Hollister. Owners, City of Hollister. The Ransome-Crummey Co., First National Bank Bldg., Oakland, will pave Monterey street from Fifth to B streets under private contract. The plans and specifications for the work will be prepared by the City Engineer and will call for a 4-inch concrete base with one-half inch covering of dursaphite after the sub-base has been properly graded and tamped. The cost of the concrete base is set at 30 cents per lineal foot and 1½ cents per square foot for the dursaphite.

SAN JOSE, SANTA CLARA CO., CAL.—Street improvements. Cost not stated. Engineer, City Engineer, San Jose. Owners, City of San Jose. At the last meeting of the City Council the City Engineer was instructed to prepare plans and specifications for the improvement of the remainder of West San Carlos street, Grant street, Orchard street from Grant southward, Taylor street from First to Thirteenth street, South Tenth street from Reed to Keys, Autumn from Julian to Santa Clara, and Julian from the Guadalupe bridge to the westerly city limits.

SAN JOSE, SANTA CLARA CO., CAL.—Furnishing cement. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Bids were received from the Standard Portland Cement Co., Santa Cruz Portland Cement Co., Henry Cowell Lime and Cement Co., and the Pacific Portland Cement Co., Consolidated, by the Supervisors at their last meeting for furnishing the county with 50,000 barrels of cement and were rejected. The District Attorney has been directed to furnish the Board with an opinion as to the right of their purchasing the cement in the open market without a further call for bids.

SAN JOSE, SANTA CLARA CO., CAL.—Highway construction. Costs as follows. San Jose. Owners, Santa Clara County. The low bids presented at the last meeting of the Board of Supervisors for highway construction in Santa Clara County are as follows: District No. 2, Ransome-Crummey Co., \$31,554.65. Ford road, same district, J. McRynolds, 249 North 15th street, San Jose, \$7,991; second low, John W. McDonald, San Jose, \$14,887. Union avenue and Foxworthy road, J. F. Adams, 621 Home street, San Jose, \$10,300, second low, Howard & Ellison

Paving Co., \$13,500. No contracts have been awarded.

SONORA, TUOLUMNE CO., CAL.—Road machinery. Cost not stated. Engineer, County Surveyor, Sonora. Owners, Tuolumne County. The County Board of Supervisors are taking under advisement the purchase of a ten-ton gasoline roller, a six thousand pound scarifier and an immense grader for the improving of the county roads.

SACRAMENTO, CAL.—Sewer construction, \$43,000. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Four bids were received by the City Commission for the construction of Unit 4 of the reinforced concrete sewer in East Sacramento. It appears that the James Kennedy Co. of Los Angeles is the low bidder. Other bidders were A. Teichert, Tibbitts Pacific Co. and Contra Costa Construction Co. The work will cost about \$43,000. The sewer will be laid on Montclair avenue to J, north on Montclair to the alley between G and H and thence east to Wright & Kimbrough Tract No. 10, and up Burns Slough to Ashley Place.

BERKELEY, ALAMEDA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. At the last meeting of the City Council specifications for the construction of a sewer in Sixth street from Harrison north 400 feet were adopted, and a resolution of intention ordering the work was made.

RIVERSIDE, RIVERSIDE CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Riverside. Owners, Riverside County. Plans are complete and figures will be opened on August 4th for the following: Improvement of a portion of Divisions B and C, Route No. 2 (Murrieta to foot of Temecula grade). The improvement consisting in part of grading and paving with concrete 16 feet wide and 4 inches thick 5.67 miles of road; also a 60-foot concrete bridge which may be bid on separately. Plans are on file at the office of the County Clerk at Riverside.

Contracts Awarded.

RIO VISTA, SOLANO CO., CAL.—Paving, curbs and gutters. Cost not stated. Engineer, Town Engineer, Rio Vista. Owners, Town of Rio Vista. Contractors, Frank Duffum and W. J. Jessup, Rio Vista. Contract price not stated.

BERKELEY, ALAMEDA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractor, Michael Heafey, 2030 McKinley avenue, Berkeley. Contract price not stated.

SACRAMENTO, CAL.—Sewer construction, Unit No. 4, \$37,250.40. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractor, James Kennedy, 901 Washington Bldg., L. A. Contract price, \$37,250.40.

SACRAMENTO, CAL.—Street paving, \$10,000. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, Clark-Henery Construction Co., Ochsner Bldg., Sacramento. Contract price, \$10,000.

CORNING, TEHAMA CO., CAL.—Water extension and sewer work. Cost as follows. Engineer, City Engineer, Corning. Owners, City of Corning. Con-

tractor, P. A. Wheeler, Corning, water extension, \$4,755. A. C. Hamlin, San Jose, sewer extensions, \$15,351.

STORES AND OFFICES.

BERKELEY, ALAMEDA CO., CAL.—Stores, 1 story and base, brick, \$5,000. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, E. A. Heron. The building will be erected on Shattuck avenue near University, and has been designed to contain two stores and a branch station. Interior will be finished in pine. Patent store fronts are specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken.

OAKDALE, STANISLAUS CO., CAL.—Offices, 2 story and base, reinforced concrete, \$10,000. Architects, Stone & Wright, 24 South California street, Stockton. Owners, Oakdale Irrigation District. The building has been designed for the administrative offices of the company. Interior will be finished in pine and hardwood. Fireproof vaults will be installed. There will be a central heating system. Exterior of the building will be faced with cement plaster. Plans are now being prepared and figures will be called for shortly.

SAN FRANCISCO—Stores and lofts, 3 story and base. Class C construction, \$25,000. Architect, Nathaniel Blaisdell, 255 California street, S. F. Owners, San Francisco Investment Co., Clunie Bldg. The building will be erected on the north side of California street east of Leidesdorff, and has been designed for a store on the first floor and a number of small offices and lofts on the upper two floors. Interior will be finished in pine and hardwood. There will be elevator service, steam heat and hot water supply. Patent store fronts and marble bases are specified. Exterior of the building will be faced with pressed brick, trimmed with terra cotta. Plans are complete and figures are being taken. A contract for the pile foundation work has been awarded to McGowan & Butler, 150 Jessie street, for \$1,244.

THEATRES.

TURLOCK, STANISLAUS CO., CAL.—Theatre and lodge, 2 story and base, reinforced concrete, \$25,000. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. The building will cover an area of 56 by 150 feet, and will have three street frontages. The main floor will contain a high class theatre with a seating capacity of 750 people. There will also be a large balcony. Upper floor has been designed for lodge rooms for the local Odd Fellows and will be finished in pine and hardwood. A central heating system will be installed. Considerable ornamental plaster will be used in the theatre. Exterior of the building will be faced with cement plaster. Plans are complete and figures are being taken.

SEALED PROPOSALS

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 955—Proposals for Electrically-Operated Passenger Elevator and Dumbwaiter and Hand-Operated Freight Elevators, Boller

Tubes, Steam Cocks, Portable Tool Stands and Lathe Pans, Cold-Rolled Steel, Tool Steel, Cable Valves, Brass Floor Drains, Air Hose, Magnesia Pipe Covering, Paper, Bristol Board, Memorandum Books, Douglas Fir and Yellow Pine Lumber, Spud Timbers and White Oak Lumber.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m., August 6, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 955) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR BUILDING.

BUILDING, ETC.—Treasury Department, Supervising Architect's Office, Washington, D. C.—Sealed proposals will be opened in this office at 3 p. m., August 24, 1915, for the construction, complete (including mechanical equipment and appliances) of the United States post office at Grand Junction, Colo. Drawings and specifications may be obtained from the custodian of site at Grand Junction, Colo., or at this office, at the discretion of the supervising architect, JAMES A. WEEMORE, acting supervising architect.

PROPOSALS FOR EXCAVATION.

EXCAVATION—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Malta, Mont., until 2 o'clock p. m., August 12, 1915, for about 355,000 cubic yards of canal excavation. This work is located from three to ten miles from Saco, Mont., on the Great Northern Railway. For particulars address the United States Reclamation Service, Washington, D. C.; Denver, Colo., or Malta, Mont. MORRIS BIEN, acting director.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 954—Proposals for Cement Roofing Tile.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m., August 3, 1915, at which time they will be opened in public, for furnishing or furnishing and erecting the above material. Blanks and general information relating to this circular (No. 954) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 951—Proposals for Mechanical Range Indicators and Patterns, Steel, Wrought Iron and Steel Pipe, Iron and Steel Chain, Nuts, Rivets, Screws, Fusible Plugs, Ridge Roll, Switch Gears, Washers, Valves, Steam Whistles, Saw Blades, Forges, Manure Forks, Hatchet Handles, Brass Hooks, Bits, Grommets, Flexible Joint, Steam Gauges, Blowing Glass, Marine Clocks, Stepladders, Ash Oars, Water Coolers, Garbage Cans and Covers, Water Closets, Sheet Copper, Lead Washers, Leather Helling, Escutcheon Pins, Air Hose, Fire Clay, Fire Brick, Engine Lubricators, Door Mats, Poultry Netting, Asbestos Cement, Asbestos Packing, Brass Cuspidors, Linoleum, Wash Toweling, Paper, Drinking Cups, Drinking Glasses, Chinaware, Linsed Oil, Alcohol, Benzine, Paints, Shellac, Amber, Zinc, Litharge, Carbon Bisulphide, Turpentine, Sublimite and Linen Tape.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m., August 2, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular

(No. 951) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR WHARF CONSTRUCTION.

WHARF—Sealed proposals indorsed "Proposals for Reinforced Concrete Wharf" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 18, 1915, and then there publicly opened, for constructing a reinforced concrete wharf at the United States Cavalry station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR CONCRETE PIERS.

CONCRETE PIERS—Sealed proposals indorsed "Proposals for Torpedo Boat Piers" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 18, 1915, and then there publicly opened, for constructing reinforced concrete torpedo boat piers at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR RAILROAD.

MARINE RAILWAY—Sealed proposals indorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 18, 1915, and then there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR DREDGING.

DREDGING—Sealed proposals, indorsed "Proposals for Dredging," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. August 14, 1915, and then there publicly opened, for dredging at the navy yard, Puget Sound, Wash. Amount available, \$15,000. Plan and specification may be obtained on application to the bureau or to the commandant of the navy yard, Bremerton, Wash. H. R. STANFORD, chief of bureau.

PROPOSAL FOR BIDS.

SEALED BIDS will be received at the Office of the Comptroller of the University of California, Berkeley, California, at or before 11 A. M., August 9, 1915, for the Excavation and Concrete, Structural Steel, Steel Erection, Roofing and Sheet Metal, Lathing and Plastering, Marble and Terrazzo, Carpentry and Interior, Plink, Plumbing, Ornamental Metal, Elevator and Acoustic Felt for Benjamin Ide Wheeler Hall on the grounds of the University of California, Berkeley, as per plans and specifications on file and obtainable after 9 A. M., Saturday, July 17th, at the Cashier's window in said office. A deposit of \$5.00 will be required for each set of plans and specifications, which deposit will be refunded upon return of said plans and specifications, provided such return is made prior to 12 o'clock, noon, August 10, 1915; no refunds will be made after said date. The time of completion of the work will be an important element in the consideration of bids.

No bids will be received unless accompanied by a certified check or bond



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in favor of the undersigned, equal to 10% of the bid, to secure execution of the contract by the successful bidder. The right is reserved to reject any or all bids.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA. (*)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, noon, Tuesday, August 10, 1915, said bids then and there to be publicly opened and read for furnishing all plant, material and labor and doing the work required for the complete construction of the Main Sewer for the Fresno State Normal School, Fresno, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Five (\$5.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Main Sewer, Fresno State Normal School, Fresno, California."

(SIGNED) W. F. MCCLURE,
State Engineer. (*)

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Officers' Quarters" will be received at the bureau of yards and docks, Navy Department, until 11 o'clock a. m. August 21, 1915, and then there publicly opened for 4 one-story officers' quarters of wooden construction at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR SUBMARINES.

SUBMARINES—Proposals for constructing by contract sixteen submarine boats, Nos. 62-77, will be received at the Navy Department until 12 o'clock noon August 2, 1915, when they will be publicly opened. Circulars for the information of bidders and general specifications for the construction of said vessels are ready for distribution among prospective bidders. Forms of proposal and contract may be had on application to the department. FRANKLIN D. ROOSEVELT, Acting Secretary of the Navy.



Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. HANDBOOK on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive special notice, without charge, in the

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PROPOSALS FOR DREDGING.

1915, and then there publicly opened for dredging 72,000 cubic yards.

DREDGING—Sealed proposals, indorsed "Proposals for Dredging," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. July 31, more or less, at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, Chief of Bureau.

FINAL FIGURES FOR ALASKA'S MINERAL PRODUCTION IN 1914.

Alaska produced gold in 1914 to the value of \$13,764,259, an increase of about \$140,000 over that of the previous year. In 1914 21,150,628 pounds of copper were produced in Alaska, compared with 21,659,953 pounds in 1913. The value of Alaska's total mineral production for 1914 is \$19,115,080; that of 1913 was \$19,476,356. This decrease is due to the low price of copper in 1913.

It is estimated that up to the close of 1914 Alaska has produced minerals to a total value of \$268,150,000, of which \$244,156,000 represents the value of the gold output. These statistics are taken from a report by Alfred H. Brooks, of the United States Geological Survey, which is now in press.

SECONDARY METAL REPORT.

The U. S. Geological Survey now has available for distribution copies of the annual statement on the recovery of secondary metals in 1914. It is reported that \$57,029,706 worth of secondary metals was recovered in the United States last year.

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

RESIDENCES—2, 1½ story and base, frame, \$1,500 each. San Francisco. Architect, none. Owner, Lazar Aydukovich, 1238 Hollister street, S. F. These two houses will be erected on the east side of 46th avenue north of Judah, and each has been designed for a five-room house with bath. Interior will be finished in pine and redwood. There will be an open fire place in the living rooms. Mantels will be of tile and brick. Exterior of the houses will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are being purchased.

RESIDENCES—6, 2 story and base, frame, \$10,000 each. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. These dwellings will be erected in Forest Hill, and each will contain eight rooms, two baths and sleeping porches. Interiors will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living and dining rooms and reception halls. There will be furnace heat and open fire places. Mantels will be of brick and tile. Bath rooms will be of brick and tile. There will be vacuum cleaning and hot water circulating systems. Exteriors will be covered with cement plaster on metal lath and brick veneer. Plans are now being prepared.

RESIDENCES—2, 2 story and base, frame, \$3,000 each. San Francisco. Architect, none. Owner, P. Algot Nelson, 4333 19th street, S. F. These two houses will be erected on the north side of Lawton west of 9th avenue, and each has been designed to contain seven rooms and bath. Interiors will be finished in pine with some hardwood veneer and white enamel. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owners, Nelson Bros., 515 Dolores street, S. F. The dwelling will be erected on the east side of 18th avenue south of Geary street, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine, redwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exter-

rior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners who will do the work by Day Labor. Materials are now being purchased.

RESIDENCES—10, 1 and 2 story and base, frame, \$5,000 to \$7,000. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. These houses, which have been designed to contain from seven to eight rooms, will be erected in Lincoln Manor. Each will have a sleeping porch. Interiors will be finished in pine and hardwood with white enamel in the bed rooms. There will be open fire places and tile or brick mantels. The more expensive homes will have furnace heat. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exteriors will be covered with rustic, shingles and cement plaster on metal lath. Plans are now being prepared.

APARTMENT HOUSE—3 story and base, frame, \$14,000. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owners, J. Risso and G. Oberstelli. The building has been designed to contain eight apartments of three rooms each with bath, and will be erected at the corner of 19th and Noe streets. Interior will be finished in pine throughout. Hardwood floors will be used in the principal rooms. Gas steam radiators are specified. Wall beds will be used. There will be a hot water supply. Bath rooms will have tile floor and wainscot. Marble wainscot will be used in the entrance. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

APARTMENT HOUSE—3 story and base, frame, \$12,000. San Francisco. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owner, George W. Mensor. The building will be erected on the south side of Washington street east of Steiner, and has been designed to contain six apartments of four rooms and bath. Interior will be finished in pine with some Philippine hogany. Hardwood floors will be used in the living rooms, dining rooms and reception rooms. There will be steam heat and a hot water system. Bath rooms will have tile floors and wainscot. Wall beds are specified. Marble and tile will be used in the entrance. Exterior will be covered with cement plaster on metal lath. Plans are complete and the owner is taking figures.

FLATS 2 story and base, frame, \$6,000. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner's name not given. The building will be erected on Oak street near Fillmore, and has been designed to contain two residential flats of six rooms each. Interiors will be finished in pine, oak and white enamel. There will be furnace

heat and open fire places. Mantels will be of tile or brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Bath flats will be provided with sleeping porches. Exterior will be covered with cement plaster and brick veneer. Plans are being prepared.

FLATS—3 story and base, frame, \$1,500. San Francisco. Architect, none. Owner, Thomas D. Quigley, 1590 8th avenue, S. F. The building has been designed to contain three modern flats and will be erected on the south side of Minna street east of Julia. Interior finish will be of pine and redwood. There will be an open fire place in each living room. Mantels will be of tile. Imitation tile wainscot will be used in the bath rooms. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

FLATS—3 story and base, frame, \$5,000. San Francisco. Architect, Charles Carlson, 200 Gates street, S. F. Owner, George D. Gilmour, 2376 Howard street. The building will be erected on the east side of Howard street north of 16th, and has been designed to contain three flats of five rooms each. Interiors will be finished in pine with some hardwood panels. Hardwood floors will be used in the principal rooms. There will be an open fire place in each living room. Mantel will be of tile or brick. Imitation tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and ship-lap. Plans are complete and the work will be done by Day Labor.

FLATS—2 story and base, frame, \$6,500. San Francisco. Architect, none. Owner, C. S. Allred, 150 Onondago avenue, S. F. The building will be erected on the south side of Union street west of Steiner, covering an area of 27 by 80 feet. There will be four small flats. Interior finish will be of pine and redwood with some hardwood veneer. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and ship-lap. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

FLATS AND STORE—3 story and base, frame, \$8,500. San Francisco. Architect, Carl Gollfuss, 16 Kearny street, S. F. Owner, Anna R. Wisman. The building will be erected at the southeast corner of Clement and 24th streets and will contain a store on the first floor and flats above. The flats have been designed for offices for doctors and dentists and will be finished in pine and white enamel. Hardwood

floors will be used in the principal rooms. In the rear of the building a garage to contain three machines has been provided for. There will be open fire places and tile or brick mantels. Bath rooms will be finished in tile and white enamel. Exterior of the building will be covered with cement plaster. Plans are complete and figures are being taken.

FLATS AND STORES—3 story and base, frame, \$6,000. San Francisco. Architect, C. Fantoni, 916 Kearny street, S. F. Owner, Caetano Ciampa, 414 Madrid. The building will be erected on Brazil and has been designed to contain two stores and three flats. Interior will be finished in pine throughout. Some hardwood floors will be used. There will be open fire places and tile or brick mantels. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and figures are being taken.

POST OFFICE—1 story and base, brick, stone and concrete. Cost not stated. Grand Junction, Colo. Architect, Oscar Wenderoth, Washington, D. C. Owners, United States Government. Revised plans for this building have been completed and figures are again being taken. The building will be finished in pine and hardwood. There will be a considerable amount of tile and marble work. Plans provide for steam heat. Exterior will be faced with pressed brick and stone. Plans can be secured from either the Custodian of the site at Grand Junction or from the Supervising Architect. Bids will be opened on August 24th.

SCHOOL AUDITORIUM—2 story and base, brick and steel. Cost not stated. San Francisco. Architect, William C. Hays, First National Bank Bldg., S. F. Owners, Wilmerding School of Industrial Arts. The building will be erected on Potrero avenue between 16th and 17th streets, and has been designed for a large auditorium and meeting halls. Interior will be finished in pine throughout. There will be a central heating system, probably steam heat. Modern plumbing and electric work will be installed. Exterior of the building will be faced with pressed brick. Plans are being prepared. This is the first of several new buildings which will be erected for the Wilmerding School.

APARTMENT HOUSE—2 story and base, frame, \$8,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name not given. The building will be erected at the corner of Union and Stockton streets and has been designed to contain a store and several small apartments. Interior will be finished in pine and redwood. There will be wall beds and private baths. Exterior of the building will be covered with rustic and shiplap. Plans are now being prepared. Further mention will be made of the work.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name not given. The building will be erected on the south side of Norton street near Mission, and will contain two flats of five rooms each. A basement garage is also provided. Interior will be finished in pine with some elm panels. Hardwood floors will

be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Imitation tile will be used in the bath rooms. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

RESIDENCE—2 story and base, steel and brick, \$100,000. San Francisco. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Andrew Welch, Jr. The house will be erected on Broadway between Broderick and Baker streets and when complete will take its place among the finest homes in the city. There will be in the neighborhood of 20 rooms, a number of baths and sleeping porch. Interior finish will be of hardwoods and white enamel. Hardwood floors will be used throughout except in the bath rooms which will be finished in tile and marble. There will be a central heating system, probably hot water, vacuum cleaning and dumb waiters. Mantels will be of marble and tile. Exterior of the house will be faced with pressed brick trimmed with terra cotta. Plans are now being prepared.

RESIDENCE—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, A. R. Lapham, 511 12th avenue, S. F. The house has been designed to contain seven rooms, bath and sleeping porch, and will be erected on the west side of 21st avenue south of Clement. Interior will be finished in pine and elm. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, Gus A. Brown, 123 Carl street, S. F. Owners, S. F. and L. A. Realty Co., Foxcroft Bldg. The dwelling will be erected on the west side of 15th avenue south of Pacheco, and has been designed to contain six rooms and bath. Interior will be finished in pine throughout. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile or brick mantel. Exterior of the dwelling will be covered with shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

FLATS—2 story and base, frame, \$7,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name not given. The building will be erected near the corner of Union and Hyde streets, and has been designed to contain three flats of five rooms each and a basement garage. Interior will be finished in pine with some hardwood floors. There will be an open fire place in each living room. Mantels will be of tile or brick. Bath rooms will be finished in tile. Automatic water heaters will be installed. Marble wainscot will be used in the entrance. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

FLATS AND STORES—3 story and base, frame, \$6,500. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name not given. The building will be erected on the west side of Mission street near 28th and will contain four flats and two stores. Interior will be finished in pine and redwood. Some oak floors will be used. Patent store fronts are specified. There will be an open fire place and tile mantel in each living room. Exterior of the building will be covered with rustic and shiplap. Plans are now being prepared.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, T. J. Houweling, 506 Chenery street, S. F. The dwelling will be erected on Sprague street east of Naylor, and has been designed for a six-room house with bath. Interior will be finished in pine throughout. Hardwood floors will be used in the principal rooms. There will be an open fire place and tile or brick mantel. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor.

STORES AND LOFTS—3 story and base. Class C construction, \$25,000. San Francisco. Architect, Nathaniel Blaisdell, 255 California street, S. F. Owners, San Francisco Investment Co., Clunie Bldg. The building will be erected on the north side of California street east of Leidesdorff, and has been designed for a store on the first floor and a number of small offices and lofts on the upper two floors. Interior will be finished in pine and hardwood. There will be elevator service, steam heat and hot water supply. Patent store fronts and marble bases are specified. Exterior of the building will be faced with pressed brick, trimmed with terra cotta. Plans are complete and figures are being taken. A contract for the pile foundation work has been awarded to McGowan & Butler, 180 Jessie street, for \$1,244.

APARTMENT HOUSE—4 story and base, brick and steel, \$25,000. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, Theo. E. Rulfs, 1167 Pine street, S. F. The building will be erected on the east side of Hyde street south of Sutter, covering an area of 25 by 86 feet. Interior will be arranged for a number of two and three room suites with baths and wall beds. Interior finish will be of pine and elm panels. Hardwood floors will be used in the living and dining rooms. There will be an automatic elevator, steam heat and a hot water system. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance lobby. Exterior of the building will be faced with pressed brick. Plans are being prepared.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, Albert Farr, Foxcroft Bldg., S. F. Owner, Stewart Smith, Mission Bank, S. F. The dwelling will be erected on the east side of 7th avenue near Lake, and has been designed for an eight-room house with bath and sleeping porch. Interior will be finished in pine and hardwood. Hardwood floors will be used in the living room, dining

room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster. Plans are being prepared.

Contracts Awarded.

CHURCH—1 story and base, frame. Cost not stated. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owners, Swedish Baptist Church. Contractor, M. S. Shaw, 2201 Larkin street, S. F. Contract price not stated. FACTORY—4 story and base, reinforced concrete, \$199,000. San Francisco. Architect, Engineering Dept. American Can Co., New York City. Owners, American Can Co. Contractors, Lindgren & Co., Monadnock Bldg., S. F. Contract price, \$199,000.

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Am't.
2090	Cavagnaro	Cavagnaro	1500
2091	Gass	Gass	500
2092	McDonald	Grahns	850
2093	O'Connor	O'Connor	1500
2094	Meade	Meade	800
2095	Anetto	Anetto	450
2096	Hart	Prout	400
2097	Scheff	Elvin	1750
2098	Egeberg	Egeberg	400
2099	Giovannetti	Giovannetti	400
2100	Gehres	Vanderford	400
2101	Murasky	Murasky	400
2102	Kerner	McBarnes	400
2103	Wilson	Wilson	400
2104	Stelling	Koenig	400
2105	City & Sub Bldg.	Plattner	1500
2106	Same	Same	1500
2107	Same	Same	1500
2108	Bertelsin	Sturges	400
2109	Young	Young	600
2110	Levinson	Holm	500
2111	Schendel	Andrews	300
2112	Sullivan	Heaphy	800
2113	Wilcox	Nichols	500
2114	Luchese	Amoroso	9500
2115	P. G. & E. Co.	Snook	4737
2116	Benitout	Narbebury	4700
2117	Corbett	Helms	1725
2118	Levy	Schley	6325
2119	Aydukovich	Owner	1450
2120	Same	Same	1450
2121	Simon	Simon	400
2122	Hovey	Johnson	400
2123	Elrpo	Cavaglia	650
2124	Sommer	Levi	400
2125	Allred	Allred	6500
2126	Lindblade	Leigh	2845
2127	Raggett	Dewar	700
2128	Hashagen	Donovan	750
2129	Bignotti	Casty	1000
2130	Hendrick	Mohler	650
2131	Bellegarde	Pearson	500
2132	Cordes	Reynolds	1000
2133	Eisenberg	Atlas	400
2134	Gilmour	Gilmour	5000
2135	O'Brien	Fraser	15450
2136	Morshead	Richardson	1850
2137	Allred	Allred	6500
2138	de Greayer	Coburn	3690
2139	Bowen	Drake	3620
2140	Brown	McMullin	5000
2141	Keneth Israel	Weiss	700
2142	Nelson	Nelson	3000
2143	Same	Same	3000
2144	Hansen	Stenbro	500
2145	Stern	Coburn	400
2146	John Hock Jng.	Cavaglieri	400
2147	Nelson	Nelson	2750
2148	Totten	Hughson	1800
2149	S. F. Invest	McGowan	1244
2150	Baltimore	Holloway	873
2151	Quigley	Tomagnini	3550
2152	Ryan	Graham	1500
2153	Hansen	Ostlund	1500
2154	Foreman	Laib	450
2155	Piazza	Cedar	600
2156	Quigley	Quigley	3550
2157	Hill	Bovyer	700
2158	Emley	Klein	500
2159	Lapham	Lapham	2750
2160	Ritz Rebidg	Stranahan	10250
2161	Galbally	Schmidt	550
2162	American Can.	Lindgren	199000

FRAME DWELLING
(2090) SE DELANO 151 NE Ocean.
One-story and basement frame dwlg.
Owner.....Geo. Cavagnaro, 268 Ocean Ave., San Francisco.
Architect...None.
Day's work. COST, \$1800

FRAME DWELLING
(2091) W FALCON 150 S Holloway.
One-story and basement frame dwlg.
Owner.....Martin Gass, 171 Falcon Ave., San Francisco.
Architect...None.
Day's work. COST, \$500

FRAME SHOP
(2092) W RAIL ROAD AVE 75 S Fairfax. One-story frame shop.
Owner.....Wm. McDonald, 120 Rail Road Ave., San Francisco.
Architect...None.
Contractor..Wm. H. Grahns, 2840 Bryant, San Francisco.
COST, \$850

FRAME DWELLING
(2093) NO. 1613 REVERE. One-story and basement frame dwelling.
Owner.....Jas. and Daisy O'Connor, 1611 Revere, San Francisco
Architect...None.
Day's work. COST, \$1500

FRAME DWELLING
(2094) S RUSSIA 275 W Naples. One-story and basement frame dwlg.
Owner.....M. J. Meade, 624 Naples, San Francisco.
Architect...None.
Day's work. COST, \$800

ALTERATIONS
(2095) NO. 212 NOE. Move and alter dwelling.
Owner.....G. Anetto, 208 Noe, S. F.
Architect...None.
Day's work. COST, \$450

ALTERATIONS
(2096) NO. 138 CUSHMAN. Alter dwelling.
Owner.....Mr. Hart, Premises.....
Architect...None.
Contractor..J. Prout, 2020 Turk, S. F.

FRAME FACTORY
(2097) N FOLSOM 125 E Fifth N 80x E 25. All work for one-story and corrugated iron factory.
Owner.....Henrietta Schiff.
Architect...Jos. M. Cahen, 133 Clayton, San Francisco.
Contractor..Frank Elving, 4017 18th, San Francisco.
Filed July 17, '15. Dated June 27, '15.
Frame completed and roughing in of plumbing done.....\$150
Building enclosed, brick and concrete floors in place..... 450
Completed and accepted..... 450
Usual 35 days..... 450
TOTAL COST, \$1790
Bond, \$895. Surety, Massachusetts Bonding & Insurance Co. Limit, 30 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING
(2098) W TWENTY-THIRD AVE 200

S Taraval. One-story and basement frame dwelling.
Owner.....Laura H. Egeberg, 2435 23rd Ave., San Francisco.
Architect...None.
Day's work. COST, \$100

ADDITION
(2099) NO. 1671 KIRKWOOD. Add 1 room and porch.
Owner.....A. Giovannetti, Premises.
Architect...None.
Day's work. COST, \$400

ALTERATIONS
(2100) NOS. 1317-25 OCTAVIA. Alter rooming house.
Owner.....Mrs. Gehres, 1416 7th S. F.
Architect...None.
Contractor..Vanderford & Alleigh, 1422 Franklin, S. F.
COST, \$100

ALTERATIONS
(2101) NO. 62 DUBOCE AVE. New roof trusses and reinforce shop.
Owner.....W. F. Murasky, 45 Duboce Ave., San Francisco.
Architect...None.
Contractor..H. D. Nichols, 1251 Stevenson, San Francisco.
COST, \$400

ALTERATIONS
(2102) NO. 1456 HAIGHT. Lower floor of store.
Owner.....Kerner & Elsert, 107 Montgomery, S. F.
Architect...None.
Contractor..A. McBarnes, 1536 Haight, San Francisco.
COST, \$400

FRAME DWELLING
(2103) W SEVENTEENTH AVE 275 S Moraga. One-story and basement frame dwelling.
Owner.....H. B. Wilson, 2517 Post, San Francisco.
Architect...None.
Day's work. COST, \$400

REPAIRS
(2104) N SEVENTEENTH 80 E Church Repair present building.
Owner.....M. Stelling, Premises.
Architect...None.
Contractor..Ludwig B. Koenig, 3525 19th, San Francisco.
COST, \$100

FRAME DWELLING
(2105) N STAPLES 175 E Detroit. One and one-half-story and basement frame dwelling.
Owner.....City & Suburban Home Bldrs., Wm. C. Hale, Pres., 1302 Merchants Nat'l Bank Bldg., San Francisco.
Architect...A. R. Denke, Humboldt Bank Bldg., S. F.
Contractor..J. H. Plattner, 1827 Fillmore, San Francisco.
COST, \$1500

FRAME DWELLING
(2106) N STAPLES 125 E Detroit. One and one-half-story and basement frame dwelling.
Owner.....City & Suburban Home Bldrs., Wm. C. Hale, Pres., 1302 Merchants Nat'l Bank Bldg., San Francisco.
Architect...A. R. Denke, Humboldt Bank Bldg., S. F.

Contractor...J. H. Plattner, 1827 Fillmore, San Francisco.
COST, \$1500

FRAME DWELLING

(2107) N STAPLES 150 E Detroit. One and one-half-story and basement frame dwelling.

Owner.....City & Suburban Home Bldrs., Wm. C. Hale, Pres., 1302 Merchants Nat'l Bank Bldg., San Francisco.

Architect...A. R. Denke, Humboldt Bank Bldg., S. F.

Contractor...J. H. Plattner, 1827 Fillmore, San Francisco.
COST, \$1500

ALTERATIONS

(2108) NO. 211 CLEMENT. Alter Bakery.

Owner.....Mr. Berthlesin, NE Balboa and 6th Ave., S. F.

Architect...None.

Contractor...B. Sturges, 3931 Geary, San Francisco.
COST, \$400

ADDITION

(2109) S TWENTY-FIRST 100 E Diamond. Add 3 room to dwelling.

Owner.....J. Young, 4031 21st, S. F.

Architect...None.

Day's work. COST, \$600

ALTERATIONS

(2110) NO. 1050 GOLDEN GATE AVE. Alter dwelling.

Owner.....Mrs. E. Levison, 1540 California, San Francisco.

Architect...None.

Contractor...Theo. S. Hoin.
COST, \$500

BRICK OVEN

(2111) NW CHURCH AND 16TH. Erect brick oven.

Owner.....Schendel & Andrews, 3731 17th & 1750 Mission, S. F.

Architect...None.

Day's work. COST, \$900

REPAIRS

(2112) NO. 1027 MISSION. Repair fire damage.

Owner.....Sullivan Estate Co., Flatiron Bldg., S. F.

Architect...None.

Contractor...J. J. Heaphy, 1721 Lombard, San Francisco.
COST, \$800

REPAIRS

(2113) NO. 3011 JACKSON. Repair roof.

Owner.....Mrs. Wilcox, Premises.

Architect...None.

Contractor...N. C. Nichols, 210 4th Ave., San Francisco.
COST, \$500

FRAME FLATS

(2114) E KEARNY 89-9 S Green 31-4 1/2 x81. All work except gas and electric fixtures for three-story frame flats.

Owner.....Biagio Ruggiero and Giuseppe Lucchese.

Architect...None.

Contractor...F. C. Amoroso, 1246 Kearny, San Francisco.

Filed July 19, '15. Dated June 9, '15.

Frame up\$2375

Completed and accepted.....2375

Usual 35 days.....2375

Brown coated2375

TOTAL COST, \$9500
Bond, \$4750. Sureties, F. Batarg and N. Capurro. Limit, 100 days after June 15. Forfeit, none. Plans and specifications filed.

CLASS "A" BUILDING

(2115) S SUTTER 115-9 E Powell S 137-6x8 45-6. Plumbing and piping for vacuum clearer system for 8-story Class "A" building.

Owner.....Pacific Gas & Electric Co., 445 Sutter, San Francisco.

Architect...Edgar A. Mathews, 251 Post, San Francisco.

Contractor...F. W. Snook Co., 596 Clay, San Francisco.

Filed July 19, '15. Dated July 17, '15.

Roughing in done.....\$1980

On completion1572

Usual 35 days.....1185

TOTAL COST, \$4737

Bond, \$2500. Surety, The Aetna Accident & Liability Co. Limit, reasonable diligence. Forfeit, none. Plans and specifications filed.

FRAME STORE AND FLATS

(2116) N CORTLAND AVE 41-10 1/2 W Bennington W 25-6 N 74-1 1/2 m or l

E 25 m or l S 75 m or l. All work for two-story frame store and flats.

Owner.....Jno. Benibou, 131 Leese, San Francisco.

Architect...None.

Contractor...Jacques Narbebury, 131 Leese, San Francisco.

Filed July 19, '15. Dated July 14, '15.

Roof on\$1175

White coated1175

Completed and accepted.....1175

Usual 35 days.....1175

TOTAL COST, \$4700

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME COTTAGE

(2117) S CLINTON PARK 260 W Guerrero W 22-6x8 75-6. All work for one-story frame cottage.

Owner.....Jno. L. Corbett and Mrs. M. Corbett, 245 Clinton Park, San Francisco.

Architect...None.

Contractor...Edw. F. Helms, 1334 Church, San Francisco.

Filed July 19, '15. Dated June 16, '15.

Rough frame up.....\$431.25

Brown coated431.25

Ready for painter.....431.25

Usual 35 days.....431.25

TOTAL COST, \$1725.00

Bond, limit, forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

(2118) LOT 5 BLK 3, St. Francis Wood All work for two-story and basement frame residence.

Owner.....Sylvain M. Levy, 638 Belvedere, San Francisco.

Architect...J. E. Kraft & Sons, Phenix Bldg., San Francisco.

Contractor...Karl Schley, 1155 14th, Oakland.

Filed July 19, '15. Dated July 15, '15.

Frame up, walls and roof sheathed, roof shingled, rough plumbing, sewerage and piping done and rough floors laid.....\$1200

Shingling done, plastering finished, exterior finish on, sash glazed and hung, tin and galvanized iron chimney work finished, exterior paint or stain on.....1200

Completed and accepted.....2335

Usual 35 days.....1600

TOTAL COST, \$6335

Bond, \$3200. Surety, New England Casualty Co. Limit, Nov. 18. Forfeit, \$3. Plans and specifications filed.

FRAME DWELLING

(2119) E FORTY-SIXTH AVE 235 N Judah. One and one-half-story and basement frame dwelling.

Owner.....Lazar Aydukovich, 1238 Hollister, San Francisco.

Architect...None.

Day's work. COST, \$1450

FRAME DWELLING

(2120) E FORTY-SIXTH AVE 250 N Judah. One and one-half-story and basement frame dwelling.

Owner.....Lazar Aydukovich, 1238 Hollister, San Francisco.

Architect...None.

Day's work. COST, \$1450

ALTERATIONS

(2121) NO. 1254 DE HARO. Alter dwelling.

Owner.....H. C. Simon, Oakland.

Architect...None.

Day's work. COST, \$400

ALTERATIONS

(2122) NO. 2002 BROADWAY. Alter porch into room.

Owner.....C. L. Hovey, Premises.

Architect...Bliss & Faville, Balboa Bldg., San Francisco.

Contractor...J. Harold Johnson, 740 9th Ave., San Francisco.

COST, \$400

REPAIRS

(2123) NO. 118 TEXAS. Repair building.

Owner.....G. B. Firpo, Premises.

Architect...None.

Contractor...N. Cavaglia, 946 Greenwich, San Francisco.

COST, \$650

ALTERATIONS

(2124) NO. 121 GRANT AVE. Alter mezzanine floor.

Owner.....Sommer & Kauffman, 121 Grant Ave., San Francisco.

Architect...None.

Contractor...The S. Levi Fixture Co., 446 6th, San Francisco.

COST, \$400

FRAME FLATS

(2125) S UNION 137-6 W Steiner. Two-story and basement frame (4) flats.

Owner.....C. S. Alired, 150 Onondago Ave., San Francisco.

Architect...None.

Day's work. COST, \$6500

FRAME FLATS

(2126) S PAGE 114-4 E Central Ave E 23-2xS 137-6. Alterations and additions to five-room and basement frame into flats.

Owner.....F. A. Lindblade.

Architect...None.

Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.

Filed July 20, '15. Dated June 7, '15.

Walls up and roof on.....\$111.25

Brown coated711.25

Completed and accepted.....711.25

Usual 35 days.....711.25

TOTAL COST, \$2845.00

Bond, \$1422.50. Surety, Fidelity & De-

posit Co. of Maryland. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(2127) SE BALBOA AND GREAT Highway. Alter dance hall. Owner.....Jas. Råggett, Premises. Architect...None. Contractor..R. Dewar & Son, 180 Jessie, San Francisco. COST, \$760

ALTERATIONS

(2128) NE CENTRAL AND HAYES. Alter stores. Owner.....Mrs. C. T. Hasshagen, 2260 Grove, San Francisco. Architect...None. Contractor..T. J. Donovan, 1477 6th Ave., San Francisco. COST, \$750

FRAME DWELLING

(2129) NW EDGARDO AND GRANT Ave (rear). One-story and basement frame dwelling. Owner.....Mrs. L. Bignott, Premises. Architect...None. Contractor..John Casty, 327 Brazil, San Francisco. COST, \$1000

REPAIRS

(2130) NO. 775 FOURTEENTH. Repair fire damage. Owner.....J. J. Hendrick, 340 16th Ave., San Francisco. Architect...None. Contractor..T. E. Mohler, 255 8th Ave., San Francisco. COST, \$650

ALTERATIONS

(2131) SE RAIL ROAD AVE AND Evans. Raise and underpin store and dwelling. Owner.....P. Bellegarde, 1395 Newcombe Ave., S. F. Architect...None. Contractor..E. K. Pearson, 2372 Bryant, San Francisco. COST, \$500

ALTERATIONS

(2132) NO. 234 DAY. Alter and add to dwelling. Owner.....Geo. and Lewis Cordes, Premises. Architect...None. Contractor..E. Reynolds, 2935 San Jose Ave., San Francisco. COST, \$1000

HEATING PIPES, ETC

(2133) NO. 937 JONES. Install heating pipes and radiators. Owner.....A. Elsenberg, Premises. Architect...None. Contractor..Atlas Heating & Ventilating Co., 4th & Freelon, San Francisco. COST, \$400

FRAME FLATS

(2134) E HOWARD 230 N 15th. Three story and basement frame (3) flats. Owner.....Geo. D. Gilmour, 2376 Howard, San Francisco. Designer...Chas. Carlson... Day's work. COST, \$5000 NOTE.—Work on this job has been started.

FRAME APARTMENTS

(2135) NW GOLDEN GATE AVE AND

Pierce 34-4½xN 137-6 W A 433. Carpentry, joinery, concrete, cement, compolite, stairs, marble, tile, glazing, clearing of building, steel and iron work for three-story and basement frame apartments. Owner.....O'Brien Bros., Inc., 240 Montgomery, S. F. Architect...O'Brien Bros., Inc., 240 Montgomery, S. F. Contractor..Fraser & Fraser, 180 Jessie, San Francisco. Filed July 21, '15. Dated July 8, '15. Concrete foundations in place \$ 500 Building framed to 1st floor Joists 3000 Building frame to 2nd floor with rustic 3000 Building frame to 3rd floor with rustic 3500 Building floors, enclosed and roof boards on 1500 Completed and accepted..... 1353 Usual 35 days..... 2365 TOTAL COST, \$15,453 Bond, none. Limit, 120 days. Forfeit, none. Plans and specifications filed.

APARTMENTS

(2136) LOCATION NOT GIVEN. All work to lay tile floors in rooms required for Morshead Apartments. Owner.....S. W. Morshead, Mills Bldg., San Francisco. Architect...Houghton Sawyer, Shreve Bldg., San Francisco. Contractor..Eri H. Richardson, Hearst Bldg., San Francisco. Filed July 21, '15. Dated June 15, '15. On 1st and 15th of each month 75% Usual 35 days..... 25% TOTAL COST, \$1850 Bond, \$940. Surety, Hartford Accident & Indemnity Co. Limit, 67 days. Forfeit, none. Plans and specifications filed.

FRAME APARTMENTS

(2137) S UNION 137-6 W Steiner W 27-6xS 137-6. All work for two-story frame apartments. Owner.....Maggie L. Allred, 150 Onondago, San Francisco. Architect...None. Contractor..Clifford S. Allred, 150 Onondago, San Francisco. Filed July 21, '15. Dated July 21, '15. Frame up\$1625 Brown coated 1625 Completed 1625 Usual 35 days..... 1625 TOTAL COST, \$6500 Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

BRICK BUILDING

(2138) S SHIPLEY 125 E Fifth E 25x S 75. All work for two-story brick building. Owner.....Jean de Greayer, Care District Attorney, Hall of Justice, San Francisco. Architect...T. Patterson Ross, 310 California, San Francisco. Contractor..Ira W. Coburn, Inc., 547 Brannan, San Francisco. Filed July 21, '15. Dated July 14, '15. 2nd floor joists on.....\$1300 Completed and accepted..... 1167 Usual 35 days..... 923 TOTAL COST, \$3590 Bond, \$1846. Surety, A. Wagner and T. P. S. Brown. Limit, 60 days. Forfeit, \$5. Plans and specifications filed.

CLASS "A" GARAGE

(2139) N POST 164-3 E Hyde 75-6x 137-6. Brick work, cement ornament and plastering, marble, etc., for one-story Class "A" garage building. Owner.....W. H. Bowen, 242 Sutter, San Francisco. Architect...M. I. Schwartz, 14 Montgomery, San Francisco. Contractor..H. E. Drake, 1333 Lincoln Way, San Francisco. Filed July 21, '15. Dated July 19, '15. Work 50% completed.....\$900 Work 75% completed..... 900 Completed and accepted..... 900 Usual 35 days..... 920 TOTAL COST, \$3620 Bond, \$1810. Surety, The Aetna Accident & Liability Co. Limit, 25 days after July 26. Forfeit, plans and specifications, none.

FRAME RESIDENCE

(2140) LOT 15 BLK 29 Map Blks 27 to 34 Forest Hill Extn. All work for two-story and basement frame bldg. Owner.....Otto A. Brown. Architect...Rousseau & Rousseau, 110 Sutter, San Francisco. Contractor..McMullen-von Voorhies Co., 1290 12th Ave., S. F. Filed July 21, '15. Dated July 19, '15. Completed and accepted.....\$5000 TOTAL COST, \$5000 Bond, \$2500. Surety, Pacific Coast Casualty Co. Limit, 70 days. Forfeit, none. Plans and specifications filed.

FRAME SYNAGOGUE

(2141) W WEBSTER 85 N McAllister W 137-6xN 52-6. Painting work for two-story frame synagogue. Owner.....Congregation Keneseth Israel, 1725 Oak, S. F. Architect...Samuel Arnold and E. A. Neumarkel, 521 Sharon Bldg., San Francisco. Contractor..M. B. Weiss. Filed July 21, '15. Dated July 21, '15. 2 coats applied.....\$262 Completed and accepted..... 300 Usual 35 days..... 190 TOTAL COST, \$752 Bond, \$330. Surety, Southwestern Surety Insurance Co. Limit, 20 days after interior is finished. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

(2142) N LAWTON 82-6 W Ninth Ave. Two-story and basement frame dwlg. Owner.....P. Algot Nelson, 4233 19th, San Francisco. Architect...None. Day's work. COST, \$3000

FRAME DWELLING


(2143) N LAWTON 57-6 W Ninth Ave. Two-story and basement frame dwlg. Owner.....P. Algot Nelson, 4233 19th, San Francisco. Architect...None. Day's work. COST, \$3000

ALTERATIONS

(2144) NO. 6163 SHARON. Alter dwlg. Owner.....Oluf Hansen, 534 14th, S. F. Architect...None. Contractor..A. Stenbro, 2609 Inyo Ave., Oakland. COST, \$500

ALTERATIONS

(2145) NO. 1040 McALLISTER. Alter butcher shop.



**Structural Steel
Contractors**

**Works at
HARRISON ST.,
bet. 8th & 9th
San Francisco**

Telephone Market 337

Owner.....M. Stern, Premises.
Architect...A. H. Jacobs, 120 Sutter,
San Francisco.
Contractor...Ira W. Coburn, Inc., 547
Brannan, San Francisco.
COST, \$400

FRAME DWELLING
(2146) SAN BRUNO $\frac{1}{2}$ mile E Silver
Ave. One-story and basement frame
dwelling.
Owner.....Lin Hock Jing, 886 Wash-
ington, San Francisco.
Architect...None.
Contractor...G. Cavaglieri, 593 Potrero
Ave., San Francisco.
COST, \$400

FRAME DWELLING
(2147) E EIGHTEENTH AVE 75 S
Geary. Two-story and basement
frame dwelling.
Owner.....Nelson Bros., 515 Dolores,
San Francisco.
Architect...None.
Day's work. COST, \$2750

FRAME COTTAGE
(2148) LOT 9 BLK 7, Sunnyside. All
work for one-story frame cottage.
Owner.....John W. Totten, 55 5th,
San Francisco.
Architect...None.
Contractor...G. L. Hughson.
Filed July 22, '15. Dated July 21, '15.
Completed\$1250
Usual 35 days.....450
TOTAL COST, \$1800
Bond, none. Limit, 75 days. Forfeit,
none. Plans and specifications filed.

CLASS "C" BUILDING
(2149) N CALIFORNIA 30 E Leides-
dorff E 30 m or 1 hy N 124. Furnish-
ing and driving piles, pumping, etc.,
for three-story Class "C" building.
Owner.....San Francisco Investment
Corporation.
Architect...Nathaniel Blaisdell.
Contractor...McGowan & Butler, 180
Jessie, San Francisco.
Filed July 22, '15. Dated July 7, '15.
Completed and accepted.....\$932
Usual 35 days.....311
TOTAL COST, \$1244
Bond, \$622. Surety, The Aetna Acci-
dent & Liability Co. Limit, 30 days.
Forfeit, \$10. Plans and specifications
filed.

HOTEL
(2150) W TAYLOR 137-6 N Sutter N
38-9xW 137-6. Tile work for hotel.
Owner.....Biltmore Realty Co.
Architect...Edward T. Foulkes,
Crocker Bldg., S. F.
Contractor...Holloway Expanded Metal
Co., 515 2nd, San Francisco
Filed July 22, '15. Dated July 8, '15.
On or before 10th of each month 75%
Usual 35 days.....25%
TOTAL COST, \$783

Bond, \$137. Sureties, A. W. Ganz and
J. D. Fraser. Limit, due diligence
Forfeit, none. Plans and specifications
filed.

(2151) MARBLE WORK ON ABOVE.
Contractor...G. Tomagnini, 237 10th
San Francisco.
Filed July 22, '15. Dated July 12, '15.
Payments same as above.....

TOTAL COST, \$590
Bond, none. Limit, due diligence. For-
feit, none. Plans and specifications
filed.

FRAME DWELLING
(2152) N THOMAS 200 W Jennings.
One-story and basement frame dwlg.
Owner.....Geo. Ryan, Army and
Hampshire, S. F.
Architect...None.
Contractor...Wm. H. Grahm, 2840 Bry-
ant, San Francisco.
COST, \$1500

ALTERATIONS
(2153) NO. 736 MARKET. Alter front
and interior store fittings.
Owner.....Hansen & Elrick, 353 Mont-
gomery, San Francisco.
Architect...F. H. Meyer, Bankers' In-
vestment Bldg., S. F.
Contractor...Ostlund & Johnson, 1901
Bryant, San Francisco.
COST, \$1500

SIGNS
(2154) NE O'FARRELL AND STOCK-
ton. Erect signs.
Owner.....Foreman & Clarke, Prem.
Architect...None.
Contractor...Jos. Laib, Jr., Golden Gate
and Gough, S. F.
COST, \$450

ALTERATIONS
(2155) NO. 3257 FOLSOM. Alter build-
ing.
Owner.....M. Piazza, Premises.
Architect...None.
Contractor...G. Cedar, 561 Chenery,
San Francisco.
COST, \$600

FRAME FLATS
(2156) S MINNA 150 E Julia. Three-
story and basement frame (3) flats.
Owner.....Thos. D. Quigley, 1599 8th
Ave., San Francisco.
Architect...None.
Day's work. COST, \$3850

ADDITION
(2157) NO. 3560 WASHINGTON. Add
to dwelling.
Owner.....Mrs. H. Hill, Premises.
Architect...None.
Contractor...Boyer & Son, 2407 Cal-
ifornia, San Francisco.
COST, \$700

FRAME LUNCH ROOM
(2158) N HAIGHT 160 E Stanyan.
One-story frame lunch room.
Owner.....Mrs. A. Emlay, 1600 Wal-
ler, San Francisco.
Architect...None.
Contractor...F. A. Klein, 1423 24th Ave.,
San Francisco.
COST, \$500

FRAME DWELLING
(2159) W TWENTY-FIRST AVE 125
S Clement. Two-story and basement
frame dwelling.
Owner.....A. R. Lapham, 511 12th
Ave., San Francisco.
Architect...None.
Day's work. COST, \$2750

THEATRE
(2160) FILLMORE, bet. Turk and
Eddy. Painting, decorating, tinting,
papering, etc., for alterations and ad-
ditions to moving picture theatre.
Owner.....Realty & Rebuilding Co.
Architect...J. R. Miller, Lick Bldg.,
San Francisco.
Contractor...Stranahan & Son, 619 Ar-
guello Blvd., S. F.
Filed July 23, '15. Dated July 21, '15.
Monthly payments of.....75%
Usual 35 days.....25%
TOTAL COST, \$1025
Bond, \$525. Surety, United States Fi-
delity & Guaranty Co. Limit, as fast
as required. Forfeit, none. Plans and
specifications filed.

ALTERATIONS
(2161) NO. 291 LILY AVE. Altera-
tions and additions to building.
Owner.....Richard J. and Annie A.
Galbally, 650 4th, S. F.
Architect...None.
Contractor...Chas. Schmidt.
Filed July 23, '15. Dated July 22, '15.
House raised\$200
On completionBalance
TOTAL COST, \$550
Bond, none. Limit, 15 days after July
23. Forfeit, none. Plans only filed.

REINFORCED CONCRETE FACTORY
(2162) ILLINOIS, KENTUCKY AND
22nd, approximately 200x352. All
work for erection and completion of
two-story and a three-story rein-
forced concrete factory building.
Owner.....The American Can Co.,
Mills Bldg., San Francisco.
Engineer...N. M. Loney.
Contractor...Lindgren Co., Modanock
Bldg., San Francisco.
Filed July 23, '15. Dated July 22, '15.
Semi monthly payments of....85%
30 days after.....Balance
TOTAL COST, \$199,000
Bond, \$99,500. Surety, Casualty Co. of
America. Limit, Jan. 10, 1916. Forfeit,
none. Plans and specifications filed.

LEASE.

July 23, 1915—NO. 704 FOLSOM, bet 3d
and 4th. Robert McMillan to Theodos
Papalodes. 3 years. \$2640.
July 21, 1915—W EAST bet. Clay and
Merchant. Leo Morgen to K S and
A S Catechi. 5 years. \$10,500.

INCORPORATIONS.

The Poppy Film Co. Capital Stock,
\$20,000, subscribed, \$70; shares, \$10
each. Directors—A. Goldenberg, G.
Dolcibello, J. Lupo, T. Alexander, S. M.

Modica, G. Carlone, A. Claris, 1 share each. Place of business, S. F.

NOTICE OF NON-RESPONSIBILITY.

July 21, 1915—LOT 14 BLK 20 Crocker Amazon Tract. Crocker Estate Co as to improvements on leased property

COMPLETION NOTICES

San Francisco

July 17, 1915—E EIGHTEENTH AV 175 N Taraval. F. C. Pendergast to MacArthur Bros.....July 14, 1915.
July 17, 1915—N ANZA 107-6 W 24th whom it may concern.....July 15, 1915
Ave W 25xN100. J A Tognetti to July 19, 1915—E FIFTEENTH AVE 291-11½ S Geary S 25-3½ E 114-3 m or l to Pleasant Valley Hd th along said line N 12½ W 25-7½ W parallel with Geary 110-5½. Thos Hamill to whom it may concern.....July 19, 1915
July 19, 1915—N ANZA 57-6 W Eighth Ave W 25xN 100. Bernard and Annie Hughes to Leigh & Schultz

Florissa Westlake to Victor Eng, Co, July 21; David Gibbs, July 21; A M Wallen.....July 21, 1915
July 22, 1915—S NINETEENTH 105 W Sanchez W 25xS 114. James Y and Cleo S Symlington to D Houle

22nd S 25xE 100. James Keane vs John O and Mrs J O'Hare and Edw T Grace.....\$320
July 22, 1915—S FELL 100 E Stelner S 137-6xE 37-6. Tony Damico vs Isabella J or Isabel J Murray and Herbert C Cameron.....\$405
July 22, 1915—W CHESTNUT 120 W Grant Ave W 20xN 70. Nic Murlale vs Modesto and Elvira Moril..\$121.80

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

July 23, 1915—S O'FARRELL 137-6 W Powell W 60xS 117-6. Inlaid Floor Co to Kate D Winship and Sandy McNaughton

OAKLAND AND ALAMEDA COUNTY.

RESIDENCE—1½ story and base, frame, \$2,800. Oakland, Cal. Architect, Yerrick & Smith, Blake Bldg., Oakland. Owner, John Michels. The dwelling has been designed to contain six rooms and bath. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are being prepared and when complete the work will be done by Day Labor.

RESIDENCE—1½ story and base, frame, \$3,000. Oakland, Cal. Architect, M. L. Newsom, 1748 Broadway, Oakland. Owner, C. A. Verele. The dwelling has been designed for a six-room house with bath and sleeping porch and will be erected in Fourth Avenue Terrace. Interior finish will be of pine and hardwood with some white enamel. Hardwood floors will be used in the living and dining rooms. There will be furnace heat and open fire place. Mantel will be of tile or brick. An automatic water heater will be installed. Tile floor and wainscot will be used in the bath room. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor.

RESIDENCE—2, 2 story and base, frame, \$1,250 each. Oakland, Cal. Architect, none. Owner, C. M. MacGregor, 170 12th street, Oakland. These two houses will be erected on the north side of Mandana Boulevard east of Paloma, and each will contain seven rooms and bath. Interiors will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms and reception halls. There will be furnace heat and open fire places. Mantels will be of tile. The wainscot will be used in the bath rooms. Plans provide for automatic water heaters. Exteriors will be covered with rustic and cement

LIENS FILED

SAN FRANCISCO COUNTY.

July 3, 1915—N FULTON 87-6 W Buchanan W 87-6xN 137-6. L D'Andrea vs Mary E Klenck, Alice, Grace, Mabel and Frederick Klenck and A E Thomas.....\$65
July 16, 1915—S FELL, bet Fillmore and Steiner; No. 567 Fell. Viggo Von Pingel vs Thomas F and Isabel J Murray.....\$117.50
July 19, 1915—S KIRKHAM 106-6 E 12th Ave E 26xS 100. Redwood Manufacturers Co vs Mary De Lay, G H and R H Old (as Old Bros).. \$483.92
July 20, 1915—S FELL 100 E Steiner E 37-6xS 137-6. A L Hughes and L G Ames, co-partners vs Isabella J or Isabelle J and T or Thos F Murray.....\$180
July 20, 1915—S FELL 100 E Steiner E 37-6xS 137-6. L R Baumgartner vs Thos F and Isabel J Murray and Herbert C Cameron.....\$110
July 20, 1915—S FELL 100 E Steiner E 37-6xS 137-6. Wm J Hanley and Chester V Nero (as Hanley & Nero) vs H C Cameron and Isabella J or Isabel J Murry....\$427.81
July 21, 1915—E NEBRASKA 100 S Powhattan S 25xE 100 ptn Lot 21 Blk 3, Barman. The Greater City Lumber Co vs Wm and Anna M Wagner.....\$296.80
July 21, 1915—S FELL 100 E Steiner E 37-6xS 137-6. John Cassaretto vs Isabella J Murray.....\$49.10
July 21, 1915—NW POTRERO AVE and Mariposa N 100xS 100. Henry R Wondt vs Municipal Hotel Co and The John Center Co.....\$127.50
July 21, 1915—E HAMPSHIRE 175 S

plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—1½ story and base, frame, \$3,200. Oakland, Cal. Architect, M. L. Newsom, 1748 Broadway, Oakland. Owner, Mr. Anderson. The dwelling will be erected in Rockridge Park, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

FACTORY—4 story and base, reinforced concrete, \$75,000. Oakland, Cal. Architect, Louis P. Hobart, Crocker Bldg., S. F. Owners, Shredded Wheat Biscuit Co. Segregated figures are being taken on all parts of this work except the excavating, which has already been awarded to James L. McLaughlin, 244 Kearny street, S. F. Bids will be opened on August 2nd. Plans and specifications can be secured from the architect.

FLATS—2 story and base, frame, \$5,000. Oakland, Cal. Architect, none. Owner, C. C. Foss, 1242 First avenue, Oakland. The building will be erected at the southwest corner of Park Boulevard and East 19th street, and has been designed to contain fourteen rooms which will be arranged in three flats. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Automatic water heaters will be installed. Bath rooms will have tile wainscot. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

STORES—1 story and base, brick, \$6,000. Berkeley, Alameda Co., Cal. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, E. A. Heron. The building will be erected on Shattuck avenue near University and has been designed to contain two stores and a branch station. Interior will be finished in pine. Patent store fronts are specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken.

BRIDGE—Reinforced concrete. Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. A resolution approving the construction of a new bridge over Cordomices Creek in Walnut street has been approved by the City Council. Bids on the work will soon be called for.

RESIDENCE—2 story and base, frame, \$4,000. San Lorenzo, Alameda Co., Cal. Architects, Mau & Sprague, MacDonald Bldg., Oakland. Owner, J. F. Martin. The dwelling will contain ten rooms and bath. Interior will be finished in pine throughout. Some

hardwood floors will be used. There will be open fire places and tile or brick mantels. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

RESIDENCE—2 story and base, frame, \$3,500. Berkeley, Alameda Co., Cal. Architects, F. R. Peake Co., 2127 University avenue, Berkeley. Owner's name not given. The dwelling has been designed for a seven-room house and will be erected on Mariposa north of Terrace Walk. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living room, dining room and reception hall. There will be open fire places and tile mantels. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SEWER CONSTRUCTION—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. At the last meeting of the City Council specifications for the construction of a sewer in Sixth street from Harrison north 100 feet were adopted and a resolution of intention ordering the work was made.

BRIDGE—Reinforced concrete. Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be opened on August 3rd for a reinforced concrete bridge over Cordomices Creek. The bridge will be 106½ feet long and 40 feet wide. Plans and specifications can be secured from the City Engineer.

FACTORY—2 story and base, frame, \$5,000. Oakland, Cal. Architect's name not given. Owners, California Cotton Mills Co., Oakland. The building will be erected on East 22nd avenue south of Railroad avenue, and will cover a considerable ground area. Interior will be finished in pine. There will be a large amount of special machinery installed. Exterior will be covered with brick veneer and rustic. Plans are complete and in the hands of the owners who will do the work by Day Labor. Materials are now being purchased.

STORAGE WAREHOUSE—3 story and base, reinforced concrete. Cost not stated. Oakland, Cal. Engineer, Edward L. Soule, Rialto Bldg., S. F. Owners, Bekins Van and Storage Co., Oakland. The building will be erected on San Pablo avenue near 21st street and will be fireproof. Interior will be arranged for small private storage vaults and public space. There will be automatic sprinklers, elevator service and metal window sash and frames. The Turner system of reinforced concrete construction will be used. Exterior will be faced with cement plaster. Plans are in the hands of Martin Bekins, Oakland, who will let segregated contracts.

Contracts Awarded.

APARTMENT HOUSE—3 story and base, reinforced concrete, \$35,000. Oakland, Cal. Architect, Charles J. Rous-

seau, 16 Kearny street, S. F. Owner, Mrs. Carrie B. Rousseau. Contractor, N. P. Anderson, 320 Market street, S. F. general construction; J. A. McNaughton, Oakland, grading; R. Masagil & Co., 2298 Turk street, S. F. concrete work. Bids are now being taken for the plumbing and heating.

DETENTION HOME—4 story and base, reinforced concrete, \$75,000. Oakland, Cal. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, Alameda County. The following contracts have been awarded by the Alameda County Supervisors for the four-story and basement reinforced concrete Detention Home: Excavating and concrete work, J. V. Westerlund, 320 Market street, S. F., \$12,984. Carpentry work, W. D. Henderson, Monadnock Bldg., S. F., \$14,963. Ornamental iron work, C. Fraunder, 335 8th street, Oakland, \$2,340. Plastering, Schnebly, Hostrawser & Pedgrift, 8th and Jackson streets, Oakland, \$6,592. Sheet metal work, Yager Sheet Metal Works, 3309 Chestnut street, Berkeley, \$2,838. Roofing, Paraffine Paint Co., 34 First street, S. F., \$443. Hardware, Maxwell Hardware Co., 1320 Washington street, Oakland, \$1,247. Painting, D. Zelinsky & Son, 564 Eddy street, S. F., \$2,856. Plumbing, Frederick W. Snook Co., 596 Clay street, S. F., \$3,964. Electric work, Rex Electric Construction Co., Monadnock Bldg., S. F., \$1,698. Marble work, Dineen Marble Works, 40th and Grove, Oakland, \$2,549. Heating and ventilating, Carl T. Doell, 427 21st street, Oakland, \$3,284. Elevator work, Otis Elevator Co., Bay and Stockton streets, S. F., \$1,990.

PORTABLE SCHOOLS—Frame, \$6,480. Oakland, Cal. Architect, none. Owners, City of Oakland. Contractor, J. R. Faulkes, 9828 East 14th street, Oakland. Contract price, \$6,480.

SEWER CONSTRUCTION—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractor, Michael Healey, 2030 McKinley avenue, Berkeley. Contract price not stated.

MUNICIPAL WOODYARD HOTEL AND OFFICE—3 story and base, brick, \$12,477. Oakland, Cal. Architect, J. J. Donovan, Dalziel Bldg., Oakland. Owners, City of Oakland. Contractor, Wm. A. Newsom, Sharon Bldg., S. F. Contract price, \$12,477.

Bids Opened For Detention Home.

Alameda County Supervisors Receive Bids For New Detention Home. Will Award Contracts Thursday.

Bids were opened at the Monday morning session of the Alameda County Supervisors for the construction of the new four-story and basement reinforced concrete detention home to be erected at the corner of 18th and Poplar streets, Oakland. Bids were referred to a Committee of the Whole and Architect Henry H. Meyers, who

prepared the plans. A complete list of the bids received follow:

Excavating and Concrete work.	
Schnebly, Hostrawser & Ped-grift	\$21,360.63
Howard S. Williams	16,978.00
C. Christenson	16,113.69
J. M. Boyd	22,496.00
David Dillon	19,250.00
William G. Thornalley	22,700.00
W. D. Henderson	15,757.00
Lester H. Stock	19,900.00
J. D. Westerlund	12,984.00
Foster-Vogt Co.	17,672.00
Blusome & Co.	18,573.00

Carpenter Work.	
R. W. Littlefield	\$19,251
H. S. Williams	17,695
J. S. Hannah	18,554
J. Wenderling	18,950
J. M. Boyd	20,900
A. B. Nelson	17,250
C. Christenson	18,650
Schnebly, Hostrawser & Pedgrift	16,796
W. G. Thornalley	15,500
Thomas Elam & Son	18,600
J. F. Dingwell	16,684
Sampson & Doane	16,998
E. T. Leiter & Son	18,937
W. D. Henderson	14,963
Forster-Vogt Co.	21,753
Lester H. Stock	15,980

Ornamental Iron Work.	
Schrader Iron Works	\$3,045
C. Frauneder	2,540
J. C. Hilliard, Inc.	3,960
Stobbe & Romak	3,181
T. H. Krueger	2,800
Vulcan Iron Works	2,977
Cal. Artistic Metal & Wire Co.	3,186
Sartorius Co.	2,900
A. Webber	2,320

Plastering.	
R. S. Williams	\$10,233
James F. Smith	8,960
J. M. Boyd	11,585
J. C. McCloud	8,783
Schnebly, Hostrawser & Pedgrift	6,592
George MacGruer	7,421
T. D. Sexton	9,475
Greenbank Plastering Co.	7,425
W. D. Henderson	7,988
A. Knowles	8,342
George Dixon	8,900
William Makin	7,590
Bradley & O'Reilly	7,590
Alexander Mennie	10,980

Tar and Gravel Roofing.	
Paraffine Paint Co.	\$412
Malott & Peterson	493
John W. Bender	498

Sheet Metal Work.	
Capitol Sheet Metal Works	\$3,272
Forderer Cornice Works	2,597
U. S. Metal Products Co.	3,820
Conlin & Roberts	2,539
William Heldt Cornice Co.	3,495
Yager Sheet Metal Works	2,838

Finish Hardware.	
Maxwell Hardware Co.	\$1,247
Perry C. Fry	1,280
Sunset Hardware Co.	1,300

Painting.	
I. Kissel	\$3,530
D. Zelinsky & Sons	2,356
Carl J. Frist	3,423
W. T. Baker Co.	3,900
Wagner Bros.	4,390
Robert Swan	3,330

Plumbing.	
J. E. O'Mara	\$1,400
Scott Co	4,293
Carl T. Doell	4,268
J. B. Cruz	4,800
P. W. Swift Co.	3,964

Wittman, Lyman Co.	5,454
Electric Work.	
Pacific Fire Extinguisher Co.	\$2,085
Central Electric Co.	1,937
Rex Electric Constr. Co.	1,698
Standard Electric Constr. Co.	2,224
McFell Electric Co.	1,739
H. S. Tittle	1,809
Le Page-McKinney Co.	1,911
Boynton Electric Co.	2,100
Butte Eng. & Elec. Co.	1,853
Marble and Tile Work.	
Dineen Marble Works	\$2,549
Joseph Musto Sons-Keenan Co.	3,039
Francis E. Tiltz	2,600

Heating and Ventilating.	
J. E. O'Mara	\$3,644
Nangrum & Otter	4,697
J. C. Hurley Co.	3,885
Carl T. Doell	3,284
Bay Engineering Co.	3,990
L. W. Blake	3,786
Wittman, Lyman Co.	3,937
Scott Co	3,890
Elevator Work.	
Otis Elevator Co.	\$1,990

Award Contract For New Detention Home

Alameda Supervisors Let Contracts For Building Under Bids Opened on Monday Last.

The following contracts have been awarded by the Alameda County Supervisors for the four-story and basement reinforced concrete detention home, designed by Architect Henry H. Meyers, Kohl Bldg., San Francisco, under bids opened on July 19th:

Excavating and concrete work—J. V. Westerlund, 320 Market, San Francisco. \$12,984.

Carpentry work—W. D. Henderson, Monadnock Bldg., San Francisco. \$14,963.

Ornamental iron work—C. Frauneder, 335 8th St., Oakland. \$2,540.

Plastering—Schnebly, Hostrawser & Pedgrift, 6th and Jackson, Oakland. \$6,592.

Sheet metal work—Yager Sheet Metal Works, 3309 Chestnut St., Berkeley. \$2,838.

Roofing—Paraffine Paint Co., 34 1st, San Francisco. \$443.

Hardware—Maxwell Hardware Co., 1320 Washington, Oakland. \$1,247.

Painting—D. Zelinsky & Son, 564 Eddy, San Francisco. \$2,856.

Plumbing—Frederick W. Snook Co., 396 Clay, San Francisco. \$3,964.

Electric Work—Rex Elec. Constr. Co., Monadnock Bldg., S. F. \$1,698.

Marble work—Dineen Marble Works, 40th and Grove, Oakland. \$2,549.

Heating and ventilating—Carl T. Doell, 427 21st, Oakland. \$3,284.

Elevator work—Otis Elevator Co., Bay and Stockton, S. F. \$1,990.

Building Contracts Awarded.

Oakland

No.	Owner	Contractor	Amt.
1370	Hammarberg	Owner	1600
1371	Pfrang	Pfrang	2500
1372	Cartwright	Lindquist	1575
1373	Anderson	Anderson	2200
1376	Robbins	Robbins	4000

1377	Stevens	Hambleton	3000
1378	Smith	Smith	1000
1379	Havens	Corbett	400
1380	Howland	Howland	1800
1382	Giacomini	Owner	450
1383	Gibb	Schnebly	400
1387	Thorps	Brown	400
1389	Friedman	Anderson	500
1390	Sima	Sims	1800
1391	Elder	Bullock	1800
1392	Fabing	Fabing	2500
1393	Oakland	Asbestos Mil	15000
1394	MacGregor	MacGregor	4250
1395	Same	Same	4250
1396	Shred Wheat	Breitwiser	850
1397	Duarle	Peterson	5448
1398	Johnston	Tupper	1500
1399	Bold	Bold	1800
1400	Moody	Corbett	400
1401	Monahan	Knight	450
1409	Silverstein	Cook	500
1410	Ginacker	Engelsen	750
1411	Young	Young	2000
1412	Kurtz	Kurtz	650
1413	Pringer	Brown	450
1414	Glenn	Shawwood	1800
1415	Swanson	Swanson	1900
1416	Taylor	Taylor	1600
1417	Wooster	McBeth	1150
1418	Philip	Williams	3198
1423	Rousseau	Anderson	24000
1424	Eich	Wakerling	400
1425	Oakland	Newaom	12477
1429	Larson	Larson	—

DWELING

(1370) W FOURTEENTH AVE 115 S E-21st, Oakland. One-story 5-room dwelling.

Owner.....A. Hammarberg, 3228 Adeline, Berkeley.

Architect...None.

Day's work. COST, \$1600

DWELING

(1371) S FOREST 120 E Claremont Ave., Oakland. One-story 5-room dwelling.

Owner.....C. J. Pfrang, 5487 Claremont Ave., Oakland.

Architect...None.

Day's work. COST, \$2500

DWELING

(1372) E MAYBELLE 240 S Porter, Oakland. One-story 4-room dwlg.

Owner.....A. E. and N. C. Cartwright 3944 Ruby, Oakland.

Architect...None.

Contractor..F. L. Lindquist, 448 35th, Oakland. COST, \$1575

DWELING

(1374) S LAWTON AVE 250 E Broadway, Oakland. One-story five-room dwelling.

Owner.....T. Anderson, 6046 Lawton Ave., Oakland.

Architect...M. L. Newsom, 1748 Broadway, Oakland.

Day's work. COST, \$2200

DWELING

(1376) E CLARK AVE 20 N Welling-ton Ave., Oakland. Two-story 6-room dwelling.

Owner.....Anna V. Robbins, 1805 Telegraph Ave., Oakland.

Architect...None.

Contractor..F. D. Robbins, 1805 Telegraph Ave., Oakland.

COST, \$4000

DWELING

(1377) E HADDON ROAD 300 S Brooklyn, Oakland. Two-story six-room dwelling.

Owner.....L. and M. Stevens, 444 11th Oakland.

Architect...None.

Contractor..Fred Hambleton, 575 43rd, Oakland.

COST, \$3000

DWELLING

(1378) S FORTY-FOURTH 274 W Market, Oakland. One-story 4-room dwelling.

Owner.....Frank Smith, 947 44th, Oakland.
Architect...None.
Day's work. COST, \$1000

ALTERATIONS

(1379) NO. 731 BROADWAY, Oakland. Alterations.

Owner.....John Havens, Premises.
Architect...None.
Contractor..Corbett & Bayless, 1110 Franklin, Oakland.
COST, \$400

DWELLING

(1380) N WALNUT AVE 41 E Lilac, Oakland. One-story 5-room dwelling.

Owner.....H. C. Howland, 269 10th, Oakland.
Architect...None.
Day's work. COST, \$1800

DWELLING

(1382) NE FORTY-EIGHTH & TELEGRAPH AVE., Oakland. One-story 3-room dwelling.

Owner.....G. Giacomini, 494 48th, Oakland.
Architect...None.
Day's work. COST, \$450

GARAGE

(1383) NO. 3423 GROVE, Oakland. Garage.

Owner.....Mrs. M. L. Gibb, Premises.
Architect...None.
Contractor..Schnebly, Hostrowser & Pedgrift, 6th & Jackson, Oakland.
COST, \$300

ALTERATIONS

(1387) NO. 1369 HOPKINS, Oakland. Alterations.

Owner.....W. C. Thorpe, SW Cor. 14th and 25th Ave., Oakland.
Architect...None.
Contractor..Joe Brown, 1347 E-14th, Oakland.
COST, \$400

ALTERATIONS

(1389) NO. 1318 CLAY, Oakland. Alterations.

Owner.....S. M. Friedman Co., Prem.
Architect...None.
Contractor..Jno. Anderson, 1424 Broadway, Oakland.
COST, \$500

DWELLING

(1390) E SIXTY-FOURTH AVE 981½ N E-14th, Oakland. One-story five-room dwelling.

Owner.....Wm. H. Sims, 1128 71st Ave., Oakland.
Architect...None.
Day's work. COST, \$1800

DWELLING

(1391) W FORTY-EIGHTH AVE 200 N E-14th, Oakland. One-story 5-room dwelling.

Owner.....W. S. Elder, 1438 48th Ave., Oakland.
Architect...None.
Contractor..O. M. Bullock, 2215 Santa Rita, Oakland.
COST, \$1800

DWELLING

(1392) NW E-THIRTY-THIRD AND Elliott, Oakland. One-story five-room dwelling.

Owner.....F. N. Fabing, 3315 13th Ave., Oakland.

Architect...None.
Day's work. COST, \$2500

WAREHOUSE

(1393) QUAY WALL, Oakland. Metal sheeting for warehouse.

Owner.....City of Oakland.
Architect...None.
Contractor..Asbestos Protected Metal Co., 58 Sutter, S. F.
COST, \$15,000

DWELLING

(1394) N MANDANA BLVD 478 E Paloma, Oakland. Two-story 8-room dwelling.

Owner.....C. M. MacGregor, 470 13th, Oakland.
Architect...None.
Day's work. COST, \$4250

DWELLING

(1395) N MANDANA BLVD 520 E Paloma, Oakland. Two-story 8-room dwelling.

Owner.....C. M. MacGregor, 470 13th, Oakland.
Architect...None.
Day's work. COST, \$4250

WELL

(1396) TWELFTH, UNION, FOURTEENTH and Poplar, Oakland. All work for deep well.

Owner.....Pacific Coast Shredded Wheat Co., Oakland.
Architect...Hobart & Cheney, Crocker Bldg., San Francisco.
Contractor..J. E. Brettwiser, Oakland.
Filed July 20, '15. Dated July 15, '15.
TOTAL COST, \$850
Bond, none. Limit, 3 weeks. Forfeit, none. Specifications only filed.

BRICK STORE BUILDING

(1397) 50 N INTERSECTION WATKINS and Hepburn, 40 frontage on Watkins by 175-6 to Hayward Ave., facing said avenue with 42-5½ frontage, San Leandro. All work for one-story brick store building.

Owner.....W. L. Duarte, San Leandro
Architect...Geo. Armstrong.
Contractor..Geo. Petersen.
Filed July 20, '15. Dated July 19, '15.
1st and 15th of each month.... 75%
Usual 35 days..... 25%
TOTAL COST, \$5443

Bond, none. Limit, Sept. 24. Forfeit, \$20. Plans and specifications filed.

DWELLING

(1398) S FIFTY-FIRST 240 W Grove, Oakland. One-story 4-room dwlg.

Owner.....Mr. and Mrs. Johnston.
Architect...None.
Contractor..Thad M. Tupper, 2310 Russell, Berkeley.
COST, \$1500

DWELLING

(1399) W THIRTY-FIFTH AVE 35 N E-17th, Oakland. One-story five-room dwelling.

Owner.....Phillip J. A. Bold, 3342 E-14th, Oakland.
Architect...None.
Contractor..Bold & Son, 1954 Minnesota Ave., Oakland.
COST, \$1800

ALTERATIONS

(1400) NO. 2002 SAN PABLO AVE., Oakland. Alterations.

Owner.....Moody Estate Co.

Architect...None.
Contractor..Corbett & Bayless, 1110 Franklin, Oakland.
COST, \$400

GARAGE

(1401) NO. 569 TWENTY-SEVENTH, Oakland. Garage.

Owner.....J. T. Monahan, Premises.
Architect...None.
Contractor..Harry C. Knight, 3857 Market, Oakland.
COST, \$450

ALTERATIONS

(1409) NO. 722 LINDEN, Oakland. Alterations.

Owner.....H. Silverstein, 680 Broadway, Oakland.
Architect...None.
Contractor..L. T. Cook, 543 30th, Okd.
COST, \$500

DWELLING

(1410) N FORTY-FIFTH 235 W Grove, Oakland. One-story 3-room dwlg.

Owner.....J. B. Ginacker, 678 45th, Oakland.
Architect...None.
Contractor..Chris Engelsen, 562 39th, Oakland.
COST, \$750

DWELLING

(1411) W MANILA AVE 100 N 41st, Oakland. One-story 5-room dwelling

Owner.....Jas. H. Young, 702 Aileen, Oakland.
Architect...None.
Day's work. COST, \$2000

ALTERATIONS

(1412) NO. 59 SANTA CLARA AVE., Oakland. Alterations.

Owner.....Benj. P. Kurtz, Premises.
Architect...None.
Day's work. COST, \$650

ADDITION

(1413) NO. 640 FIFTY-FIRST, Oakland. Addition.

Owner.....S. Pringer, Premises.
Architect...None.
Contractor..O. N. Brown, 5007 Webster Oakland.
COST, \$450

DWELLING

(1414) E KAINS 250 S Washington, Albany. One-story 5-room dwelling.

Owner.....G. Glenn.
Architect...None.
Contractor..F. E. Sherwood.
COST, \$1800

DWELLING

(1415) E NEILSON 150 S Marin, Albany. One-story 5-room dwelling.

Owner.....Oscar Swanson.
Architect...None.
Day's work. COST, \$1900

DWELLING

(1416) E PEARLTA 200 N Solono, Albany. One-story 5-room dwelling.

Owner.....W. N. Taylor.
Architect...None.
Day's work. COST, \$1600

ADDITION

(1417) E MADISON 175 N Main, Albany. Addition.

Owner.....C. Wooster.
Architect...None.
Contractor..R. H. McBeth.
COST, \$1150

STORE AND OFFICES
(1418) SE 96TH AVE AND E-14TH, Oakland. Two-story 8-room store and offices.
Owner.....Robert Philip, 1410 Fruitvale Ave., Oakland.
Architect...Edwin J. Symmes, 2429 Vallejo, San Francisco.
Contractor...L. A. Williams & Son, 37 7th Ave., San Francisco.
COST, \$3193

APARTMENTS
(1423) NW GRAND AVE AND PARK View Terrace, Oakland. Three-story 57-room apartments.
Owner.....Charles B. Rousseau.
Architect...Charles J. Rousseau, 46 Kearny, San Francisco.
Contractor...N. P. Anderson, 320 Market, San Francisco.

REPAIRS
(1424) SE TWENTY-THIRD AND E-14th, Oakland. Roof repairs.
Owner.....Ench Estate, Oakland.
Architect...None.
Contractor...W. H. Wakerling, Orin Drive, Oakland.
COST, \$400

BRICK WOODYARD
(1426) N EIGHTH, bet. Harrison and Alice, Oakland. Three-story brick municipal woodyard.
Owner.....City of Oakland.
Architect...John J. Donovan, Dalziel Bldg., Oakland.
Contractor...Wm. A. Newsom, Sharon Bldg., San Francisco.
COST, \$12,477

FRAME DWELLING
(1429) STANNAGE, bet. Marin and Dartmouth, being Lot 641 Blk 11 Tract 4, Regents Park, Albany. All work for one-story frame dwelling.
Owner.....John Larson, Stannage Ave near Marin, Berkeley.
Architect...None.
Contractor...None Given.
Filed July 23, '15. Dated —.
TOTAL COST, \$—
Bond, limit, forfeit, none. Plans and specifications filed.
NOTE:—No contract filed merely plans and specifications.

Building Contracts Awarded Berkeley.

No.	Owner	Contractor	Amt.
1372	Cal Fruit	Wittman	2460
1375	Campbell	Campbell	2500
1384	Alpus	Alpus	400
1385	Allen	Scammon	450
1386	Conlon	Stock	400
1388	Stonden	De Kay	400
1406	Morton	Morton	1950
1407	Hillen	Hillen	2000
1408	Bartlett	Montgomery	650
1419	Tolson	Riddell	3750
1420	Hizan	Bowers	500
1421	Stanage	Houghton	1500
1422	Lindsey	Kitley	2150
1426	Needham	Needham	500
1427	McNulty	Jessiman	3950
1428	Gelder	Wells	3200

FRAME FACTORY
(1372) BLOCK BDED BY SECOND, Gillman, Third and Harrison, Berkeley. Plumbing for two-story frame factory.
Owner.....California Cured Fruit Exchange, 417 Market, S. F.
Architect...Washington J. Miller, 417 Market, San Francisco.
Contractor...Wittman, Lyman & Co.,

341 Minna, San Francisco.
Filed July 17, '15. Dated July 14, '15.
August 1st 75%
Completed and accepted..... 75%
Usual 35 days..... 25%
TOTAL COST, \$2460 plus 10%
Bond, \$1230. Surety, Fidelity & Deposit Co. Limit, 22 days. Forfeit, \$25.
Plans only filed.

DWELLING
(1375) ROSE ST. at end Le Roy Ave., Berkeley. One-story 5-room dwlg.
Owner.....G. L. Campbell, 1425 Center, Berkeley.
Architect...F. Holberg Relmers, 2125 Shattuck Ave., Berkeley.
Day's work. COST, \$2500

SHED
(1334) N RUSSELL 50 E Adeline, Berkeley. Shed.
Owner.....Alps, Wood Supply Co.
Architect...None.
Day's work. COST, \$400

ADDITION
(1385) NO. 1625, SCENIC, Berkeley.
Addition.
Owner.....Mrs. Francis Allen, Prem.
Architect...None.
Contractor...C. F. Scammon, 1816 Adeline, Berkeley.
COST, \$450

REPAIRS
(1386) NO. 2108 MILVIA, Berkeley.
Repairs.
Owner.....S. Conlon, Premises.
Architect...None.
Contractor...V. O. Stock, 1640 Dwight Way, Berkeley.
COST, \$400

GARAGE
(1385) E ELLSWORTH 75 N Stuart, Berkeley. Garage.
Owner.....Mrs. G. Stonden, 2401 Stuart Berkeley.
Architect...None.
Contractor...De Kay & Co., 2000 Shattuck Ave., Berkeley.
COST, \$400

DWELLING
(1406) N ALCATRAZ AVE 85 W Baker, Berkeley. One-story 5-room dwelling.
Owner.....Mathew Morton, 1300 Alcatraz Ave., Berkeley.
Architect...None.
Day's work. COST, \$1950

DWELLING
(1407) W MCGEE 398 N Dwight Way, Berkeley. One-story 5-room dwlg.
Owner.....R. C. Hillen, 430 Haight, Alameda.
Architect...None.
Day's work. COST, \$2000

HALL
(1408) S PARKLR 135 E Fulton, Berkeley. One-story 1-room hall.
Owner.....C. F. Bartlett, 2210 Parker, Berkeley.
Architect...None.
Contractor...W. S. Montgomery, 2221 Ward, Berkeley.
COST, \$650

FRAME DWELLING
(1419) PTN LOT 3 BLK 2 Amended Map Hopkins Terrace Map No. 4, Berkeley. All work for two-story 8-room frame dwelling.

Owner.....Geo. T. Tolson, 1617 La Loma Ave., Berkeley.
Architect...None.
Contractor...Riddell Bldg. Service Corporation.
Filed July 22, '15. Dated July 13, '15.
Frame up ¼
Brown coated ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$3750
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS
(1420) NO. 1564 LE ROY AVE., Berkeley. Alter dwelling into flats.
Owner.....W. B. Hizar, Prtmises.
Architect...None.
Contractor...—Bowers.
COST, \$500

DWELLING
(1421) S EMERSON 150 E Shattuck Ave., Berkeley. One-story 5-room dwelling.
Owner.....D. N. Stanage, 896 55th, Oakland.
Architect...None.
Contractor...O. M. Houghton, 894 55th, Oakland.
COST, \$1500

DWELLING
(1422) S ROSE 100 E Grant, Berkeley. One-story 5-room dwelling.
Owner.....H. E. Lindsey, 1405 Grant Berkeley.
Architect...None.
Contractor...Wm. Kitley, 924 Benito Road, Berkeley.
COST, \$2150

ADDITION
(1426) E PERALTA 400 N Gillman, Berkeley. Addition.
Owner.....A. S. Needham, 1214 Walnut, Berkeley.
Architect...None.
Day's work. COST, \$500
DWELLING
(1427) E OXFORD 56 N Virginia, Berkeley. Two-story 8-room dwelling.
Owner.....J. McNulty, 1637 Oxford, Berkeley.
Architect...None.
Contractor...John W. Jessiman, 17 Linda Ave., Oakland.
COST, \$3950

FRAME DWELLING
(1428) S BERKELEY WAY 50 W McGee Ave W 50xS 125, Berkeley. All work for two-story frame dwelling.
Owner.....Lucy Gelder, Berkeley.
Architect...None.
Contractor...W. B. Wells, 2106 38th Ave. Oakland.
Filed July 23, '15. Dated July 21, '15.
Frame up ¼
Brown coated ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$3200
Bond, \$1500. Surety, Pacific Coast Casualty Co. Limit, 90 days. Forfeit, \$25. Plans and specifications filed.

Building Contracts Awarded Alameda.

No.	Owner.	Contractor	Amt.
1381	Lewis	Vollmar	1150
1402	Burgner	Burgner	1950
1403	Noble	Noble	1900
1404	Same	Same	2000
1405	Johnson	Rounds	1700

DWELLING

(1381) N STANTON 100 S Santa Clara Ave., Alameda. All work for one-story 4-room dwelling.

Owner.....Joseph Lewis, Alameda.
Architect...None.
Contractor...A. G. Vollmar, 2217 San Jose Ave., Alameda.

Filed July 19, '15. Dated July 17, '15.
Rafters on 1/4
Brown coated 1/4
Completed and accepted..... 1/4
Usual 35 days..... 1/4

TOTAL COST, \$1160

Bond, \$600. Sureties, Charles F. Fischer and Johannah J. Vollmar. Limit, 50 days. Forfeit, \$1. Plans and specifications filed.

DWELLING

(1402) S GARFIELD AVE 300 W High Alameda. One-story 6-room dwlg. Owner.....A. J. Burgner, 1601 High, Alameda.

Architect...None.
Day's work. COST, \$1950

DWELLING

(1403) NO. 2524 NOBLE AVE., Alameda. One-story 5-room dwelling. Owner.....Geo. H. Noble, 2220 Central Ave., Alameda.

Architect...None.
Day's work. COST, \$1800

DWELLING

(1404) NO. 2500 NOBLE AVE., Alameda. One-story 6-room dwelling. Owner.....Geo. H. Noble, 2220 Central Ave., Alameda.

Architect...None.
Day's work. COST, \$2000

DWELLING

(1405) NO. 817 HAIGHT AVE., Alameda. One-story 4-room dwelling. Owner.....Addie Johnson, 1229 College Ave., Oakland.

Architect...None.
Contractor...F. C. Rounds, 820 56th, Oakland. COST, \$1700

NOTICE OF NON-RESPONSIBILITY.

ALAMEDA COUNTY.

July 17, 1915—PTN SURVEY NO. 60 Ex Mission San Jose lying bet W P. Railway Co's right of way and S and E 1 ppty Spring Valley Water Co on W. County Road 1.0. 247 on N except such land contained in Map Ellsworth Sbdvn No. 1 and Map Niles Glen Tract and lands occupied by Italian gardeners and triangular plot land N Alameda Creek, Near Niles. Hattie B Ellsworth as to improvements on leased property.....

COMPLETION NOTICES.

ALAMEDA COUNTY

July 10, 1915—LOT 36 BLK 8 Map Rock Ridge Park, Okd. C S Cherry Flittner to Jos Flittner June 30, 1915 to Nelson & Carlson..... July 7, 1915
July 15, 1915—LOT 1 BLK 1 Map Oakland; being sbdvn Blks R & S Lots 4 and 5 Blk "Q" Vernon Park. Okd. Rosa McCarthy to George W Patton..... July 9, 1915
July 17, 1915—LOT 8 BLK 2, Colusa Ave Ext, Okd. W H Archer to F R Peake Co..... July 7, 1915

July 20, 1915—N 20 LOT 4 and S 20 Lot 5 Blk 7, Solano Ave Terrace, Okd. Tp. Nathan Saxton and James Thomas to whom it may concern. July 19, 1915

July 20, 1915—LOT 23 AND NE 12 1/2 Lot 24 Blk 9 Map Key Route Heights, Okd. Jos and Mary

July 21, 1915—NO. 940 ROSE AVE, being Lot "K" Revised Map of Sbdvn Lots 20, 21 and 22 Glen Echo Tract, Piedmont. Frederick E Sandelin to Erle Saxton. July 15, 1915

July 22, 1915—W ELARITH AVE 143 S Magnolia Ave S 70xW 90, Piedmont. O M Bullock to whom it may concern..... July 21, 1915

July 22, 1915—LOTS 72 AND 73 and NW 15 Lot 70 and NW 15.03 Lot 71 Map Rosa Le Tract, Brooklyn Tp. Mrs Esther Seat to Jos Flittner..... July 19, 1915

July 22, 1915—S POSEN AVE 50 W Colusa Ave W 42xS 100, Okd. Soren Jensen to whom it may concern..... July 20, 1915

July 23, 1915—SW FREDERICK AND Terrace S 45.59 W 107.43 N 33.78 E 108.84, Okd. Wm H Blake to H R Abrahamson..... July 21, 1915

LIENS FILED

ALAMEDA COUNTY.

July 15, 1915—LOT 31 BLK "Q" Map Central Oakland Tract, Okd. Spott Bros, \$181; Sunset Lumber Co, \$427.92 vs O M Bullock.....

July 17, 1915—N HASTE 182.46 E Shattuck Ave E 60 N 135 W 10 S 15 W 50 S 120, Bkly. Sunset Lumber Co vs C Takahashi..... \$193.50

July 21, 1915—N Rose Terrace 185.44 E Arch NW 66.93 to pt beg NW 47 NE 33 NE 12.17 SE on curve 32.77 SE 25.53 SE 29.01 SW 95, Bkly. Chas F and E M Naylor, \$97.61; James Haverlin, \$99.50 vs Mrs J S Howley, A F Waid and R A Gilkey

July 22, 1915—LOTS 1 TO 24 incl. Map Rose Tract, Alameda. W Mattson, \$57.20; W A Hartlett, \$108 vs George H Noble, Geo F Ott and E W Cummings (Martinez Mfg Co)

July 23, 1915—N ROSE TERRACE 185.44 E Arch NW 66.93 to pt beg NW 47 NE 33 NE 12.17 SE on curve 32.77 SE 25.53 SE 29.01 SW 95, Bkly. Wm H Jones, \$162.50; R A Gilkey and J H Wilde, \$356.50; W J Rigney (Oakland Mantel Co), \$124.40 vs Mrs J S Hawley and A F Waid

RELEASE OF LIENS

ALAMEDA COUNTY.

July 15, 1915—S TWENTY-SECOND 360 E Webster E 51xS 162, Okd. W Delacour (Delacour Art Glass Wks) \$117; B C White, \$567.52; R H Chamberlain, \$164.90; Marshall & Stearns Co, \$1143.45 to D Miller ...

July 21, 1915—PTN LOTS 2 AND 3 Map W G Henshaw's Sbdvn Lot at 24th street and Bay Place, Okd. Sunset Lumber Co to Renee Claire Broden et al..... \$801.36

July 21, 1915—E 45 LOTS 16 AND 17 Blk "B" Map Leviston Tract, Bkly. John Heikkila, \$639.40; Paul T Swedberg, \$48; John P Maxwell, \$47.80; Berkeley Hardware Co, \$127; Art Fixture Co, \$170; Oakland Concrete, Terrazzo & Mosaic Co,

E. H. Williams

Chalmer Munday

Munday & Williams
Attorneys-at-Law

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\$124; A Severy, \$345; Marshall & Stearns Co, \$184; California Door Co, \$622; John O Adler, \$149.25; Frank Montano, \$488; Swift & Wilcox, \$124.10; Bruce Lumber & Mill Co, \$471.62; William Champion & Son, \$143.75; Hunter Lumber Co, \$84 to Gustaf Johanson.....
July 21, 1915—SE PARKER and Mabel 40x132-6, Bkly. Jepsen Bros to Gustaf Johanson..... \$114.20
July 21, 1915—LOT 1 BLK 20 Mathews Tract, Bkly. John P Maxwell, \$65; A Severy, \$123 to Gustaf Johanson

**SAN JOSE AND THE SANTA CLARA
VALLEY**

BRIDGE CONSTRUCTION—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Bids will be opened on August 2nd for the construction of a timber bridge over Robinson Creek at Station 436x50; a timber trestle over White House Creek at Station 557x50, and a timber trestle over Gazos Creek at Station

476x20 on the Pescadero to Santa Cruz County line road, known as Route 3, Division 3, of the San Mateo County Highways.

SEWER CONSTRUCTION — \$9,842.09. Santa Cruz, Santa Cruz Co., Cal. Engineer, City Engineer, Santa Cruz. Bids opened for the construction of the National street sewer show W. J. Tobin of Santa Cruz low at \$9,842.09. All bids were taken under advisement.

ROAD CONSTRUCTION—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The County Surveyor has been instructed to prepare plans and specifications for a road from Moss Beach to Montara and from Farrelone to Martini's. On completion and approval of the plans bids will be called for.

STREET PAVING — Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, Town Engineer, Redwood City. Owners, Redwood City. Plans and specifications providing for the paving of Main and East Bradford streets have been adopted by the City Trustees. The work will probably be done under private contract. The specifications call for a reinforced concrete base and a Topeka wearing surface.

HIGHWAY WORK—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Plans are complete and figures will be opened on August 2nd for the following work: For grading and partly macadamizing 14.25 miles of highway, located in Fifth Road District of San Mateo County, beginning at a point in the center of the present county road from Pescadero to the Santa Cruz County line. The work has been figured before, bids being opened on July 12th. Plans and specifications can be secured from the office of the County Surveyor.

ROAD GRADING—\$9,050. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Bids have been opened for the grading of the Monterey-Castroville road, a distance of approximately 11 miles in length, extending from the Huerta del Rey lagoon at Seaside to the Neponset bridge. The Engineer's estimate is \$9,050, and the lowest bid was that of L. G. Hare, Salinas, at \$6,723. The next low bid was Ruthven & Serano, Monterey, at \$9,352. Bids were taken under advisement.

STREET IMPROVEMENTS — Cost not stated. Mayfield, Santa Clara Co., Cal. Engineer, City Engineer, Mayfield. Owners, City of Mayfield. Plans and specifications for the paving of all principal streets of Evergreen Park and College Terrace have been ordered. The streets to be improved are Palo Alto and Amherst avenues in College Terrace and all streets running at right angles to the state highway in Evergreen Park. The work will probably be done under the Vrooman act or the Act of 1911. The City Engineer has been instructed to plan for an 18-foot roadway in the middle of each street of the same quality as the state highway, the rest of the street to be graded to the curb line.

STREET PAVING—Cost not stated. Hollister, San Benito Co., Cal. Engineer, City Engineer, Hollister. Owners, Town of Hollister. The Ransome-Crummey Co., First National Bank Bldg., Oakland, will pave Monterey street from Fifth to B streets under private contract. The plans and specifications for the work will be prepared by the City Engineer and will call for a 4-inch concrete base with one-half inch covering of dursaphite after the sub-base has been properly graded and tamped. The cost of the concrete base is set at 30 cents per lineal foot and 11½ cents per square foot for the dursaphite.

STREET IMPROVEMENTS — Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, City Engineer, San Jose. Owners, City of San Jose. At the last meeting of the City Council the City Engineer was instructed to prepare plans and specifications for the improvement of the remainder of West San Carlos street, Grant street, Orchard street from Grant southward, Taylor street from First to Thirteenth street, South Tenth street from Reed to Keys, Autumn from Julian to Santa Clara and Julian from the Guadalupe bridge to the westerly city limits.

FURNISHING CEMENT—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Bids were received from the Standard Portland Cement Co., Santa Cruz Portland Cement Co., Henry Cowell Lime and Cement Co., and Pacific Portland Cement Co., Consolidated, by the Supervisors at their last meeting for furnishing the county with 50,000 barrels of cement and were rejected. The District Attorney has been directed to furnish the Board with an opinion as to the right of their purchasing the cement in the open market without a further call for bids.

HIGHWAY CONSTRUCTION—Costs as follow. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The low bids presented at the last meeting of the Board of Supervisors for highway construction in Santa Clara County were as follows: District No. 2, Itansome-Crummey Co., \$31,854.05; Ford Road, same district, J. McKeynolds, 249 North 15th street, San Jose, \$7,991; second low, John W. McDonald, San Jose, \$14,887; Union avenue and Foxworthy road, J. F. Adams, 621 Home street, San Jose, \$10,300; second low Howard & Ellison Paving Co., \$13,500. No contracts have been awarded.

Contracts Awarded.

RESIDENCE — 2 story and base, frame, \$5,000. Burlingame, San Mateo Co., Cal. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, A. L. Elford. Contractor, D. Charles Scanlan, Burlingame. Contract price, \$5,000.

BUILDING CONTRACTS

SANTA CLARA COUNTY.

FRAME DWELLING
W SAN JOSE AND OAKLAND ROAD,
Town of Milpitas. All work for two-story frame dwelling.

Owner.....Dr. R. J. Smith, Milpitas.
Architect...F. D. Wolfe, 1st National Bank Bldg., San Jose.
Contractor...P. T. Jorgenson, 113 W-Santa Clara, San Jose.
Filed July 8, '15. Dated July 6, '15.
Frame up\$1498.75
Brown plaster on 1498.75
Building completed 1498.75
Usual 35 days..... 1498.75
TOTAL COST, \$5995.00
Bond, \$2997.50. Sureties, J. A. and S. H. Chase Limit, 85 days. Forfeited, \$5. Plans and specifications filed.

COTTAGE

S-SIXTEENTH near Santa Clara, San Jose. Six-room cottage.
Owner.....A. A. Hapgood.
Architect...C. McKenzie, Bank of San Jose Bldg., San Jose.
Contractor...W. Latta, 444 N-11th St., San Jose.
COS, \$2500

COTTAGE

SEVENTH AND KEYS STS., San Jose. Five-room cottage.
Owner.....E. D. Wells, 17th and Empire Sts., San Jose.
Architect...None.
Day's work. COST, \$2000
COTTAGE
E SEVENTEENTH, bet. Washington & Julian Sts., San Jose. Flye-room cottage.
Owner.....E. D. Wells, 17th and Empire Sts., San Jose.
Architect...None.
Day's work. COST, \$2000

GARAGE

NO. 306 S-FOURTEENTH ST., San Jose Garage.
Owner.....H. Bozzoni, Premises.
Architect...None.
Contractor...E. D. Wells, 17th & Empire, San Jose.
COST, \$400
ALTERATIONS
NO. 448 S-THIRTEENTH ST., San Jose. Alterations.
Owner.....Mrs. E. M. Owen, 446 S-10th St., San Jose.
Architect...None.
Contractor...H. A. Bridges, 725 S-7th, San Jose.
COST \$400

FRAME DWELLING

LOT 114 ORCHARD PARK Sub, San Jose. All work for frame dwelling.
Owner.....A. A. and E. M. Reihon, San Jose.
Designer...L. I. Kelly, San Jose.
Contractor...L. I. Kelly, 6 Mayellen Ave., San Jose.
Filed July 9, '15. Dated July 8, '15.
Frame up\$412.50
Brown plaster on 412.50
When completed 412.50
Usual 35 days..... 412.50
TOTAL COST, \$1650.00
Bond, \$825. Sureties, J. A. Chase and C. P. Allen. Limit, forfeit, none. Plans and specifications filed.
FRAME DWELLING
LOCATION NOT GIVEN. All work except painting for one-story frame dwelling.
Owner.....M. M. Hall, San Jose.
Architect...A. P. Hill Jr., Elks' Bldg., San Jose.

Contractor, P. E. Peterson.

Filed July 13, '15. Dated July 10, '15.
 Frame up\$530.50
 Brown plastered 530.50
 When completed 530.50
 Usual 35 days..... 530.50
TOTAL COST, \$2122.00

Bond, \$1061. Sureties, J. A. and L. H. Chase. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

S-TWELFTH ST., between Reed and Margaret Sts., San Jose. All work for frame dwelling.

Owner.....L. E. Appleton, 546 S-12th St., San Jose.

Architect.....None.
 Contractor, A. Thomas, San Jose.
 Filed July 16, '15. Dated July 14, '15.

Frame up\$787.50
 House plastered 787.50
 House finished 787.50
 Usual 35 days..... 787.50
TOTAL COST, \$3152.00

Bond, \$1600. Sureties, J. A. and S. H. Chase. Limit, 100 days. Forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS

SAN MATEO COUNTY.

FRAME RESIDENCE

LOT 29 BLK 59, Easton Addition to Burlingame No. 7, Easton. All work for one-story five-room frame residence.

Owner.....Elizabeth H. and Fay R. Spangler, 402 Monadnock Bldg., San Francisco.

Architect...Fay R. Spangler, 402 Monadnock Bldg., S. F.

Contractor..Croop & Keegan, San Mateo.

Filed July 16, '15. Dated July 14, '15.
 Rough frame up.....\$500
 When plastered 600
 Completed and accepted..... 600

Usual 35 days..... 550
TOTAL COST, \$2250

Bond, \$1125. Surety, The Fidelity & Casualty Co. of New York. Limit, 45 working days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED ACCEPTED
 July 19, 1915—LOT "A" Map of Turner Terrace, San Mateo. Annie L. Turner to Wm S Leadley. July 16, '15
 July 21, 1915—LOT 6 BLK 13, Dingle Park Tract, Redwood City. J P H Dykes to H H Putnam. July 19, 1915

ROAD EXPENDITURES IN SAN MATEO COUNTY.

REDWOOD CITY, San Mateo Co., Cal.—Operating expenses in the five road districts of San Mateo county amounted to \$132,008.53 during the year 1914, according to an analysis of expenditures made by Accountant E. J. White in his report to the Board of Supervisors.

The operating expense was heaviest in Supervisor John MacBain's district—the Third—and was lightest in the Fifth district—that of the late Supervisor D. E. Blackburn. Operating expenses in the five districts were as follows:

First district (Supervisor Casey)\$ 41,262.87

Second district (Supervisor Brown) 27,929.26
 Third district (Supervisor MacBain) 46,605.23
 Fourth district (Supervisor Francis) 10,278.67
 Fifth district (late Supervisor Blackburn) 5,932.55
Total\$132,008.53

MARIN, CONTRA COSTA AND SONOMA COUNTIES

BATH HOUSE—1 and 2 story and base, hollow tile, \$20,000. White Sulphur Springs, Napa Co., Cal. Architect, Frank S. Holland, 100 Haight street, S. F. Owner's name withheld. The building will contain the mud baths, reception room, attendants' quarters and lounging room. Interior will be finished in pine, white enamel and metal. There will be a large amount of special plumbing and steam heating equipment. Exterior will be faced with cement plaster. Plans are complete and figures will be called for at once.

BRIDGE—Reinforced concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Bids are now being taken by the County Supervisors for the construction of a bridge across Pacheco Slough, also for 1100 feet of trestle. The bridge will have concrete piers and will be 6 feet in width.

BRIDGE—Reinforced concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor Ralph Arnold, Martinez Owners, Contra Costa County. County Engineer Ralph Arnold has completed plans and specifications for the construction of a bridge over Peyton Slough and has presented them to the Supervisors, who will consider them at their next meeting when bids will probably be called.

BRIDGES—2, reinforced concrete. Cost not stated. Santa Rosa, Sonoma Co., Cal. Engineer, County Surveyor, Santa Rosa. Owners, Sonoma County. Bids will be opened on August 12th for the construction of a reinforced concrete bridge over Maacama Creek, and for a similar structure on the Petaluma and Santa Rosa road. Plans can be secured from the office of the County Clerk.

BRIDGES — Reinforced concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, City Engineer, Martinez. Owners, City of Martinez. Plans are complete and figures will be opened on August 4th for the construction of two reinforced concrete bridges in the city of Martinez. Included in the work will be the removal of steel girders in the Main street bridge. The bridges can be bid on as a whole or separately. Plans can be secured from the office of the City Clerk.

BRIDGE AND FLUME CONSTRUCTION—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, City Engineer, Martinez. Owners, City of Martinez. The City Trustees have instructed the City Attorney to immediately prepare for the calling of bids for the construction of a concrete flume across the creek at Main street, and for the construction of a concrete bridge over the creek at Ferry street. The bids will include the amount necessary to straighten out the bend in the creek at Ferry street. The flume on Main street will be 77 feet long, 30

feet wide and 11 feet high. The new Ferry street structure will increase the width of the creek crossing from 16 to 50 feet, thus making it as wide as the street. Bids on the work close August 3rd.

MAUSOLEUM—1 story, reinforced concrete and stone, \$10,000. San Rafael, Marin Co., Cal. Architects, Cunningham & Politeo, First National Bank Bldg., S. F. Owner, A. W. Foster. The building has been designed in the classic style and will contain six receptacles. Interior will be finished in stone and ornamental plaster. There will be modern plumbing and electric work. Exterior of the building will be faced with granite. Plans are nearly complete and figures will be called for shortly.

ROAD CONSTRUCTION — Cost not stated. San Rafael, Marin Co., Cal. Engineer, County Surveyor, San Rafael. Owners, Marin County. At the last meeting of the County Supervisors bids were ordered called to be received on August 3rd for constructing a piece of road in District One, across the marsh near McNear's Point. Bids are to be received for four different specifications, and the board will decide which is best after the bids are received. One specification calls for the necessary fill with a twelve-inch rock rip-rap; another calls for pile bulkhead; another for bulkhead composed of rock each containing a cubic yard; and one for embankments obtained from any source. Further information may be had from the County Surveyor at San Rafael.

LIGHTING SYSTEM — Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Plans and specifications have been adopted by the County Supervisors for a lighting district known as Crockett-Crolona and Valona lighting district, and orders that the Clerk of the Board advertise for bids for furnishing and installing lights in accordance with plans.

SEWER SYSTEM—\$12,500. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Plans and specifications for adequate sewerage in South Sausalito have been approved by the Board of Trustees. The sewage from all that portion of Sausalito in the watershed between the boundary lines of the Sausalito Land and Ferry Co. and the Sausalito Bay Land Co. will be collected in the Main street and the Water street sewers and carried 125 feet out into the bay by a cast iron pipe outlet. Plans are on file at the office of the Town Engineer. Bids will be called for shortly.

SEWER CONSTRUCTION — Cost not stated. Napa, Napa Co., Cal. Engineer, City Engineer, Napa. Owners, City of Napa. The City Council has adopted resolutions providing for sewer work in Nursey, Vallejo and Juarez streets. Bids for the work will soon be called for.

STREET WORK—Cost as follow. Napa, Napa Co., Cal. Engineer, City Engineer, Napa. Owners, City of Napa. Bids for doing certain street work on First street have been taken under advisement by the Council and a contract will probably be awarded at the next meeting. The following bids were re-

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

FRAME BUILDING

W TUNNEL AVE., bet. Nichol and Scenic Aves., Lot 16 blk "G," Richmond. One-story frame building.

Owner.....Richard Paaschh, 9 Tunnel Ave., Richmond.

Architect.....None.

Contractor..J. F. Meyer and Bochardt Constr. Company.

COST, \$1800

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

RESIDENCE — 1 story and base, frame, \$1,00. Fresno, Fresno Co., Cal. Architect, none. Owner, Conrad Kinzel, Fresno. The dwelling will be erected at 445 F street, and has been designed for a five-room house with bath and sleeping porch. Interior will be finished in pine and redwood. There will be an open fire place and tile mantel. Exterior will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

BRIDGE—Reinforced concrete. Cost not stated. Fresno, Fresno Co., Cal. Engineer, County Surveyor, Fresno. Owners, Fresno County. Plans have been completed and figures are now being taken for the reinforced concrete bridge to be erected over Fish Slough on the Elkhorn grade. Bids will be opened for this work on August 4th. Plans and specifications can be secured from the office of the County Clerk.

BRIDGE—Steel and concrete. Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, County Surveyor E. H. Annear, Modesto. Owners, Stanislaus County. Stanislaus County will build a new bridge across the Tuolumne River eight miles east of Waterford on the road to the La Grange country. Plans and specifications for the structure have been adopted by the Board of Supervisors. Bids will soon be taken.

CHURCH—1 story and base, brick, \$10,000. Turlock, Stanislaus Co., Cal. Architect, C. C. Edburg, Turlock. Owners, First Church of Christ, Scientist. The building will have a seating capacity of 600 people. Sunday school rooms and reading rooms are also provided. Interior will be finished in pine with some ornamental plaster. Art glass is also specified. Exterior will be faced with pressed brick veneer. Plans are being prepared.

SCHOOL—1 story, frame. Cost not stated. Maricopa, Kern Co., Cal. Architect, Thomas B. Wiseman, 1333 Chester avenue, Bakersfield. Owners, Maricopa Union High School. The building will be in the nature of an addition to the present school and will contain three class rooms and study hall. Interior will be finished in pine with some maple floors. There will be steam heat. Interior will be covered with cement plaster on metal lath. Plans are complete and figures are being taken. Bids will be opened on July 30th.

THEATRE AND LODGE HALL—2 story and base, reinforced concrete, \$25,000. Turlock, Stanislaus Co., Cal. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name

withheld. The building will cover an area of 56 by 150 feet, and will have three street frontages. The main floor will contain a high class theatre with a seating capacity of 750 people. There will also be a large balcony. Upper floor has been designed for lodge rooms for the local Odd Fellows and will be finished in pine and hardwood. A central heating system will be installed. Considerable ornamental plaster will be used in the theatre. Exterior of the building will be faced with cement plaster. Plans are complete and figures are being taken.

APARTMENT HOUSE—2 story and base, frame, \$20,000. Fresno, Fresno Co., Cal. Architect, Henry F. Starbuck, Rowell Bldg., Fresno. Owner, Jacob Kichter. The building will be erected at the corner of Merced and P streets, and has been designed to contain a total of twenty suites of two and three rooms. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. Plans provide for a central heating system and hot water supply. Bath rooms will be finished in tile. Wall beds are specified. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

SCHOOL COMPLETION—Frame. Cost not stated. Sunnyside School District, Tulare Co., Cal. Architect F. W. Griffin, First National Bank Bldg., Porterville. Owners, Sunnyside School District. Plans and specifications have been completed for the alterations and work necessary to complete the Sunnyside School. Bids are now being taken and will be opened on August 2. Plans can be secured from the architect.

WATER TANK AND TOWER — Steel. Cost not stated. Bakersfield, Kern Co., Cal. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. Bids are now being received at the office of the City Manager for a steel tower and 5,000 gallon tank to be erected at Beale Park for the water system there.

STREET PAVING—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, City Engineer, Modesto. Owners, City of Modesto. Preliminary steps have been taken by the City Council to provide for the paving of L street between 7th and 9th. Bids will be called for on this work when the plans and specifications have been approved.

SEWER CONSTRUCTION—Cost not stated. Fresno, Fresno Co., Cal. Engineer, City Engineer, Fresno. Owners, City of Fresno. Plans have been completed and figures are now being taken for the construction of a 16-inch sewer in El Dorado street. Brick man-holes and Y branches are included in the work. Plans can be secured from the office of the City Clerk. Bids will be opened on August 2nd.

STREET PAVING, CONCRETE CURBS AND GUTTERS — Cost not stated. Visalia, Tulare Co., Cal. Engineer, City Engineer, Visalia. Owners, City of Visalia. Bids will be received by the Board of Trustees up to 5 p. m. of August 4, 1915, for paving and constructing concrete curbs and gutters in East Main St. from Encina avenue to Conyer street, in accordance with plans and specifications on file in the office of the City Engineer. Certified check or bond for 10 per cent

Contracts Awarded.

CHURCH—1 story and base, frame and brick, \$14,950. Dixon, Solano Co., Cal. Architect, John J. Foley, 46 Foley, 46 Kearny street, S. F. Owners, Roman Catholic Church. Contractor, Charles P. Rose, Dixon. Contract price, \$14,950.

CONVERTER PUMP HOUSE—1 story steel and concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, Engineering Department Shell Oil Co., 343 Sansome street, S. F. Owners, Shell Oil Co. Contractors, Gutleben Bros., New Call Bldg., S. F. Contract price not stated.

PAVING, CURBS AND GUTTERS—Cost not stated. Rio Vista, Solano Co., Cal. Engineer, Town Engineer, Rio Vista. Owners, Town of Rio Vista. Contractors, Frank Duffum and W. J. Jessup, Rio Vista. Contract price not stated.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

FRAME BUNGALOWS

BLK 24 OF THE WELCH or Additional Survey of Town of Martinez. All work for two one-story frame bungalows.

Owner.....D. L. Hilson, 703 Main St., Martinez.

Architect...None.

Contractor..D. H. MacQuiddy, Concord. Filed July 15, '15. Dated July 15, '15.

Usual 35 days after said work is completed\$2400

TOTAL COST, \$2400

Bond, none. Limit, within space of 60 days. Forfeited, none. Plans and specifications filed.

FRAME COTTAGE

BLK 24 OF WELCH or Addition Survey of Town of Martinez. All work for one-story frame cottage and finishing garage.

Owner.....Dorothy Julia Hilson, Pine near Green, Martinez.

Architect...None.

Contractor..D. H. MacQuiddy, Concord. Filed July 15, '15. Dated July 15, '15.

Frame up\$487.50

Roof on and all interior plaster completed 487.59

Completed and accepted..... 487.50

Usual 35 days..... 487.50

TOTAL COST, \$1950.00

Bond, \$950. Sureties, Jas. P. McNamara and J. P. Graham. Limit, within space of 52 days. Forfeited, none. Plans and specifications filed.

is required. Ida Markham is City Clerk.

LIBRARY—1 story and base, brick, \$8,000. Dinuba, Tulare Co., Cal. Architects, Bowen & Davis, McKenzie Bldg., Fresno. Owners, Town of Dinuba. The building has been designed in the classic style and will cover an area of 32 by 60 feet. There will be a large reading room, office and stack room. Metal book stacks are specified. A central heating system will be installed. Interior will be finished in pine with maple floor. Exterior of the building will be faced with pressed brick. A clay tile roof is specified. Plans are complete and figures will be called for at once.

COURT HOUSE ALTERATIONS AND REPAIRS—Cost not stated. Modesto, Stanislaus Co., Cal. Architect, none. Owners, Stanislaus County. Bids will be opened on August 11th for extensive alterations and repairs, including painting, plastering, interior finish and electric work at the County Court House. Plans and specifications can be secured from the County Clerk at Modesto.

OFFICES—2 story and base, reinforced concrete, \$10,000. Oakdale, Stanislaus Co., Cal. Architects, Stone & Wright, 24 South California street Stockton. Owners, Oakdale Irrigation District. The building has been designed for the administrative offices of the company. Interior will be finished in pine and hardwood. Fireproof vaults will be installed. There will be a central heating system. Exterior of the building will be faced with cement plaster. Plans are now being prepared and figures will be called for shortly.

Contracts Awarded

BRIDGE—Reinforced concrete, \$6,000. Hanford, Kings Co., Cal. Engineer County Surveyor, Hanford. Owners, Kings County. Contractor, S. G. Smartt, Bakersfield. Contract price, \$6,000.

HOTEL AND STORES—2 story and base, brick, \$60,000. Fresno, Fresno Co., Cal. Architects, Coates & Traver, Rowell Bldg., Fresno, and Head Bldg., S. F. Owners, Olender Bros., 1833 Tulare street, Fresno. Contractors, Riggins & Palmer, 1908 Fresno street, Fresno. Contract price, \$60,000.

BUILDING CONTRACTS

FRESNO COUNTY.

DWELLING

NO. 445 F ST., Fresno. Dwelling. Owner.....Conrad Kinzel, Premises. Architect...None. Day's work. COST, \$1500

DWELLING

NO. 556 ROOSEVELT AVE., Fresno. Dwelling. Owner.....Mrs. J. S. Baker. Architect...None. Contractor...Dan Blosser, 217 Abby St., Fresno. COST, \$2000

ALTERATIONS

LOTS 1 AND 2 BLK 70, Fresno. Alterations. Owner.....Shaver Estate. Architect...None. Contractor...R. F. Flechlin, 616 Rowell Bldg., Fresno. COST, \$2600

BUILDING CONTRACTS

FRESNO COUNTY.

REPAIRS

NO. 1044 I ST., Fresno. Repairs. Owner.....L. M. Tennant. Architect...None. Contractor...E. Reggins. COST, \$1500

LIENS FILED.

FRESNO COUNTY.

RECORDED AMOUNT

July 16, 1915—LOTS 62 AND 64, A Glunz Tract, Fresno. Freson Lumber Co vs S A Dooley and Lloyd S Jackson\$63
July 16, 1915—LOTS 6, 7 AND 8 BLK 2 Forthcamp Add'n No. 2, Fresno. Norris Waldo and F J Wallace vs Bessie C and W T Burks.....\$518
July 17, 1915—N ½ OF SE ¼, SE ¼ of SE ¼ of SE ¼ of Sec 23 16-21, Fresno. (re-recorded). Z T Gilbert vs Marie A Campbell.....\$44

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA.

RESIDENCE—1 story and base, frame, \$2,000. Sacramento, Cal. Architect, none. Owner, T. J. Crabbe, Yuba City. The dwelling has been designed for a five-room house with bath. Interior will be finished in pine throughout. Some oak floors will be used. There will be a large open fire place and tile or brick mantel. Imitation tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and the work will be done by Day Labor.

BRIDGES—8 steel and concrete. Cost not stated. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. Plans and specifications for two of eight bridges Butte County will build on the state highway between Chico and Nelson have been adopted by the Supervisors. The longest, 300 feet, will cross Butte Creek. The eight will cost \$40,000.

BRIDGES—3, timber and concrete. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. At the last meeting of the County Supervisors the Clerk was instructed to advertise for bids to be received on August 2nd at 10 a. m. for construction of concrete and steel bridges across Sand Slough, Samson Slough and the Paynes Creek Slough in Road District No. 3. Further information together with plans and specifications may be had from the County Surveyor.

BRIDGE REPAIRS—Concrete. Cost not stated. Ukiah, Mendocino Co., Cal. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Plans and specifications prepared by the County Surveyor for the repairs on the Pudding Creek bridge have been adopted and bids for the work have been ordered called. Further information together with the plans and specifications may be had from the County Surveyor.

BRIDGE—Reinforced concrete. Cost not stated. Oroville, Butte Co., Cal.

Engineer, County Surveyor, Oroville. Owners, Butte County. Plans have been completed and figures are now being taken for the construction of a reinforced concrete bridge over Edgar Slough on the line of the state highway between Nelson and Chico. Plans and specifications can be secured from the office of the County Surveyor. Bids will be opened on August 7th.

BRIDGES—Steel and timber, \$20,000. Redding, Shasta Co., Cal. Engineer, County Surveyor, Redding. Owners, Shasta County. Plans for a new bridge across the Sacramento River at Kennett have been adopted by the Supervisors and bids will be taken until August 21st. The bridge is to be a combination steel and wooden structure and is to span the river just above the depot. It will be three spans of 200 feet each, with approaches 80 feet long at each end.

BRIDGE—Steel and concrete, \$12,000. Placerville, El Dorado Co., Cal. Engineers, A. V. Saph and O. B. Rushmer, Rialto Bldg., S. F. Owners, El Dorado County. Plans and specifications have been completed for the construction of a steel bridge with reinforced concrete approaches to be erected over the South Fork of the American River at Coloma. The main span will be 162 feet long. Bids are now being taken and will be opened by the Board of Supervisors on August 16th. Plans and specifications can be secured from the office of the County Clerk.

SCHOOL—1 story, frame. Cost not stated. Oat School District, Tehama Co., Cal. Architect, none. Owner, Oat School District. Plans for a one-story frame building containing two rooms have been completed and are now out for figures. Bids will be opened on August 2nd at 2 p. m. Plans and specifications can be secured from A. N. Norcott, Trustee, at Red Bluff.

SEWER CONSTRUCTION—\$43,000. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Four bids were received by the City Commission for the construction of Unit 4 of the reinforced concrete sewer in East Sacramento. It appears that the James Kennedy Co. of Los Angeles is the low bidder. Other bidders were A. Teichert, Tibbits Pacific Co. and Contra Costa Construction Co. The work will cost about \$43,000. The sewer will be laid on Montclair avenue to J. north on Montclair to the alley between G and H and thence east to the Wright & Kimbrough Tract No. 10, and up Burns Slough to Ashley Place.

Contracts Awarded

STREET PAVING—\$10,000. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, Clark-Henery Construction Co., Ochsner Bldg., Sacramento. Contract price, \$10,000.

WATER EXTENSION AND SEWER WORK—Cost as follows. Corning, Tehama Co., Cal. Engineer, City Engineer, Corning. Owners, City of Corning. Contractor, F. A. Wheeler, Corning. water extension, \$4,755; A. C. Hamlin, San Jose, sewer extensions, \$15,381.

SEWER CONSTRUCTION—Unit No. 4, \$37,280.40. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractor, James Kennedy, 901 Washington Bldg., L. A. Contract price, \$37,280.40.



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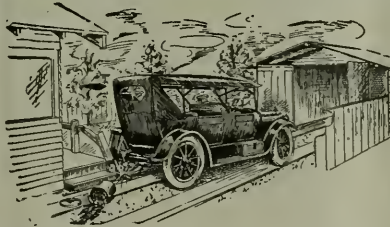
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Benj. G. McDougall, Architect.
ST. LUKE'S CHURCH, S. F.

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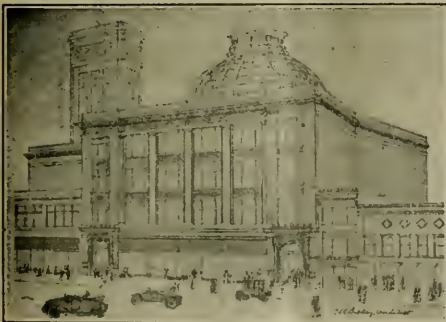
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Righetti & Headman, Architects.

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Wright, Rushford & Cahill, Architects

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C. W. Dickey, Architect

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Frederick H. Meyer, Architect

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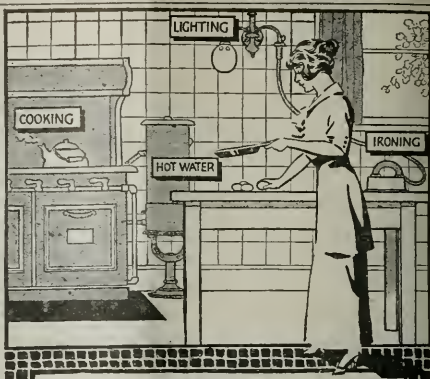
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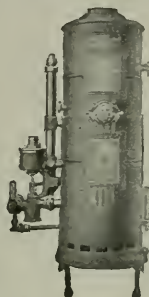
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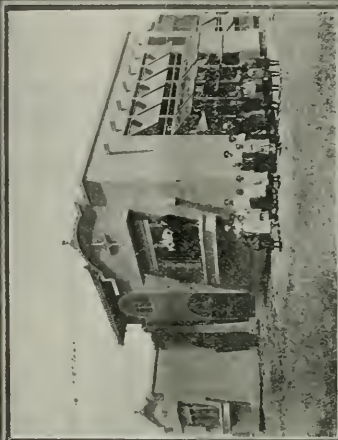
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Building and Engineering News

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San Francisco, August 4, 1915

Fifteenth Year, No 29

The Los Angeles County Board of Flood Control has filed its report as the County Supervisors recommending the expenditure of \$16,508,900 on a comprehensive work to control the floods of storm waters and at the same time conserve these waters for irrigation and reforestation purposes.

A total of \$4,000,000 is proposed by the engineers to be spent in building check dams in all the canyons in the county and the conservation work incidental to this.

The remaining \$12,508,900 is recommended to be spent on the building of channels of rivers, arroyos and other water courses leading to the sea outlets, together with levees where they are needed.

The problem of Flood Control is not a new one in this country, but it has never been satisfactorily solved, and it is not likely that the county will embark on any elaborate control scheme until the check dams now being experimented with have proven beyond a doubt that they will do the work for which they were designed and built. If the check dam system proves a success in Los Angeles County there is no reason why it cannot be applied to other places that are now being heavily eroded every time a rainstorm hits them.

The report contemplates control of all storm waters in the Los Angeles and San Gabriel Rivers, Rio Hondo, Arroyo Seco, the San Antonio flood district and all other waterways.

The Board of Flood Control consists of Engineers Frank H. Olmsted, H. Hawgood, J. B. Lippincott, J. W. Reagan and Captain Leeds.

The County of Los Angeles is getting ready to spend some three millions on new highways to develop sections of the county that were left unprovided for in the first bond issue of three and a half millions that built the first 305 miles of good roads in the county some five years ago. There is no doubt that the bond issue will carry as there is not a knocker in Southern California when the question is up for more good roads.

As an example, the deep interest that is taken in road building was conclusively shown several days ago when a straw vote was taken at a meeting of the Board of Supervisors, attended by more than a hundred representative citizens, as to the advisability of voting \$3,000,000 in bonds for additional road building in the county. For

every man and woman who voted said "aye," when the question was put.

The proposed highways are as follows:

Through the San Gabriel Canyon, from a point near Azusa to the Antelope Valley, near Big Rock Creek, thence west to Palmdale, approximately 63 miles, at an estimated cost of \$950,000, or as an alternate through the Arroyo Seco Canyon from Pasadena to Palmdale, approximately 44 miles; estimated cost \$850,000.

Through Mint Canyon, from Saugus to the Antelope Valley, connecting with the road under construction from Palmdale to Lancaster, 30 miles; estimated cost, \$200,000.

The Harbor-Truck boulevard, extending from Los Angeles city through Compton to the harbor front, 15 miles; estimated cost, \$400,000.

Pico boulevard from Los Angeles to the sea, (to complete) 4 miles; estimated cost, \$45,000.

The coast road from Venice to Manhattan and Redondo Beach, 2 miles; approximate cost, \$50,000.

A road from the valley near Pomona, through La Brea Canyon, connecting with the Orange County highway system, 6 miles; estimated cost, \$65,000.

Millions of dollars' worth of natural gas has been going to waste each year near the city limits of Los Angeles. Some of this gas—at least several million cubic feet a day—has been going to waste within ten miles of the central part of the business district, and right at the door of the residence district. The balance, in the Fullerton district, has been going to waste within twenty miles of the city.

But investigations carried on in what is known as the Rancho la Brea oil fields, owned by G. Allan Hancock, and in the Fullerton fields, has resulted in steps being taken to conserve the gas, as well as to further develop the gas fields. And the direct result has been to give to Los Angeles homes and manufacturing plants served by the Economic Gas Company the first pure natural gas sold in the city.

With more than 900 heat units, as compared with 500 to 700 heat units obtainable from the artificial or mixed gas, the patrons of the Economic Company are enjoying cheaper fuel than ever before, and the almost unlimited supply obtainable assures a continuation of this desirable service.

Lessons from the Exposition.

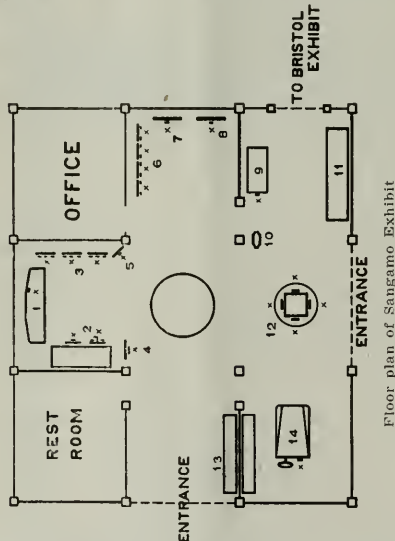
By George Nelson, C. E.

INTERESTING SANGAMO EXHIBIT.

Story of the Sangamo Exhibit.

The Sangamo Electric Company of Springfield, Illinois, has one of the most interesting and instructive exhibits to be found in the Palace of Machinery. This exhibit is located in what is known as "Block 22" situated at the corner of 2nd street and Avenue C2. The factory of this company is devoted exclusively to the manufacture of electric meters and their accessories and in its exhibit will be found a most comprehensive line of both integrating and graphic meters. In order to better show the operation of its meters the company has installed a great deal of equipment with which its meters are used.

One of the first things the visitor sees on approaching the booth is a large glass dial hanging in the center arch. This dial is electrically operated from a meter located on the east wall of the Palace of Machinery. This meter records the entire alternating current load of the building; the reading of this meter is duplicated on the dial by means of a contact-mating mechanism in the meter, which operates electro-magnets in the dial. As each ten kilowatt-hours is recorded on the meter a contact is made closing the local circuit to the dial, which causes the large hand to move one point; the visitor can therefore determine how long it takes for ten kilowatt-hours to be consumed in the building by noting the time between contacts. In other places in the exhibit there are on display a number of smaller dials of this type such as is used on electric vehicles and in other places where it is desirable to duplicate the reading of a meter at any distance from the meter.



Floor plan of Sangamo Exhibit

To the left of the entrance is the front end of a Hudson Motor Car (14), containing the gasoline engine and the Delco self-starting and lighting equipment. On this equipment this company shows the operation of one of its types of amperehour meters in connection with the storage battery. The type of meter used on this car was recently developed to meet the demand for a small, inexpensive instrument which would show at all times the exact condition of the battery with respect to charge or discharge, and is known as the type "MS." With this meter it is

possible to tell at a glance whether or not there is sufficient current left in the batteries to start the engine or to burn the lights without injury to the battery. The meter also contains a current indicator which shows at all times whether the battery is being charged or discharged and the approximate rate. This feature is valuable in determining whether the car is being driven at a fast enough speed to charge the battery. This meter also automatically gives the necessary overcharge to the battery, so that with this instrument the most inexperienced person can keep the batteries in good condition. This type of meter can be used with any self-starting and lighting system on any car and is very easily installed.

To the right of the main entrance, a small isolated lighting plant (9) is shown in actual operation. This plant consists chiefly of a gas engine, a generator, and a set of storage batteries. This plant supplies a part of the current that is used in lighting the booth. The current can be taken from the batteries when the engine is not running or from the generator and batteries when the engine is going. An amperehour meter is used on the switchboard of this plant to show the exact amount of charge in the batteries at any time. In this plant, the meter is so arranged that when the batteries need recharging a contact is made which lights a lamp or rings a bell to notify the owner to start the engine; when the batteries become fully charged it will also stop the engine, thereby preventing the batteries from becoming overcharged. These plants are used on farms and ranches and other places where electric current cannot be obtained in the usual way from some electric light company.

In the rear center of the booth is located a complete axle generator equipment (2) manufactured by the United States Light and Heating Co. These equipments are used on steam railway cars to furnish the power for the electric lights and other electrical devices used on the cars. In this installation the generator is driven by an electric motor, but in actual service it is belted to the axle of the car. An electric tachometer mounted on the panel shows the speed of the set corresponding to the speed in miles per hour of the railway train. In this equipment, the amperehour meter not only shows the condition of the batteries but also controls the charging and discharging of the batteries by operating devices on the standard control panel.

Adjacent to this is the vestibule of a street car (1) showing the installation and operation of a street railway amperehour meter. This meter records the amount of current used to run the car and is used to develop efficiency among the motormen, which results in a marked decrease in the power bill. These meters, at the same time, bring to light defective equipment such as tight brake shoes, inefficient gear reductions, and inefficient motors. Watthour meters are also designed for the same class work. On systems where these meters have been installed, savings as high as 20 per cent have been effected in the power bills alone.

In the same section of the booth will be found a marble switchboard (3) on which are mounted samples of various types of amperehour meters used in electric vehicles, electric starting systems, train lighting systems and garages. These meters are all connected in circuit and so arranged that the visitor can easily operate them. There are also mounted on this board a number of circuit breakers such as used in connection with battery charging. These circuit breakers are arranged to open the charging circuit when the batteries are fully charged, as indicated by the position of the large hand of the meter.

Another marble switchboard (6) supports the meters, registering the different loads in the booth. There are both amperehour and watthour meters in the service or house types and also switchboard type. To the right of this switchboard are shown two testing racks for testing (7) alternating and (8) direct current meters and instruments. Of these racks tests of various types of meters are conducted daily.

In several places in the booth are located showcases (11) containing groups of transformers, shunts, and portable testing meters. There are also showcases (13) showing the parts of typical meters and their method of assembly and the processes of manufacturing the parts. Thus the visitor may see the steps in the making of the meter from the raw stock to the finished meter, then the method of testing and calibrating the meter, and finally the operation of the meter in the actual service for which it was designed.

In addition to this interesting and educational exhibit, this company has provided a large rest room where visitors may rest in comfort and read the New York, Chicago and San Francisco papers or write letters to their friends back home on the stationery provided for this purpose, consisting of souvenir postcards of the booth and handsomely embossed note paper. A cordial invitation to visit this booth is extended to all Exposition visitors.

Key to Diagram Group of Panels, Space 6, Panama-Pacific Exposition.

1. Service type amperhour meter with variable resistor to give overcharge automatically, and totaling dials, as built for Consolidated Railway, Electric Lighting & Equipment Company, for automatic control of battery in railway train lighting.
2. Garage type wattour meter, back connected, large dial showing charge put in each car, small dials keeping total record.
3. Service type amperehour meter with differential shunt to give overcharge automatically and double-acting contact train operating distant dials, 20 and 21.
4. Auto type amperehour meter with variable resistor, bottom cable connections as built for Grinnell Electric Car Company, Detroit.
5. Service type amperehour meter with simple shunt and large dial not arranged to give overcharge automatically.
6. Service type amperehour meter with totaling circles for discharge.
7. Panel with auto type amperehour meter with variable resistor and with Sangamo shunt trip circuit breaker as built especially for the Pennsylvania Railroad Company for use on electric lighted cars with straight storage battery or axle generator equipment.



Diagram Group Panels—Space 6

8. Auto type amperehour meter with variable resistor, zero contact and reset for main hand, as used by the U. S. Light & Heating Company, Niagara Falls, N. Y., for control of battery charge on electric lighted railway cars.
9. Auto type amperehour meter same as No. 12, except made for the Pullman Company.
10. Extension back amperehour meter with standard dial, variable resistor to give overcharge.
11. Same as no. 10, except with special dial and special locking bezel ring as built for General Motors Truck Co.
12. Service type amperehour meter with variable resistor and with special dial and terminals as built for the B. & O. R. R. Co. for use on electric lighted cars.
13. Service type amperehour meter with duplex recording train and dial; recording on one row of circles, total charge, and on the other, total discharge of battery.
14. Weston ammeter, reversing switch and controlling rheostat for operating meters on panel at left.
15. Ditto. For operating meters on center panel.
16. Ditto. For operating meters on panel at right.
17. Sangamo Shunt Trip Circuit Breaker, back con-

nected, operated from zero on full charge contacts in several different meters on these panels.

18. Typ MS amperehour meter with full circular dial, zero contact and side supporting lugs as used on electric vehicles with isolated-lighting plant batteries, etc.

19. Type MS amperehour meter similar to No. 18 but with current indicator showing rate of charge or discharge of battery at any time, and without supporting lugs. Designed for use on gas cars with self-starting batteries, with batteries of isolated lighting plants, and other services.

20. Flush type distant dial mechanism recording electrically from meter No. 3 on center panel.

21. Same as No. 20, except projecting type mechanism.

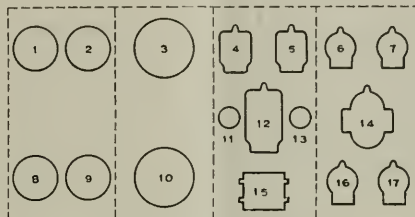


Diagram Group Panels—Space 8

Key to Diagram Group of Panels, Space 8, Panama-Pacific Exposition.

1. Single-phase, alternating current Type H switchboard wattour meter as used on power plant and other switchboards.
2. 2-wire direct current Type D-5 switchboard wattour meter for use on switchboards of central station or isolated power plants.
3. 3-wire direct current D-5 switchboard type wattour meter adapted to measure total load on any 3-wire current system.
4. 2-wire direct current D-5 service type wattour meter as used in general service. This meter arranged with special contact device in the train to operate distant dials 11 and 13.
5. 2-wire direct current D-5 service type wattour meter with special test dial and sealing cup for Government seal, as built for Canadian use.
6. Single-phase Type H service type wattour meter as used for house lighting service and all general conditions of metering single-phase alternating currents.
7. Single-phase alternating current meter, same as No. 6, except with special Canadian test dial and Government sealing cup.
8. Amperehour meter, switchboard type, with large circular dial, zero contact and reset, as used with large central station batteries.
9. Amperehour meter, switchboard type, with duplex dial for recording total charge and total discharge of batteries as used with large central station batteries.
10. Polyphase switchboard Type H wattour meter for 3-wire and 4-wire 2-phase or 3-phase circuits, as used on power plant and other switchboards.
- 11 and 13. Single-acting distant dials recording kilowatt-hours, arranged to be operated at any distance from meter; these dials operating from contact in meter No. 4, above.
12. 3-wire service type D-5 wattour meter for general service, adapted to measure all conditions of load on 3-wire direct current systems.
14. Polyphase Type H service wattour meter for 2-phase and 3-phase circuits adapted to measure all conditions of polyphase alternating current loads, as used in mills, factories, stores, and all places operating with poly-phase currents.
15. 3-wire shunt for operating 3-wire Sangamo direct current meter as No. 12, for currents 100 to 300 amperes, inclusive.
16. Single-phase Type 11 large capacity service wattour meter.
17. Same as No. 16, except as built for Canadian use, with special dial and sealing cup.

Story of the Sangamo Electric Company.

The Sangamo Electric Company may justly be called one of the pioneers in the electric meter industry of the United States; having been organized in January, 1899, after those interested in the company had spent several years in the development of an induction meter.

At that time the induction watt-hour meter for alternating current was practically unknown in this country, although lamp-hour or ampere-hour meters had been used for several years. The best known meters at that time were the Edison chemical type meters for direct currents only, and the Thompson recording watt meter which had been successfully used for direct currents, and to a considerable extent on alternating currents, for over ten years.

The Sangamo Company was successful from the start with the Gutmann induction meter, first brought out in the spring of 1899, and at the same time, the Westinghouse, Stanley and Diamond meter companies brought out induction meters, followed shortly by an induction meter of the General Electric Company. Through a period of several years, the Sangamo Company continued to develop and improve induction meters, and sold large quantities of Gutmann disc type meters until the fall of 1903 when, owing to patent litigation under the well known Tesla patents, the manufacture of induction meters was discontinued, and for a number of years thereafter, until the expiration of these patents in 1910, such meters were made only by two companies owning or controlling these patents.

Before this time the Sangamo Company had started on the development of a mercury motor type meter for direct currents, believing that this principle offered many advantages over the small shunt motor or so called commutator type of meter for direct current. After stopping the manufacture of induction meters, the first Sangamo mercury type direct current meter was made in the fall of 1904 and then for a period of several years the development and improvement of mercury meters, both for direct and alternating currents, was continued under considerable difficulties and with many discouragements, but as a result, a highly improved and perfected type of mercury meter was made possible, and today, the Sangamo Electric Company is the largest manufacturer in the world of mercury motor meters for all purposes, including service

type watt-hour meters for 2-wire and 3-wire circuits, switchboard watt-hour meters of both types, ampere-hour meters for use with storage batteries, and in all other services where measurement in ampere-hours instead of watt-hours is necessary or desirable.

The development of the 3-wire type of direct current meter, something over two years ago, was really the most remarkable achievement in this line, as it had been considered for many years physically impossible to build a 3-wire mercury meter, in which it is necessary to have two elements immersed in mercury, but entirely separated, and with the shaft of the upper element actually passing out through a jewel bearing under mercury and without the mercury following through.

In the fall of 1910, the Sangamo Electric Company, as a result of its original experience in the development and manufacture of the Gutmann induction meter, and with the added and much more difficult experience of many years in the mercury meter art, designed and brought out the Type H induction meter, which, since its introduction in the spring of 1911, has had an extensive sale. This meter, of which over 300,000 have now been made, is offered in all combinations, single-phase and polyphase, for circuits of any voltage, frequency and magnitude, and in service and switchboard forms.

Aside from standard types of alternating and direct current meters which we have mentioned, the Sangamo Company has, during the past few years, developed many special devices, more or less related to meters and their use, such as small circuit breakers for control of battery charge, graphic recording devices of various kinds, including graphic ampere-hour meters for analyzing operation of batteries, distant recording and transmitting devices for use with gauges and instruments of various types, distant dials, permitting the record of any meter to be made at a long distance from the point where the current is measured, etc. It is interesting to note, in this connection, that the Sangamo Company made, two years ago, the largest meter in the world, rated at 60,000 amperes, 650 volts, which was built for the Hydraulic Power Company at Niagara Falls. This meter has been in successful operation for nearly two years, measuring loads day and night from 40,000 to 50,000 kilowatts.

At the present time the Sangamo Electric Company is developing many new and interesting devices, more or less related to meters and their applications.

THE SOLDIER'S RIFLE PASSES.

Nothing seems to stay put in this changeful world. The theories of yesterday are discarded today; the inventions of yesterday, today are punk and tomorrow will be forgotten. Newton's conception of gravity no longer stands as first enunciated; the theory of the ultimate constituents of matter is involved in the fog of uncertainty as to what matter really is, or whether it really is. And there you are.

Since the days of the crossbow and the stinkpot—from the time when gunpowder was first made—the soldier's rifle by one name and another, has been identified with the soldier, one and inseparable. A war without a soldier, like a soldier without a rifle, has been considered unthinkable.

But now, behold, the rifle is passing. It is wholly unlikely that any other war than this will be fought with the rifle in the soldier's hands. As the bicycle became machined into the motor vehicle, the rifle has become machined into a device far deadlier than a company's rifles combined, equally portable, even lighter in weight than many five-shot bayoneted guns now in the Allies' trenches. One modern machine gun, which a single soldier may now carry upon his back with as little or less burden than the soldiers of the English squares bore at Waterloo, is capable of far deadlier service than the whole face of a square 100 years ago.

Formerly the soldiers "fired upon the enemy." Now they "squirt death," if they are armed with the modern German hell-maker. Posted in concealed positions, any one of these new contrivances is more effective than a whole company of infantry, for the delivery of bullets. They literally sweep the field before them, "spray" the enemy with a flood of deadly projectiles, "squirt death."

So far has this modern device been perfected that it can be made even more cheaply than the best rifles now in European use. Not only this, but it is so made that interchangeable parts may be supplied upon the field. It is simpler, lighter and vastly more powerful than any gun that ever "kicked" a shoulder, and will "carry" farther by 100 per cent.

Many pet theories of warfare have fighting man becomes a galling gun for efficiency; a whole company for volume of fire.

And as the soldier has become a company, the whole face of a square, he has become, relatively, a smaller target. With smokeless powder he has become well-nigh invisible, even when his immediate vicinity is known. With his long range machine gun he becomes many times a company—he can fire, with equal accuracy, twice as far.

—Oakland Enquirer.

Walt Mason, the Emporia ex-stand-patter, lately converted to the single tax, wrings this protest from his typewriter: "The whole system of taxation is wrong. Joshua Spoon-drift had a vacant lot that raised a crop of cockle-burs and sunflowers every year. It got to be a sort of general dumping ground for the neighborhood. People used to write letters to the newspapers saying the Spoon-drift's lot was a menace to the public health as well as a blot on the escutcheon of our beautiful city. Spoon-drift paid a few dollars a year taxes and laughed merrily when people said his lot was a public nuisance. Finally he had a change of heart. He cleaned all the junk off his lot and put up a handsome residence on it. He graded the place in fine shape and set out flower beds and fussed around until he had the finest property in his end of town. The assessor got wise to what he was doing and determined to punish him severely. When Spoon-drift found out how much taxes he would have to pay he swooned away and he's never smiled since. Now, if there was any sense in taxation the man who improves his property would be rewarded and the one who lets it run to cockle-burs would be punished. It's such injustice as this, professor, that makes a man wonder whether George Washington crossed the Delaware in vain."

ADVANCE NEWS

Classified according to Character of Work



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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 4 story and base, brick and steel, \$25,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, Theo. E. Rulfs. The building will be erected on the east side of Hyde street north of Sutter, having a frontage of 25 feet and a depth of 56 feet. There will be eight apartments of three and four rooms. Interiors will be finished in pine and elm with hardwoods floors in the living rooms and reception halls. Plans provide for steam heat, elevator service and a hot water system. All suites will have wall beds and private baths. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance lobby. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and sub-figures are being taken.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$10,000. Architect, William H. Armitage, 328 Montgomery street, S. F. Owner, Mrs. E. McGlew. The building will be erected at the corner of Folsom and Norfolk streets and has been designed for a store on the first floor and four modern apartments of four rooms each on the two upper floors. Interiors will be finished in pine. Patent store fronts will be installed. There will be wall beds. Exterior of the building will be covered with cement plaster and shiplap. Plans are complete and a contract will be awarded shortly.

SAN FRANCISCO—Apartment house alteration, 2 story, frame, \$4,000. Architects, O. R. Thayer and Charles C. Frye, 20 Montgomery street, S. F. Owners, H. M. and Francis C. Berthiaume. The building to be altered is located at the northwest corner of Geary and Cook streets. The work will consist of rearranging the interior for four-room apartments. There will be new plastering, plumbing, painting, interior finish, wall beds and hardwood floors. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

BERKELEY, ALAMEDA CO., CAL.—Apartment house, 3 story and base, frame. Cost not stated. Architect, C. M. Cook. Owner represented by Olin Offield, Phelan Bldg., S. F. The building will be erected at the corner of Durant Way and Telegraph avenue, and will cover an area of 80 by 130 feet. There will be a total of 84 apartments of two and three rooms. Interior will be finished in pine and hardwood veneer. Some hardwood floors will be used. There will be steam heat and a hot water system. All suites will have wall beds and private baths. Bath rooms will be finished in tile. Marble and tile wainscot will be used

in the entrance. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken by Mr. Offield, Phelan Bldg.

SEATTLE, WASH.—Apartment house 3 story and base, brick, \$40,000. Architect, C. W. Saunders, Alaska Bldg., Seattle. Owner, Alice Cosgrove. The building will be erected at 1809 Broadway and has been designed to contain a total of 20 apartments of two, three and four rooms. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. There will be furnace heat, a hot water system and vacuum cleaning. Bath rooms will be finished in tile. All apartments will have wall beds and private bath rooms. Exterior of the building will be faced with pressed brick. Plans are complete and figures will be called for at once.

SAN FRANCISCO—Apartment house, 4 story and base, reinforced concrete, \$35,000. Architects, Smith & Stewart, 214 Kearny street, S. F. Owners, Smith & Stewart. The building will be erected on the south side of O'Farrell street between Polk and Van Ness, having a frontage of 27½ feet and a depth of 120 feet. There will be a total of 27 suites of two rooms each besides a large and attractive lobby, office and amusement room. Interior will be finished in pine, white enamel and mahogany. All suites will have private baths and wall beds. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance. Plans provide for steam heat, an automatic elevator, oil burning furnace, hot water supply and vacuum cleaning. Exterior has been designed in the Pueblo style and will be faced with cement plaster. Plans are being prepared.

OAKLAND, CAL.—Apartment house, 3 story and base, frame, \$35,000. Architects, Oliver & Thomas, Pantages Theatre Bldg., Oakland. Owner's name not given. The building will be erected at the corner of Harrison and Grand avenue, and has been designed to contain a total of 25 suites of two, three and four rooms, all with private baths and wall beds. Interior will be finished in pine with some elm panels and hardwood floors. Plans provide for steam heat, oil burning system and hot water system. Bath rooms will have tile wainscot. Marble and tile will be used in the entrance lobby. Exterior of the building will be covered with veneer pressed brick and cement plaster. Plans are being prepared.

Contracts Awarded.

OAKLAND, CAL.—Apartment house, 3 story and base, frame, \$5,000. Architect, J. Henry Boehrer, Delger Bldg., Oakland. Owner, Dora Krohner, Contractors, Boehrer & Legault, Delger Bldg., Oakland. Contract price, \$5,000.

BANKS

RIO VISTA, SOLANO CO., CAL.—Bank, 2 story and base, reinforced concrete. Cost not stated. Architect, Henry C. Smith, Humboldt Bank Bldg., S. F. Owners, Bank of Rio Vista. The building will be designed in the classic style and will be a fireproof structure. The entire main floor and basement will be occupied by the bank. Upper floors will be used for offices. Interior will be finished in pine, hardwood and ornamental plaster. Fireproof vaults will be specified. There will be a central heating system with oil burning equipment. Exterior of the building will be faced with pressed brick. Plans are being prepared.

Contracts Awarded.

SACRAMENTO, CAL.—Bank and offices, 7 story and base. Class A construction, \$200,000. Architect, R. A. Herold, Forum Bldg., Sacramento. Owners, Capitol National Bank. Contractors, McGillivray Construction Co., Nicholas Bldg., Sacramento. Contract price, \$200,000.

RIO VISTA, SOLANO CO., CAL.—Bank, 1 story and base, brick and concrete, \$20,000. Architect, W. H. Weeks, 75 Post street, S. F. Owners First National Bank of Rio Vista. Contractors, Harvey A. Klyce, Sheldon Bldg., S. F. Contract price, \$20,000.

BONDS.

SANTA BARBARA, SANTA BARBARA CO., CAL.—August 30th is the date set by the County Board of Supervisors for the voting of bonds of \$1,500,000 to finance the construction of several bridges and roads throughout Santa Barbara County. The amounts will be expended as follows: Bridges, \$350,000; Cuyama road, \$95,000; other roads, \$892,000; hospital, \$100,000; detention home, \$15,000, making a total of \$1,453,000.

Information as to plans for the above mentioned work may be had from the County Surveyor at Santa Barbara.

EUREKA, HUMBOLDT CO., CAL.—The County Supervisors have sold the \$150,000 state highway bonds to Byrne & McDonnell. The proceeds of this sale will be used in the completion of the state highway in Humboldt County.

SACRAMENTO, CAL.—Commissioner of Education E. J. Carragher is negotiating for the purchase of a block of land between Thirteenth and Fourteenth, E and F streets, for a new school building.

SAUSALITO, MARIN CO., CAL.—A number of meetings have been scheduled in various districts in Marin County to discuss the proposition of issuing bonds to secure an ample supply of water for the residents in the Marin Municipal Water District.

REDDING, SHASTA CO., CAL.—The Shope National Concrete Company of Portland is making preparations to establish a plant in this city, according to a letter received by R. J. Anderson, secretary of the Shasta County Promotion and Development Association. If the scheme is carried through a new plant will be erected.

YUBA CITY, SUTTER CO., CAL.—The West Sacramento Club of Sacramento plans to construct a handsome club house in Yuba City, the site for

the proposed structure having already been secured. As far as can be learned no architect has been selected to design the building.

AUBURN, PLACER CO., CAL.—The \$250,000 worth of state highway bonds which Placer County purchased last week from the Highway Commission have been sold to Byrne & McDonnell, the highest bidders. The bonds were taken on the agreement that highway work be commenced on the Auburn-Roseville lateral immediately.

SAN DIEGO, SAN DIEGO CO., CAL.—After having bought \$200,000 worth of highway bonds last March with the understanding that the money was to be expended in improving the highway through San Diego County chosen by the State Commission, the Supervisors have been asked by that body to invest \$50,000 more in the securities. The request was accompanied by another promise that the money would be used in this county.

Supervisor Smith has been authorized to demand of the Commission that it comply without further delay with its promise to expend the \$200,000 on the improvement of San Diego County roads.

JACINTO, GLENN CO., CAL.—The residence of Frank B. Glenn, recently destroyed by fire, will be rebuilt immediately according to statements made by Glenn. The structure carried an insurance of \$20,000. Glenn plans to expend \$40,000 in the new structure.

RODEO SANITARY DISTRICT, CONTRA COSTA CO., CAL.—Sealed bids will be received by the Rodeo Sanitary District of Contra Costa County until August 11th for the purchase of bonds of \$17,000. The proceeds of the sale will be used in the construction of a sewer system for the Rodeo District. Further information may be had from J. D. Smith, secretary of the Sanitary Board of Rodeo Sanitary District.

BAKERSFIELD, KERN CO., CAL.—The City Council has voted to call a special election for the voting of bonds of \$200,000 for the purchase and improvement of city parks. Of this amount \$10,000 will be used as prizes in a competition to secure proper plans for the development of the properties.

RIVERSIDE, RIVERSIDE CO., CAL.—Theo. Crossley of Riverside has purchased the lot on Main and Eleventh streets and will erect a \$25,000 fireproof garage building.

LOS ANGELES, CAL.—The Chamber of Commerce and Auto Club of Southern California have opposed the proposition of a \$3,000,000 bond issue for more good roads.

EL CENTRO, IMPERIAL CO., CAL.—The Imperial Irrigation District bonds, aggregating \$3,500,000, which were voted by the people of Imperial Valley for the purchase of the irrigation system of the valley, have been properly printed and signed and have been forwarded to Los Angeles.

SACRAMENTO, CAL.—The Road Selection Committee of the Sacramento Good Roads Association at a recent meeting prepared a tentative plan for road construction, which calls for the construction of 160 miles of concrete highway. It is the intention of the association to keep the bond issue as near as possible to \$1,500,000.

ANAHEIM, ORANGE CO., CAL.—The City Council has decided to call a special election to vote bonds of \$50,000 to

provide for the erection of a new city hall building.

VICTORVILLE, SAN BERNARDINO CO., CAL.—On account of a technicality, the Board of Trustees of the Victor Valley Union High School District has decided to call a new election to vote bonds for the erection of a new high school building. The previous bond issue was for \$25,000 but it is probable that the amount will be increased.

WASCO SCHOOL DISTRICT, KERN CO., CAL.—A \$25,000 bond issue to provide a high school building is being considered by residents of the Wasco Union High School District. An election will be called in the near future, it is thought.

BRIDGES AND DAMS

REDDING, SHASTA CO., CAL.—Bridge, steel or reinforced concrete. Cost not stated. Engineer, County Surveyor, Redding. Owners, Shasta County. Plans A and B for a wagon bridge across Clear Creek on the Igo road were adopted at the last meeting of the County Supervisors and bids were ordered received until August 21st. Plan A calls for a reinforced concrete bridge and plan B for a steel structure. Plans and specifications together with full information may be had from the County Surveyor at Redding.

OROVILLE, BUTTE CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. Plans have been compiled and approved for the construction of a highway bridge over Butte Creek on the State Highway between Nelson and Chico. Bids are now being taken and will be opened on August 7th. Plans and specifications can be secured from the County Clerk.

SAN JOSE, SANTA CLARA CO., CAL.—Bridges, 2, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the County Supervisors plans and specifications prepared by the County Surveyor for two bridges in Santa Clara County were approved and the Clerk of the Board was instructed to receive bids for same until August 23rd at 11 a. m. Both structures will be of reinforced concrete. One will be a slab type bridge with reinforced concrete culverts and will be erected on the Shannon road. The other will be a two-span girder bridge and will be erected on Bodfish road over Bodfish Creek. Plans may be obtained from the County Surveyor.

SEATTLE, WASH.—Bridges, steel and concrete. Cost as follows. Engineer, City Engineer, Seattle. Owners, City of Seattle. Figures given out by F. A. Rapp, bridge engineer, regarding the two Lake Washington Canal bridges, show the low bidders as follows: Fifteenth Avenue Bridge—Booker, Kiehl & Whipple, substructure, \$95,145.50; Beers Building Co., superstructure, \$146,049.50. Substructure and superstructure—Beers Building Co., \$238,416; Hans Pederson, \$242,620.30. Engineer's estimate, \$316,391. Fremont Avenue Bridge—Pacific States Construction Co., substructure, \$112,651.50; Beers Building Co., superstructure, \$154,601. Substructure and superstructure—Beers Building Co.,

\$271,701.50; Hans Pederson, \$271,471. Engineer's estimate, \$360,076.

DUNSMITH, SISKIYOU CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Plans are complete and figures are now being taken for the construction of the large reinforced concrete bridge over the Sacramento River. The structure will be 532 feet long with one arch of 130 feet clear span and two arches of 114 feet clear span. Bids will be opened on August 23rd. Plans and specifications can be secured from the State Highway Commission at Sacramento or its branch offices in San Francisco or Los Angeles.

VISALIA, TULARE CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Visalia. Owners, Tulare County. Bids will be received by the Board of Supervisors up to August 16, 1915, for the construction of a 40-foot reinforced concrete bridge across the Alta District Canal.

Contracts Awarded.

BURLINGAME, SAN MATEO CO., CAL.—Bridges, 10, reinforced concrete, \$20,555.57. Engineer, City Engineer, Burlingame. Owners, City of Burlingame. Contractor, Chris Larsen, Easton. Contract price, \$20,555.57.

CHURCHES

SACRAMENTO, CAL.—Church, 2 story and base, reinforced concrete, \$30,000. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, Roman Catholic Church of Sacramento. The building has been designed in the Mission style and will contain an auditorium seating 750 people. The plans also provide for Sunday school rooms and a large hall. Interior will be finished in pine and ornamental plaster. There will be a central heating system. Art glass windows and marble altars will be provided. Exterior of the building will be faced with cement plaster. Plans are being prepared.

FRESNO, FRESNO CO., CAL.—Church, 2 story and base, brick and steel, \$75,000. Architect, R. F. Hotchkin, Fresno. Owners, First Church of Christ, Scientist. The building will be designed in the classic style and will cover a large ground area. There will be a main auditorium, Sunday school rooms and reading rooms. Interior will be finished in pine and ornamental plaster. Art glass windows are specified. Plans provide for a steam heating system. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are now being prepared.

RIVERSIDE, RIVERSIDE CO., CAL.—Church, 1 story and base, brick. Cost not stated. Architect, Thomas Franklin Power, Higgins Bldg., L. A. Owners, Roman Catholic Church. The building has been designed in the classic style, and will cover a considerable ground area. The main auditorium will seat 550 people. Plans also provide for Sunday school rooms. Interior will be finished in pine with ornamental plaster. Art glass windows are specified. Exterior of the building will be faced with cement plaster. Plans have been revised and new figures are being

taken. The foundation work is complete.

FIRE HOUSES AND JAILS.

STOCKTON, SAN JOAQUIN CO., CAL.—Fire houses, 2, 1 and 1½ story and base, brick and frame. Cost as follows. Architects, Ralph P. Morrell, Odd Fellows Bldg., and W. B. Thomas, Yosemite Bldg., Stockton. Owners, City of Stockton. A. J. McPhee & Son, Stockton, presented the lowest figures for both the Rose street and California street fire houses and will probably be awarded the contracts. Their bid for the Rose street house was \$5,696.50, oak floor, \$150 extra, and slate roof, \$160 extra. California street house, \$6,978.

FLATS

SAN FRANCISCO—Flats and store, 3 story and base, frame, \$5,000. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner, Mrs. Perry. The building will be erected on 16th street near Guerrero, and has been designed for one store on the first floor and two modern flats above. Interiors will be finished in pine and elm panels. Hardwood floors will be used in the principal rooms. There will be an open fire place in each living room with tile or brick mantel. Bath rooms will have tile floors. An automatic water heater will be installed. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO—Flats and store, 3 story and base, frame, \$8,000. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner, Mrs. Bunner. The building will be erected at the corner of 20th and Bryant streets, and has been designed for a store on the first floor and two modern flats of five and six rooms on the upper floors. Interiors will be finished in pine. Hardwood floors will be used in the principal rooms. There will be an open fire place in each living room. Mantel will be of tile. Automatic water heaters are specified. Tile wainscot will be used in the bath rooms. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, none. Owner, W. A. Hemminga, 1600 Fell street, S. F. The building will be erected on the north side of California east of 15th avenue, and will cover an area of 25 by 63 feet. There will be two flats of six rooms each and a basement garage. Interior finish will be of pine and elm. Hardwood floors will be used in the principal rooms. Plans provide for open fire places and tile or brick mantels. Automatic water heaters will be installed. Bath rooms will have tile wainscot. Exterior of the building will be covered with asbestos cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Flats, 3 story and base, frame, \$5,000. Architect, Theo S. Boehm, 4419 19th street, S. F. Owner, F. J. Boehm, 4419 19th street, S. F. The building will be erected on the east side of 16th avenue north of Balboa,

and has been designed to contain three modern flats of five and six rooms. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Tile wainscot will be used in the bath rooms. Each living room will have an open fire place and tile or brick mantel. Exterior will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor.

LOS ANGELES, CAL.—Flats, 2 story and base, frame, \$30,000. Architect, H. H. Whiteley, Story Bldg., L. A. Owner, Henry M. Jones. The building will be erected on West Washington street near Rose Hill, and will contain a total of 15 flats. The design is in the Italian patio style. Interiors will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. A central heating system will be installed. Bath rooms will be finished in tile. Exterior will be covered with cement plaster on metal lath. Plans are being prepared.

GARAGES

SAN FRANCISCO—Garage, 1 story and base, reinforced concrete. Cost not stated. Architects, Havens & Toepeke, 46 Kearny street, S. F. Owner's name withheld. The building has been designed for a commercial garage and will be erected at the corner of Powell and Union streets, covering a considerable ground area. There will be a cement floor, concrete walls and roof slabs. Interior will be finished in pine. There will be metal window sash and frames and special gasoline storage tanks. Exterior of the building will be faced with cement plaster. Plans are being prepared.

SAN FRANCISCO—Garage, 1 story, frame. Cost not stated. Architect, Carl Geiffuss, 46 Kearny street, S. F. Owner, B. Schmidt. The building has been designed for a private garage and will be erected at the corner of 21st and Folsom streets. A cement floor will be used. Exterior of the building will be covered with rustic and shiplap. Plans are complete and the work will be done by Day Labor.

GOVERNMENT WORK & SUPPLIES

Greeley, Colo., Furniture.

The contract for installing furniture in the U. S. post office at Greeley, Colo., has been awarded to Federal Equipment Co., Carlisle, Pa., at \$1,096.

Casper, Wyo., Furniture.

The contract for installing furniture in the U. S. post office at Casper, Wyo., has been awarded to Federal Equipment Co., Carlisle, Pa., at \$795.

Grass Valley, Cal., Furniture.

The contract for installing furniture in the U. S. post office at Grass Valley, Cal., has been awarded to Federal Equipment Co., Carlisle, Pa., at \$1,029.

Salem Indian School, Building.

The following bids were received by the commissioner of Indian Affairs, Washington, D. C., for the construction of an addition to the brick as-

sembly hall at the Salem Indian School, Ore.:

L. C. Denison, 185 S. 19th street, Salem, Ore., work, complete, \$10,719.20; add for metal roof, \$350 add for steel trusses, \$1,625.

Stewart & Engstrom, 575 N. Capitol street, Salem, Ore., \$12,927; with metal roof, \$13,450 with steel trusses, \$14,500; 120 days.

W. D. Lovell, Minneapolis, Minn., work, complete, \$18,500; with metal roof, \$306; with steel trusses, \$800; 180 days.

Southwick & Headrick, Salem, Ore., work, complete, \$13,597; with metal roof, add \$400; steel trusses, add \$1,200; 180 days.

John Almeter, 294 E. 51st street, Portland, Ore., work, complete, \$13,829; add for metal roof, \$720; add for steel trusses, \$1,550; 180 days.

Port Townsend, Wash., Elevator.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., July 21 for the installation of an elevator in the U. S. public building at Port Townsend, Wash.:

Kaestner & Hecht Co., Chicago, Ill., \$1,200; time December 15.

Llewellyn Iron Works, Los Angeles, Cal., \$5,580; time December 21.

Otis Elevator Co., Washington, D. C., \$3,838; time November 27.

Pendleton, Ore., Post Office.

As previously reported, the contract for the construction, complete, of the U. S. post office at Pendleton, Ore., has been awarded to James E. Winters, Portland, Ore., at \$99,537; time to complete 18 months. In the construction of the building fixtures and material manufactured by the following firms will be used: Plumbing fixtures, John Douglas Co.; cast iron column and wall radiators, American Radiator Co.; radiator valves, Jenkins Bros. damper regulator, Standard Regulator Co.; air valves for radiator, Hoffman Specialty Co.; air valves for steam mains, Jenkins Bros.; vacuum cleaner, United Vacuum Appliance Co.; motor for vacuum cleaner, General Electric Co.; cabinet and tablet, McPate, McKenny Co.; conduit, National Metal Molding Co.; rubber-covered wire, Simplex Wire & Cable Co.; flush switches, General Electric Co.; pendant switches, Cutler-Hammer Mfg. Co.; canopy switches, Cutler-Hammer Mfg. Co.; keyless sockets, Weber; reflectors and glassware, Macbeth-Evans Co.

Reclamation Service, Cylinder Gates.

The following bids were received by the director, U. S. Reclamation Service, Washington, D. C., for furnishing two cast iron cylinder gates for Keechelus reservoir and a duplicate set for Sherburne reservoir.

Item 1, iron and steel; 2, brass and bronze.

Fulton Engineering Works, Los Angeles, Cal., item 1, 8c per lb; 2, 50c per lb.

Power Mining Machinery Co., Cudahy, Wis., item 1, 5.36c; 2, 4.3c.

R. D. Wood & Co., Philadelphia, Pa., items 1 and 2, 7.32c.

Payne & Joubert, Birmingham, Ala., item 1, 5.27c; 2, 5.72c.

Hardie-Tynes Mfg. Co., Birmingham,

Ala., item 1, 5.26c; 2, 4.84c.

Rosedale Foundry & Machine Co., Pittsburgh, Pa., item 1, 4.65c; 2, 6.25c.

Denver, Colo., Furniture.

The contract for installing furniture in the U. S. post office at Denver, Colo., has been awarded to the Louck & Hill Co., Richmond, Ind., at \$12,608.94.

Port Townsend, Wash., Oil-Burning Plant.

As previously reported, the contract for installing an oil-burning plant in the U. S. Marine Hospital, at Port Townsend, Wash., was awarded to Appling-Griggs Co., Tacoma, Wash., who will use the following fixtures in the prosecution of the work: Oil-burning apparatus, S. T. Johnson Co.; motor, General Electric Co.; thermostatic element for controlling oil supply, American Radiator Co.

San Francisco, Cal., Mint.

As previously reported, the contract for installing conduits and wiring in the U. S. mint, San Francisco, Cal., was awarded to Possett & Wilhelm, Denver, Colo., at \$6,200. In the prosecution of the work the following fixtures and material will be used: Cabinet and tablet, Frank Adam Electric Co.; conduit, Western Conduit Co.; rubber-covered wire, General Electric Co.; flush switches, Perkins; conduit type fittings, V. V. Fittings Co. and Crouse-Hinds Co.; outlet boxes, Flint Electric Mfg. Co.

Laterals, Greenfields Distribution System.

The following bids were received July 1 by the U. S. Reclamation Service at Fort Shaw, Mont., under specification 292, for furnishing earthwork and structures, first unit of laterals on Greenfields distribution system:

Bid 1. West Coast Construction Co. & Hans Pederson, Madison Building, Seattle, Wash.

2. Winston Bros. Co., 801 Globe Building, Minneapolis, Minn.

3. J. E. Hinton, Billings, Mont.

4. O'Connor & Healan, Great Falls, Mont.

5. Charles Wilhite & Co., Malta, Mont.

6. I. J. Denton, Gilman, Mont.

7. Security Bridge Co., Minneapolis, Minn.

8. Threot Bros. & Jolly, Lovell, Wyo.

Schedule 1.

Item 1, excavation, class 1—Bid 1, 12c; 2, 11.5c; 3, 11c; 4, 11.8c; 5, 14c.

Item 2, excavation, class 2—Bid 1, 25c; 2, 35c; 3, 20c; 4, 30c; 5, 50c.

Item 3, excavation, class 3—Bid 1, 25c; 2, 75c; 3, 70c; 4, 50c; 5, \$1.

Total schedule 1—Bid 1, \$10,333.50; 2, \$10,028.50; 3, \$9,471; 4, \$10,307; 5, \$12,276.

Schedule 2.

Prices the same as schedule 1, excepting bid 1, which is as follows; Item 5, 12c; 6, 25c; 7, 50c; 8, 2c.

Total, schedule 2—Bid 1, \$12,173; 2, \$11,790.50; 3, \$11,143; 4, \$12,124; 5, \$14,428.

Schedule 3.

Prices of all bidders the same as schedule No. 2.

Total schedule 3—Bid 1, \$11,442; 2, \$11,079.50; 3, \$10,477; 4, \$11,394; 5, \$13,552.

Schedule 4.

Prices of all bidders same as schedule No. 2.

Total, schedule 4—Bid 1, \$9,666; 2, \$9,363.50; 3, \$8,849; 4, \$10,020; 5, \$11,456.

Schedule 5.

Prices and bidders same as schedule No. 2.

Total, schedule 5—Bid 1, \$8,058.50; 2, \$7,023.50; 3, \$6,583; 4, \$7,476 5, \$8,626.

Schedule 6.

Item 21. Excavation, class 1—Bid 1, 35c; 2, 32c; 6, 28c; 7, 30c.

Item 22. Excavation, class 2—Bid 1, 50c; 2, 45c; 6, 28c; 7, 60c.

Item 23. Excavation, class 3—Bid 1, 50c; 2, \$1; 6, 28c; 7, \$1.50.

Item 24. Back fill—Bid 1, 30c; 2, 30c; 7, 12c; 8, 25c.

Item 25. Puddling—Bid 1, 10c; 2, 75c; 3, 50c; 4, 75c.

Item 26. Concrete—Bid 1, \$8; 2, \$10.50; 6, \$9.40; 7, \$13.20.

Item 27. Placing reinforcing steel—Bid 1, 1c; 2, 1c; 6, 1.5c; 7, 1.4c.

Item 28. Placing structural steel—Bid 1, 2.5c; 2, 5c; 6, 4c; 7, 1.26c.

Item 29. Grouted paving—Bid 1, 12c; 2, 30c; 3, 20c; 4, 25c.

Total, schedule 6—Bid 1, \$19,687.60; 2, \$26,979.50; 6, \$23,064.50; 7, \$29,229.

Schedule 7.

Item 31. Excavation, class 1—Bid 1, 40c; 2, 32c; 6, 28c.

Item 32. Excavation, class 2—Bid 1, 50c; 2, 45c; 6, 28c.

Item 33. Excavation, class 3—Bid 1, 50c; 2, \$1; 6, 28c.

Item 34. Back fill—Bid 1, 30c; 2, 30c; 6, 12c.

Item 35. Puddling—Bid 1, 12c; 2, 75c; 6, 50c.

Item 36. Concrete—Bid 1, \$8; 2, \$12.50; 6, \$11.

Item 37. Placing reinforcing steel—Bid 1, 1c; 2, 2c; 6, 1.5c.

Item 38. Erecting gates and other metal work—Bid 1, 2c; 2, 5c; 6, 4c.

Item 39. Grouted paving—Bid 1, \$1; 2, \$2.50; 6, \$2.25.

Item 40. Laying 12-inch vitrified pipe—Bid 1, 75c; 2, 70c; 6, 50c.

Item 41. Manufacture and laying 18-inch concrete—Bid 1, \$1.60; 2, \$1.10; 6, \$1.50.

Item 42. Do, 20-inch—Bid 1, \$2; 2, \$1.25; 6, \$1.75.

Item 43. Do, 24-inch—Bid 1, \$2.50; 2, \$1.50; 6, \$2.

Item 44. Laying 18-inch and 20-inch corrugated metal pipe—Bid 1, 50c; 2, 45c; 6, 25c.

Item 45. Laying 30-inch corrugated metal pipe—Bid 1, 60c; 2, 60c; 6, 35c.

Item 46. Do, 36-inch—Bid 1, 50c; 2, 75c; 6, 40.

Item 47. Laying 42-inch do—Bid 1, \$1; 2, 90c; 6, 50c.

Item 48. Erecting lumber—Bid 1, \$10; 2, \$18; 6, \$30.

Total, schedule 7—Bid 1, \$13,952.30; 2, \$18,073; 6, \$15,742.40.

Schedule 8.

Item 49. Excavating, class 1—Bid 1, 55c; 2, 32c; 6, 28c.

Item 50. Excavation, class 2—Bid 1, 50c; 2, 45c; 6, 28c.

Item 51. Excavation, class 3—Bid 1, 50c; 2, \$1; 6, 28c.

Item 52. Back fill—Bid 1, 35c; 2, 30c; 6, 12c.

Item 53. Puddling—Bid 1, 10c; 2, 75c; 6, 50c.

Item 54. Concrete—Bid 1, \$8, 2, \$12.50; 6, \$11.

Item 55. Placing reinforcing steel—Bid 1, 1c; 2, 2c; 6, 1.5c.

Item 56. Erecting gates and other metal work—Bid 1, 2c; 2, 6c; 6, 4c.

Item 57. Grouted paving—Bid 1, \$1; 2, \$2.50; 6, \$2.25.

Item 58. Laying 12-inch vitrified pipe—Bid 1, 75c; 2, 70c; 6, 50c.

Item 59. Manufacturing and laying 18-inch concrete pipe—Bid 1, \$1.60; 2, \$1.10; 6, \$1.50.

Item 60. Do, 20-inch—Bid 1, \$2; 2, \$1.25; 6, \$1.75.

Item 61. 24-inch do—Bid 1, \$2.30; 2, \$1.50; 6, \$2.

Item 62. Laying 18 and 20 inch corrugated metal pipe—Bid 1, 50c; 2, 45c; 6, 25c.

Item 63. Laying 24-inch corrugated metal pipe—Bid 1, 60c; 2, 50c; 6, 30c.

Item 64. 30-inch do—Bid 1, 60c; 2, 60c; 3, 35c.

Item 65. 36-inch do—Bid 1, 80c; 2, 75c; 6, 40c.

Item 66. 42-inch do—Bid 1, \$1; 2, 90c; 3, 50c.

Item 67. Erecting metal flumes, diameter 2 ft 7 ins—Bid 1, 40c; 2, 75c; 3, 50c.

Item 68. Do, 3 ft 2 ins—Bid 1, 40c; 2, 90c; 6, 60c.

Item 69. Do, 3 ft 10 ins—Bid 1, 50c; 2, \$1; 6, 75c.

Item 70. Laying 4-inch drain pipe—Bid 1, 10c; 2, 30c; 6, 15c.

Item 71. Erecting lumber—Bid 1, \$10; 2, \$18; 6, \$30.

Total, schedule 8—Bid 1, \$15,865.40; 2, \$20,559.80; 6, \$17,959.85.

Schedule 9.

Item 72. Excavation, class 1—Bid 1, 35c; 2, 32c; 6, 28c.

Item 73. Excavation, class 2—Bid 1, 50c; 2, 45c; 6, 28c.

Item 74. Excavation, class 3—Bid 1, 50c; 2, \$1; 6, 28c.

Item 75. Back fill—Bid 1, 30c; 2, 30c; 6, 12c.

Item 76. Puddling—Bid 1, 10c; 2, 75c; 6, 50c.

Item 77. Concrete—Bid 1, \$8; 2, \$12.50; 6, \$11.

Item 78. Placing reinforcing steel—Bid 1, 1c; 2, 1c; 6, 1.5c.

Item 79. Erecting gate and other metal work—Bid 1, 2c; 2, 5c; 6, 4c.

Item 80. Grouted paving—Bid 1, 90c; 2, \$2.50; 6, \$2.25.

Item 81. Manufacture and laying 18-inch concrete pipe—Bid 1, \$1.75; 2, 61.10; 6, \$1.50.

Item 82. Do, 20-inch—Bid 1, \$2; 2, \$1.25; 6, \$1.75.

Item 83. Do, 24-inch—Bid 1, \$2.25; 2, \$1.50; 6, \$2.

Item 84. Laying 18-inch and 20-inch corrugated metal pipe—Bid 1, 50c; 2, 45c; 6, 25c.

Item 85. Laying 24-inch corrugated metal pipe—Bid 1, 60c; 2, 50c; 6, 30c.

Item 86. Laying 30-inch do—Bid 1, 65c; 2, 60c; 6, 35c.

Item 87. Laying 36-inch do—Bid 1, 75c; 2, 75c; 6, 40c.

Item 88. Laying 42-inch do—Bid 1, \$1; 2, 90c; 6, 50c.

Item 89. Erecting lumber—Bid 1, \$10; 2, \$18; 6, \$30.

Total, schedule No. 9—Bid 1, \$16,471; 2, \$21,595; 6, \$19,028.60.

Schedule 10.

Item 90. Excavation, class 1—Bid 1, 35c; 2, 32c; 4, 34c; 6, 28c; 7, 35c; 8, 22.5c.

Item 91. Excavation, class 2—Bid 1, 50c; 2, 45c; 4, 40c; 6, 28c; 7, 70c; 8, 75c.

Item 92. Excavation, class 3—Bid 1, 50c; 2, \$1; 4, 80c; 6, 28c; 7, \$1.50; 8, \$1.25.

Item 93. Back fill—Bid 1, 40c; 2, 30c; 4, 45c; 6, 12c; 7, 25c; 8, 22.5c.

Item 94. Concrete—Bid 1, \$10; 2, \$12.50; 4, \$13.90; 6, \$10; 7, \$13; 8, \$10.

Item 95. Erecting lumber—Bid 1, \$10; 2, \$18; 4, \$11.85; 6, \$16; 7, \$11; 8, \$12.50.

Total, schedule 10—Bid 1, \$7,880; 2, \$10,002.50; 4, \$9,532.75; 6, \$8,207.60; 7, \$8,830; 8, \$7,517.50.

HALLS AND SOCIETY BUILDINGS

SAN FRANCISCO—Lodge hall alterations, 2 story, frame. Cost not stated. Architect, Albert Lapachet, 110 Sutter street, S. F. Owners, Knights of Columbus Hall Association. The architect has awarded the following contracts in connection with the alterations to the Knights of Columbus building on Golden Gate avenue near Pierce street: Painting to J. P. Murphy for \$1,250; plastering to Martin Carriek for \$263; bowling alleys to Brunswick-Balke-Clendell Co. Bids are now being taken for the mill work, hardwood floors and lighting fixtures.

LOS ANGELES, CAL.—County club, 1 story and base, frame, \$20,000. Architects, Edelman & Barnett, Black Bldg., L. A. Owners, Concordia Country Club. The building will be erected about seven miles out of the city and has been designed for living rooms as well as the usual club rooms. There will be a large banquet hall, ball rooms and office. Interior will be finished in pine with some hardwood. Hardwood floors will be used throughout. Plans provide for a central heating system and open fire places. Mantels will be of field stone. Exterior of the building will be covered with cement plaster and shingles. Plans are now being prepared.

HOSPITALS

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—Hospital group. The main building will be a four-story structure and will contain the administration offices, reception rooms, consulting rooms, dispensary, nurses quarters, etc. There will be two two-story wings to contain the operating rooms, wards and private rooms for patients. The tuberculosis ward, indigent quarters, and criminal ward buildings will be located at different points on the site. The entire group of buildings will accommodate about 246 patients. The style of architecture will be Spanish Renaissance. The main building will be of reinforced concrete construction with plastered exterior and clay tile roof. The other buildings will be of metal stud and metal lath and plaster construction with tile roofs. The equipment will be modern in every particular with hospital plumbing, elevators, steam heat, marble and tile work, etc. There will also be a number of residences and cottages for the superintendent, doctors and other members of the hospital staff. Plans are being prepared.

HOTELS.

SAN FRANCISCO—Hotel alterations, 2, 1 story class C construction. Cost not stated. Architect, William H. Armitage, 328 Montgomery street, S. F. Owners, Keane Estate. Two buildings belonging to this estate and located on the west side of Grant avenue between Washington and Jackson streets are to undergo extensive alterations. The work will include interior partitions, plastering, plumbing, electric work and painting. No exterior changes will be made. Plans are complete and figures are being taken.

IRRIGATION PROJECTS

LIME POINT, MARIN CO., CAL.—Substation, 1 story, reinforced concrete. Cost not stated. Engineer, Engineering Dept. Pacific Gas and Electric Co., S. F. Owners, Pacific Gas and Electric Co. Plans are complete and a contract will be let at once for a new substation which will be erected by the Pacific Gas and Electric Co. at what is known as the Lime Station in Marin County. The building will be 40 by 50 feet and will have steel frame, steel roof trusses and reinforced concrete walls and roof. The steel work is being done by the Western Iron Works.

Contracts Awarded

MODESTO, STANISLAUS CO., CAL.—Flume, reinforced concrete, \$60,602.95. Engineer, Chief Engineer, Modesto. Owners, Modesto Irrigation District. Contractor, Ernest Green, Modesto. Contract price, \$60,602.95.

WEST LINN, ORE.—Water system, \$60,000. Engineers, S. A. Cobb and H. A. Randes, West Linn. Owners, Town of West Linn. Contractors, Oregon Engineering & Construction Co. Contract price, \$60,000.

RAILROAD CONSTRUCTION AND EQUIPMENT

Contracts Awarded

RIVERTON TO CRANE CREEK, ORE.—Railroad construction, \$1,500,000. Engineer's name not given. Owners, Oregon-Easton Railroad Co. Portland. Contractors, Twohy Bros. Co., Railroad Bldg., Portland. Contract price, \$1,500,000.

SAN FRANCISCO — Municipal railroad equipment. Cost as follows. Engineer, City Engineer, City Hall. Owners, City and County of San Francisco. Contractors, Pacific Car Equipment Co., work car, \$3,250; Westinghouse Electric Co., motor equipment for same, \$2,343, and J. G. Brill, car trucks for same, \$985.

SAN FRANCISCO—Car barn additions, reinforced concrete, \$27,947. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractor, James McLaughlin, 24 Kearny street, S. F. Contract price, \$27,947.

RESIDENCES.

SAN FRANCISCO—Residences, 3, 2 story and base, frame. Cost not stated. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, H. P. Livermore. These houses will be erected on Vallejo street near Jones, and each has been designed to contain

seven rooms and bath. Interiors will be finished in pine with some hardwood veneer and white enamel. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Bath rooms will be finished in tile. Automatic water heaters are specified. Tile wainscot will be used in the bath rooms. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

SAN FRANCISCO—Residence alterations, frame, \$2,500. Architect, none. Owner, Charles Hills, 297 Edgewood, S. F. This work will consist of moving the building to the front of the lot, adding two rooms, making the dwelling a six-room house with bath. There will be new interior finish, plastering, painting, plumbing and electric work. Some hardwood floors will be used. Exterior will be repainted. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, Carl Menzel, 850 15th avenue, S. F. The dwelling will be erected on the east side of 15th avenue north of Fulton, and has been designed to contain six rooms and bath. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living room, dining room and reception hall. There will be a large open fire place in the living room. Mantel will be of tile or brick. Tile wainscot and floor will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and shingles. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$5,500. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owners, Allen Bros. The dwelling has been designed for an eight-room house with two baths and two sleeping porches, and will be erected in Inndor Terrace. Interior will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used throughout. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot and will be equipped with showers. Automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. A separate garage will also be erected on the property. Plans are being prepared and when complete the work will be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owner, Mr. Blair. The dwelling will be erected at the corner of Uplands and El Camino Real, and has been designed for an eight-room house with bath and sleeping porch. Interior will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic

water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, William F. Neary, 1723 Telegraph avenue, Oakland. The dwelling will be erected at the corner of South Court and Walk streets, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the living room, dining room and reception hall. There will be open fire places and tile mantels. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$7,000. Architect, Sidney B. Newson, Nevada Bank Bldg., S. F. Owner, Sidney B. Newson. The dwelling will be erected in Crocker Highlands, and has been designed for an eight-room house with two baths and sleeping porch. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. A hot water circulating system will be installed. Bath rooms will have tile floors and wainscot. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are now being revised, and new figures will be called for shortly.

OAKLAND, CAL. — Residences, a, 2 story and base, frame, \$4,500 each. Architect, none. Owner, C. M. MacGregor, 470 13th street, Oakland. These dwellings will be erected on the north side of Mandana Boulevard west of Paloma, and each has been designed to contain eight rooms, bath and sleeping porch. Interior finish will be of pine, hardwood and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be furnace heat and open fire places. Mantels will be of tile and brick. Tile wainscot and floors will be used in the bath rooms. Plans provide for automatic water heaters. Exteriors will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN LORENZO, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$4,000. Architects, Mau & Sprague, MacDonough Bldg., Oakland. Owner, J. P. Marlin. The dwelling will contain eight rooms and bath. Interiors will be finished in pine and redwood with some elm panels. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire place. Mantel will be of tile or brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

YOUNTVILLE, NAPA CO., CAL.—Residence, 2 story and base, frame, \$16,000. Architect, Sidney B. Newsom, Nevada Bank Bldg., S. F. Owner, Bertran E. Nixon. The dwelling has been designed to contain fifteen rooms, three baths and sleeping porches. A separate garage and summer house will also be erected on the grounds. Interior of the dwelling will be finished in pine and hardwood. Walls will be covered with painted canvas. Hardwood floors will be used in the principal rooms. There will be a vapor system of steam heat with wood burning furnace. Bath rooms will be finished in tile and equipped with showers. A hot water circulating system will be installed. Vacuum cleaning is specified. The grounds have been laid out in formal gardens and will contain a large lily pond. Exterior of the house will be covered with cement plaster on metal lath, brick and filed stone. Plans are complete and figures are being taken.

HURLINGAME, SAN MATEO CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, Carl Geilfuss, 46 Kearny street, S. F. Owner's name withheld. The dwelling will contain eight rooms, bath and sleeping porch. A separate garage will also be erected on the property. Interior of the house will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used throughout. There will be furnace heat and open fire places. Mantels will be of tile and marble. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

SAN FRANCISCO—Residence, 1 story and base, frame, \$3,000. Architect, Parkside Home Builders, Crocker Bldg., S. F. Owner, Oscar E. Middlestadt. The dwelling has been designed for a seven-room house and will be erected on 21st avenue south of Ulloa. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. There will be open fire places and tile mantel. An automatic water heater will be installed. Bath room will have tile wainscot and floor. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,800. Architect, none. Owner, B. J. Hooper, 766 5th avenue, S. F. The dwelling has been designed for a seven-room house with bath and sleeping porch, and will be erected on the east side of 17th avenue south of Geary street. Interior will be finished in pine with some hardwood veneer. Hardwood floors will be used in the living room, dining room and reception hall. Bath room will be finished in tile. Plans provide for furnace heat and open fire place. Mantel will be of tile or brick. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

Contracts Awarded.

SEATTLE, WASH. — Residence, 2 story and base, frame and stucco, \$30,-

000. Architects, Somerville & Putnam, White Bldg., Seattle. Owner, Dr. A. L. Bouffleur. Contractor, M. Arveson, Downs Bldg., Seattle. Contract price, \$30,000.

SCHOOLS.

SAN FRANCISCO—School, 3 story and base, brick and steel, \$100,000. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, Cogswell School. The building will be erected at the corner of 26th and Folsom streets and will be a fireproof structure. Interior has been designed for a number of class rooms, auditorium and library. The trim will be of pine and hardwood. Maple floors will be used in the class rooms. Plans provide for steam heat, an oil burning system and hot water supply. Vacuum cleaning is also specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures are now being taken for the structural steel work. Other parts of the work will be figured later.

MODESTO, STANISLAUS CO., CAL.—School, 1 story frame. Cost not stated. Architect, E. H. Zion, Masonic Bldg., Modesto. Owners, Town of Modesto. The building will contain four class rooms. Interior will be finished in pine. There will be modern school plumbing. Exterior will be covered with shiplap. Plans are complete and figures are being taken. Bids will be opened on August 6th. Plans and specifications can be secured from the architect.

GALT, SACRAMENTO CO., CAL.—School, 1 story, hollow tile construction, \$15,610. Architect, Clarence C. Cuff, Ochsner Bldg., Sacramento. Owners, Galt School District. Contractors, E. E. Etherton & Co., Monadnock Bldg., S. F. The contractors are now taking sub-figures on all parts of the work except the concrete and carpentry.

CITRUS GROVE, FRESNO CO., CAL.—School, 1 story, frame. Cost not stated. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owners, Citrus Grove School District. The building will contain four class rooms and an assembly hall. Interior will be finished in pine with some maple floors. Exterior will be covered with cement plaster on metal lath. Plans are complete and bids are being taken. Figures will be opened on August 7th. Plans and specifications can be secured from the architect.

Contracts Awarded

GALT, SACRAMENTO CO., CAL.—School, 1 story and base, hollow tile, \$11,110. Architect, Clarence C. Cuff, Ochsner Bldg., Sacramento. Owners, City of Galt. Contractor, E. E. Etherton, Monadnock Bldg., S. F. Contract price, \$14,410.

SACRAMENTO, CAL.—School auditorium, 2, 1 story, frame, \$8,200 and \$2,000. Architect, none. Owners, City of Sacramento. Contractor, W. J. Mathews, City Hall, Sacramento. Contract price, Marshall School addition, \$9,200; Lincoln School addition, \$2,700.

HARMY SCHOOL DISTRICT, SUTTER CO., CAL.—School alterations and additions, \$2,700. Architect, none. Owners, Barry School District. Contractors, Gould Bros., Yuba City. Contract price, \$2,700.

OREGON CITY, ORE.—School, 2 story and base, brick and concrete, \$15,362.

Architects, Vonderahle & Forbes, Oregon City. Owners, Oregon City. Contractors, Stohinger Bros., 626 7th street, Portland. Contract price, \$15,362.

PORTLAND, ORE.—Sunday school, 2 story and base, brick and steel, \$20,000. Architects, Tourtellotte & Hummell, Rothchild Bldg., Portland. Owners, First Methodist Church. Contractor, E. B. White, Lumber Exchange Bldg., Portland. Contract price, \$20,000. This contract does not include the plumbing, heating, electric work, painting sheet metal work or roofing.

SEWERS, STREET WORK & WATER SYSTEMS.

SACRAMENTO, CAL.—Highway construction. Cost not stated. Engineer, State Highway Commission Forum Bldg., Sacramento. Owners, State of California. Bids were opened at the last meeting of the State Highway Commission for constructing highways in five counties. A complete list of these bids will be found under the heading of San Francisco in this issue.

SAN LEANDRO, ALAMEDA CO., CAL.—Street paving, grading and curbs. Cost not stated. Engineer, City Engineer, San Leandro. Owners, City of San Leandro. Bids for a large amount of street work are now being received by the Board of Trustees. Bids on the work close August 16th between 8 and 9 p. m. The following streets will be improved: Hays, San Miguel and Santa Rosa streets, between Callan and Estudillo avenue; San Rafael street from Estudillo to Juana avenue; San Leandro street from Joaquin to Juana avenues; Juana avenue from Santa Clara street to Grand avenue. The improvement will consist of construction of sidewalks, grading, paving, curbing and macadamizing, construction of cast iron and concrete culverts, etc. Plans together will full information regarding the work may be had from the City Engineer.

SAN JOSE, SANTA CLARA CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The County Supervisors have instructed the County Surveyor to prepare plans and specifications for the improvement of Stevens Creek road from San Jose to Meridian Corners, and Saratoga avenue from Meridian Corners to Saratoga. Plans were also ordered for improving the following roads: Saratoga avenue from Santa Clara to Meridian Corners and Stevens Creek road from Meridian Corners to Saratoga and Mountain View road from San Francisco road to the town of Los Gatos; Alum Rock avenue from San Jose to Alum Rock Park; also Congress Springs and Summit road. On completion of plans bids will be called for.

STOCKTON, SAN JOAQUIN CO., CAL.—Street improvements. Cost as follows. Engineer, City Engineer, Stockton. Owners, City of Stockton. Bids received for the improvement of Weber and Miner avenues, Market, Commerce, Sonora, Church, Washington, Sutter and San Joaquin streets, are as follows: Eaton & Smith, 407 11th street, S. F., \$4,556.70; Federal Construction Co., Sharon Bldg., S. F., \$98,007.55; Clark & Henery, Ochsner Bldg., Sacramento, \$99,003.93. All bids were taken under advisement. An award will prob-

ably be made at the next meeting.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewers and street improvements. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has adopted plans and specifications and has ordered bids called for the construction of storm sewers in parts of Maple, Elm, North Commerce, North Center and North El Dorado streets. Plans for the work may be secured from the City Engineer at Stockton. The Council also adopted a resolution of intention for the improvement of East street between Park and Poplar, to consist of asphalt concrete paving and concrete curbs and gutters.

BAKERSFIELD, KERN CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Plans are complete and figures are now being taken for the construction of Division 10, Section 4, of the Bakersfield-Mojave road. The work consists of constructing about 6 1/4 miles of road, grading, culverts and concrete pavement. Bids will be opened on August 9th. Plans and specifications can be secured from the County Highway Commission, Bakersfield.

MAITINEZ, CONTRA COSTA CO., CAL.—Boulevard construction, \$38,665. Engineer, County Surveyor E. E. Arnold, Martinez. Owners, Contra Costa County. The Board of Supervisors has decided to call for bids for the construction of the first unit of the boulevard system to run through Contra Costa County. The first strip will extend for a distance of about three miles, ending about 150 feet below the bridge over San Pablo Creek. The construction of this road will cost about \$12,000 a mile, according to County Engineer E. E. Arnold, the amount of the first contract being approximately \$38,665. Plans call for concrete road with macadam shoulder on each side, making a road about 22 feet wide.

PITTSBURG, CONTRA COSTA CO., CAL.—Septic tank, \$800. Engineer, W. H. Castner, Pittsburg. Owners, Town of Pittsburg. All bids received by the Town Board for the septic tank have been rejected as they were higher than the estimate of W. H. Castner, designer of the system, which was \$800, while the lowest bid received was that of S. E. Withers at \$1,250.

RICHMOND, CONTRA COSTA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. City Engineer Chapman has recommended to the City Council the improvement of First, Third and Fourth streets between Chanslor avenue and the Santa Fe right-of-way.

NAPA, NAPA CO., CAL.—Street improvements. Cost not stated. Engineer, Town Engineer, Napa. Owners, Town of Napa. All bids received by the City Council for the improvement of First street have been rejected and new bids have been ordered called.

RICHMOND, CONTRA COSTA CO., CAL.—Street improvement, \$8,000. Engineer, City Engineer, Richmond. Owners, City of Richmond. Ten bids were received by the Council for the improvement of Laurel avenue in the Stege District. Galbraith & Jones, 156 14th street, Richmond, it is thought, sub-

mitted the lowest bid at approximately \$8,000.

Contracts Awarded

SAN JOSE, SANTA CLARA CO., CAL.—Road improvement. Costs as follows. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, Ransome-Crummey Co., First National Bank Bldg., Oakland. Improvement of Tully, White and San Felipe roads, \$31,854.05. John W. McDonald, Jr., San Jose. Improvement of Ford road, Fontanso and Phelan avenues, \$14,887.

OROVILLE, BUTTE CO., CAL.—Street paving, \$15,700. Engineer, City Engineer, Oroville. Owners, City of Oroville. Contractors, Clark-Henery Co., Ochsner Bldg., Sacramento, \$15,700.

ANAHEIM, ORANGE CO., CAL.—Street paving, \$10,606.01. Engineer, County Surveyor, Santa Ana. Owners, Orange County. Contractor, Oscar Ford, Riverside. Contract price, \$10,606.01.

SEALED PROPOSALS

PROPOSALS FOR RECLAMATION WORK.

RECLAMATION WORK—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service at St. Ignatius, Mont., until 3 o'clock p. m. August 18, 1915, for the construction of laterals, sublaterals and appurtenant structures on the Flathead project, involving about 32,900 cubic yards of excavation, 560 cubic yards of concrete, 3,500 square yards of paving, the placing of about 33,500 pounds of reinforcing steel and 74,000 feet, b. m., of lumber and the manufacturing and laying of about 1,000 linear feet of concrete pipe. The work is situated on the east side of the Flathead River, from 10 to 18 miles southwest of Polson and 9 to 16 miles northwest of Ronan, Mont. For particulars address the United States Reclamation Service, Washington, D. C.; Denver, Colo., or St. Ignatius, Mont. A. P. DAVIS, chief engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 956—Office of the General Purchasing Office, Panama Canal, Washington, D. C.—Sealed proposals will be received here until August 19, 1915, under circular 956 for furnishing the following: 50 brackets, brake shaft; 2,000 feet trolley wire, 20 reams Manila paper, 40 cast iron posts, 1,200 feet vulcanized rubber strips, 800 spring plates, 12 machinists' vices, 50 lengths corrugated tender hose, 3 lengths steel rails, 108 hand saws, 2 water gauges, 500 handles, 72 hatchets, 24 vises, 288 wheels for Barnes pipe cutters, 12 air whistles, 144 blacksmiths' anvils, 144 blacksmiths' chisels, 3,600 hacksaw blades, 24 breast drills, 72 saw frames, 12 buckets for ladder dredge and 24 manganese steel lips, 300,000 feet ceiling, 275,000 feet flooring, 200 feet siding, 2,200,000 feet service and rough lumber; also a quantity of files, bits, augers, cape and machine chisels, monkey, and Stilson wrenches, machinists' hand taps, pipe cutters, drills, dies, claw, machinists' and sledge hammers, stocks and dies and condulets. For further information address F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR SUBMARINES.

SUBMARINES—The date for the opening of proposals for building submarine boats Nos. 62-77, as fixed by the department's advertisement of May 20, 1915, is hereby changed from August 2 to September 29, 1915. JOSEPH PHUS DANIELS, Secretary of the Navy.

PROPOSALS FOR WHARF.

WHARF—Sealed proposals indorsed "Proposals for Extensions of Wharf" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. August 21, 1915, and then and there publicly opened, for extension of wharf at the naval training station, San Francisco, Cal. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval training station named. H. R. STANFORD, chief of bureau.

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION.

NOTICE TO CONTRACTORS.

Sealed proposals will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, California, until 2 o'clock p. m. on August 25, 1915, at which time they will be publicly opened and read, for construction in accordance with the specifications therefor, to which special reference is made, portions of state highway as follows:

Siskiyou County across the Sacramento River near Dunsmuir (II-Sis-3-A), a reinforced concrete bridge about 532 feet long with one arch of 180 feet clear span and two arches of about 114 feet clear span.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers are located at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the state.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
AUSTIN B. FLETCHER,
Highway Engineer.
WILSON R. ELLIS, Secretary.

NOTICE TO CONTRACTORS.

OFFICE OF THE BOARD OF STATE Harbor Commissioners, Union Depot and Ferry House, San Francisco, Cal., July 30, 1915.

Sealed proposals or bids will be received at this office at or prior to 11 o'clock a. m. on Thursday, August 12th, 1915, for furnishing materials and constructing Pier No. 22 and shed over same, on the waterfront of the City and County of San Francisco, in accordance with the plans and specifications prepared therefor by the Assistant State Engineer and adopted by the Board July 5, 1915, and on file in this office to which special reference is hereby made.

The materials to be used in this work shall consist of the requisite quantities of Portland cement and piles which will be furnished to the contractor by the Board; merchantable yellow fir lumber, redwood lumber, cedar lumber, sand, reinforcing materials, metal lath, castings, structural steel, rods, bolts, spikes, nails and fastenings, bituminous concrete paving, roofing and painters' materials, glass, window frames, etc. All materials used must be of the best of their respective kinds, if not specified herein. All materials used in these structures will be subjected to a rigid examination and test, and, if found defective, under size, unsuitable or not as specified, will be condemned and must be

immediately removed from the work by the contractor at his expense.

No bid will be received unless it is made on a blank form furnished from this office. Each bid shall be accompanied by a certified check for an amount equal to five (5) per cent of the amount of the proposal, to be made payable to the order of the Secretary of the Board, conditioned that if the proposal is accepted and the contract awarded, and if the bidder shall fail or refuse to execute a contract, and give the bond required within six days after the award is made, in that case said sum mentioned in said check shall be deemed liquidated damages for such failure and neglect and shall be paid into the San Francisco Harbor Improvement Fund.

The bond required to be not less than one-half of the amount of the bid, with two or more sureties to be approved by the Board of State Harbor Commissioners, and conditioned for the faithful performance by the contractor of all the terms and conditions of said contract according to the true intent and meaning thereof and to the satisfaction of said Board; and said bond shall also be effective as provided in the approved May 1, 1911, for the protection of material men, mechanics and laborers.

Bids will not be considered by this Board unless delivered to the Secretary or to the Assistant NEWMAN at the office of the Secretary, Room 17, Union Depot and Ferry House, at or prior to 11 o'clock a. m. on Thursday, August 12, 1915, at which time and place the bid will be opened.

The Board reserves the right to reject any or all bids if deemed for the best interests of the State.

Bidders are invited to be present at the opening of the bids. Plans and specifications for this work to be had at Room 18, Union Depot and Ferry House upon depositing \$2000 for same, which will be returned on return of plans and specifications.

Bidders are requested to mark envelope containing bid, "Bid for Pier No. 22."

J. J. DWYER,
THOMAS S. WILLIAMS,
J. H. MCCALLUM,
Board of State Harbor Commissioners.
JEROME NEWMAN,
Assistant State Engineer.
LEO V. MERLE, JR.,
Secretary.

PROPOSALS FOR WHARF CONSTRUCTION.

WHARF—Sealed proposals indorsed "Proposals for Reinforced Concrete Wharf" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 18, 1915, and then and there publicly opened, for constructing a reinforced concrete wharf at the United States naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR CONCRETE PIERS.

CONCRETE PIERS—Sealed proposals indorsed "Proposals for Torpedo Boat Piers" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 18, 1915, and then and there publicly opened, for constructing reinforced concrete torpedo boat piers at the naval station Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR RAILROAD.

MARINE RAILWAY—Sealed proposals indorsed "Proposals for Marine Railway," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 18, 1915, and then and there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be ob-

tained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR DREDGING.

DREDGING.—Sealed proposals, indorsed "Proposals for Dredging," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. August 14, 1915, and then there publicly opened, for dredging at the navy yard, Puget Sound, Wash. Amount available, \$15,000. Plan and specification may be obtained on application to the bureau of yards and docks, Navy Department, Washington, D. C., or to the commandant of the navy yard, Bremerton, Wash. H. R. STANFORD, chief of bureau.

PROPOSAL FOR BIDS.

SEALED BIDS will be received at the Office of the Comptroller of the University of California, Berkeley, California, at or before 11 A. M. August 9, 1915, for the Excavation and Concrete, Structural Steel, Steel Erection, Roofing and Sheet Metal, Lathing and Plastering, Marble and Terrazzo, Carpentry and Interior Finish, Plumbing, Ornamental Metal, Elevator and Acoustic Felt for Benjamin Ide Wheeler Hall on the grounds of the University of California, Berkeley, as per plans and specifications on file and obtainable after 9 A. M., Saturday, July 17th, at the Cashier's window in said Office. A deposit of \$5.00 will be required for each set of plans and specifications, which deposit will be refunded upon return of said plans and specifications, provided such return is made prior to 12 o'clock, noon, August 10, 1915; no refunds will be made after said date. The time of completion of the work will be an important element in the consideration of bids. No bids will be received unless accompanied by a certified check or bond in favor of the undersigned, equal to 10% of the bid, to secure execution of the contract by the successful bidder. The right is reserved to reject any or all bids. **THE REGENTS OF THE UNIVERSITY OF CALIFORNIA.** (*)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, noon, Tuesday, August 10, 1915, said bids then and there to be publicly opened and read for furnishing all plant, material and labor, and doing the work required for the complete construction of the Main Sewer for the Fresno State Normal School, Fresno, California. In accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California, in good condition. Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, or bond, or a certified check, in the sum of ten per centum (10%) of the amount of the bid must accompany each bid. A deposit of Five (\$5.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition. The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received. All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Main Sewer, Fresno State Normal School, Fresno, California." (SIGNED) W. F. McCLURE, State Engineer. (*)

PROPOSALS FOR BUILDING.

BUILDING.—Sealed proposals indorsed "Proposals for Officers' Quarters" will be received at the bureau of

yards and docks, Navy Department, until 11 o'clock a. m. August 21, 1915, and then there publicly opened for 4 one-story officers' quarters of wooden construction at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR BUILDING.

BUILDING, ETC.—Treasury Department, Supervising Architect's Office, Washington, D. C.—Sealed proposals will be opened in this office at 3 p. m. August 24, 1915, for the construction, complete (including mechanical equipment and approaches) of the United States post office at Grand Junction, Colo. Drawings and specifications may be obtained from the custodian of site at Grand Junction, Colo., or at this office, at the discretion of the supervising architect. JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR EXCAVATION.

EXCAVATION.—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Malta, Mont., until 2 o'clock p. m. August 12, 1915, for about 355,000 cubic yards of canal excavation. This work is located from three to ten miles from Saco, Mont., on the Great Northern Railway. For particulars address the United States Reclamation Service, Washington, D. C., Denver, Colo., or Malta, Mont. MORRIS BIEN, acting director.

TOWER OF BABEL.

Its Remains Are Relieved to Stand Near Babylon's Ruins.

It is doubtful if there is any place in the world so rich in ancient remains as the valley of the Euphrates, in Mesopotamia. The result is that to archaeologists and scholars the place is a veritable "Tom Tiddler's ground," and new "finds" are constantly being reported.

When it is remembered that tradition places the site of the Garden of Eden here, while among its many ruins are those of ancient Babylon, the promising nature of the valley to the scientific excavator becomes apparent.

It is near the ruins of Babylon that we find what many scholars believe to be the remains of the Tower of Babel—an immense cube of brickwork, called by the natives Birs Nimrud.

Recent exhaustive examination of the strange pile and its site has revealed the fact that the tower that once stood here consisted of seven stages of brickwork on an earthen platform, each being of a different color.

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The tower boasted of a base measurement of nearly 600 square feet and rose to an unknown height. Even today the ruins rise some 160 feet above the level of the surrounding plain.—Wide World Magazine.

REINFORCED CONCRETE WORK IN EGYPT.

A remarkable piece of reinforced concrete work is the jetty at the port of Alexandria, Egypt. The entire construction has a total length of 330 feet, and is made up of a series of caissons in reinforced concrete which are floated into place in the sea. Such caissons are 5 in number and measure 66 feet long by 26 feet wide and 20 to 22 feet high, and are built on the Hennebique system. Caissons are let down a slipway into the water, and one or more steam tugs serve to tow them into place, where they are let down on the prepared bed of the sea. Concerning recent work in Egypt we may also mention an embankment wall on the Nile at Ghiesreh which was very successfully carried out—Portland Cement.

Notwithstanding the great improvement in farm implements and methods of agriculture in the western hemisphere, there are still sections of China in which the primitive methods of hundreds of years ago are still employed. In plowing two men with ropes over their right shoulders and going tandem haul a very crude affair that turns a furrow six inches wide. In plowing an acre they travel fifteen miles. As each furrow is opened the seed is scattered, the next furrow covers it.



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LODGE HALL ALTERATIONS — 2
story, frame. Cost not stated. San Francisco Architect, Albert Lapachet, 110 Sutter street, S. F. Owners, Knights of Columbus Hall Association. The architect has awarded the following contracts in connection with the alteration to the Knights of Columbus building on Golden Gate avenue near Pierce street: Painting to J. F. Murphy for \$1,250; plastering to Martin Carrick for

\$255; bowling alleys to Brunswick-Balke-Collender Co. Bids are now being taken for the mill work, hardwood floors and lighting fixtures.

HOTEL ALTERATIONS—2, 1 story class C construction. Cost not stated. San Francisco. Architect, William H. Arncliffe, 223 Montgomery street, S. F. Owners, Keane Estate. Two buildings belonging to this estate and located on the west side of Grant avenue between Washington and Jackson are to undergo extensive alterations. The work will include interior partitions, plastering, electric work and painting. No exterior changes will be made. Plans are complete and figures are being taken.

SCHOOL—3 story and base, brick and steel, \$100,000. San Francisco. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, Cogswell School. The building will be erected at the corner of 26th and Folsom streets and will be a fireproof structure. Interior has been designed for a number of class rooms, auditorium and library. The trim will be of pine and hardwood. Maple floors will be used in the class rooms. Plans provide for steam heat, an oil burning system and hot water supply. Vacuum cleaning is also specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures are now being taken for the structural steel work. Other parts of the work will be figured later.

RESIDENCE—2 story and base, frame, \$3,800. San Francisco. Architect, none. Owner, E. J. Hooper, 766 5th avenue, S. F. The dwelling has been designed for a seven-room house with bath and sleeping porch, and will be erected on the east side of 17th avenue south of Geary street. Interior will be finished in pine with some hardwood veneer. Hardwood floors will be used in the living room, dining room and reception hall. Bath room will be finished in tile. Plans provide for furnace heat and open fire place. Mantel will be of tile or brick. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE—1 story and base, frame, \$3,000. San Francisco. Architect, Parkside Home Builders, Crocker Bldg., S. F. Owner, Oscar E. Middlestadt. The dwelling has been designed for a seven-room house and will be erected on 21st avenue south of Ulloa. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. There will be open fire places and tile mantel. An automatic water heater will be installed. Bath room will have tile wainscot and floor. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day labor.

APARTMENT HOUSE—4 story and base, reinforced concrete, \$35,000. San Francisco. Architects, Smith & Stewart, 244 Kearny street, S. F. Owners, Smith & Stewart. The building will be erected on the south side of O'Farrell street between Polk and Van Ness, having a frontage of 27½ feet and a

depth of 120 feet. There will be a total of 27 suites of two rooms each besides a large and attractive lobby, office and amusement room. Interior will be finished in pine, white enamel and mahogany. All suites will have private baths and wall beds. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance. Plans provide for steam heat, an automatic elevator, oil burning furnace, hot water supply and vacuum cleaning. Exterior has been designed in the Pueblo style and will be faced with cement plaster. Plans are being prepared.

FLATS—2 story and base, frame, \$3,000. San Francisco. Architect, Theo S. Boehm, 4419 19th street, S. F. Owner, F. J. Boehm, 4419 19th street, S. F. The building will be erected on the east side of 16th avenue north of Balboa, and has been designed to contain three modern flats of five and six rooms. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Tile wainscot will be used in the bath rooms. Each living room will have an open fire place and tile or brick mantel. Exterior will be covered with rustic and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor.

Contracts Awarded.

MUNICIPAL RAILROAD EQUIPMENT—Cost as follows. San Francisco. Engineer, City Engineer, City Hall, S. F. Owners, City and County of San Francisco. Contractors, Pacific Car Equipment Co. work car, \$3,250; Westinghouse Electric Co., motor equipment for same, \$2,343, and J. G. Brill, car trucks for same, \$985.

CAR BARN ADDITIONS—Reinforced concrete, \$27,947. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractor, James McLaughlin, 244 Kearny street, S. F. Contract price, \$27,947.

City Bids Opened.

Board of Works Received Figures For Addition to Municipal Car Barns And For Railroad Equipment.

At the Wednesday afternoon meeting of the Board of Public Works bids were opened for constructing the second story addition to the Municipal Car barns at Geary street, also for furnishing a work car for the Municipal Railways.

At the same meeting the Board of Public Works awarded the contract for the improvement of Irving street from 26th to 33rd avenues to J. McHugh for approximately \$11,000. Other awards made were to the United States Steel Products for Sec. A and D of the Municipal Railroad for track fastenings; to Eccles & Smith for Sec. B of the same contract and to the Track Specialties Co. for Sec. C.

A resolution, passed to print by the Board of Supervisors, was received by the Board of Works calling for the construction of sewers in El Portal

Way, between Kenningson and the Twin Peaks Tunnel Reservation. Bids will be called for as soon as the plans are approved by the Board of Works.

Following is a complete list of bids opened:

Addition to Geary Street Car Barn.

J. L. Leonard.....	28,222
West Bldg. & Eng. Co.....	29,938
Constr. & Eng. Co.....	26,935
James L. McLaughlin.....	26,747
D. Graham.....	30,698
H. L. Peterson.....	30,830
Neil A. McLean Co.....	26,876
N. E. Dawson.....	28,883

Furnishing Work Car.

Pacific Car & Equipment Co., \$3,250

Furnishing Trucks for Same.

J. G. Brill Co.....	\$985.00
Eccles & Smith.....	947.70

Furnishing Motor Control for Same.

Westinghouse Electric Co., \$2,343

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Amt.
2163	Schulby	Schulby	500
2164	Shell Co.....	Shell Co.....	2200
2165	Howelling	Howelling	2000
2166	S F & L A Rly.....	Brown	2800
2167	Hooper	Hooper	3200
2168	Guisti	Montani	4345
2169	Sudden	Scott Co.....	7397
2170	Moore	Hannah	6285
2171	Bertheau	Kincanon	6853
2172	Wssmann	Jones	6500
2173	Brooks	McGee	995
2174	Sawyer	Weber	2046
2175	Bowen	Malloch	2090
2176	Same	Schrader	1200
2177	Same	Hughes	2500
2178	Herscher	Judson	7150
2179	Same	Barrett	1950
2180	Mahler	Sharman	2850
2181	Gillies	Nelson	1210
2182	Towne	Fibrestone	4440
2183	Ward	Leiter	750
2184	Cohen	Hansen	2165
2185	Hermann	Fink	596
2186	Miller	Madden	5000
2187	Sudden	Butte	1200
2188	Brown	McMullin	1000
2189	Nurok	Nurok	400
2190	N Y & S F Amuse.....	Jensen	450
2191	Cohen	Steur	500
2192	Backman	Backman	1000
2193	Marlow	Hardy	400
2194	Heymann	Heymann	450
2195	Sparks	Sparks	500
2196	Williams	Williams	1000
2197	Vella	Vella	500
2198	Sawyer	Weber	1000
2199	Heminga	Heminga	2000
2200	Bills	Bills	600
2201	Heishberg	Qartono	400
2202	Constant	Bormardei	970
2210	N Y & S F Amuse.....	Jensen	10550
2211	Cantley	Montgomery	10500
2212	Carson	Evans	400
2213	Minnie	Sass	1200
2214	Fredlow	Bredlow	14955
2205	Pacific G & E Co.....	Arlert	5596
2206	Wipfler	Mangles	1650
2207	Cenbrano	Dolder	2750
2208	Cavanaugh	Christie	1153
2209	Western	Pires	

FOUNDATION

(2163) NO. 291 LILY AVE Concrete foundation.
Owner.....Richard Galhury, New Washington Hotel, S. F.
Architect.....None.
Contractor.....Chas. H. Schmidt, 291 Lily Ave., San Francisco.
COST, \$200

SUPPLY STATION

(2164) NE ELLIS AND VAN NESS Ave. One-story steel ant supply station.
Owner.....Shell Oil Co. of Cal., 343 Sansome, San Francisco.
Architect.....None.
Day's work.....COST, \$500

FRAME DWELLING

(2165) S PRAGUE 130 E Naylor. Two story and basement frame dwelling. Owner.....T. J. Howeling, 506 Chenery, San Francisco.
Architect....None.
Day's work COST, \$2200

ALTERATIONS

(2210) NO. 965 MARKET All work for alterations to procenium arch, Empress Theatre.
Owner.....New York and San Francisco Amusement Co.
Architect....J. R. Miller, Lick Bldg., San Francisco.
Contractor...G. P. W. Jensen, 320 Market, S. F.
Filed July 31, '15. Dated July 28, '15.
Completed and accepted.....75%
Usual 35 days.....25%
TOTAL COST, \$970
Bond, \$485. Sureties, Massachusetts Bonding and Insurance Co. Forfeit, none. Limit, fast as possible. Plans and specifications filed.

APARTMENTS

(2211) S SACRAMENTO, 98-9 W Jones W 30xS 97-6. All work for three-story and basement frame apartments.
Owner.....James Cantley, 1370 Green, San Francisco.
Architect....Edward E. Young, 251 Kearny, S. F.
Contractor...E. J. Montgomery, 1318 Broadway, S. F.
Filed July 31, '15. Dated July 30, '15.
Frame up and roof boards on.....\$1983.75
Brown coated 1983.75
Standing finish on 1983.75
Completed and accepted 1983.75
Usual 35 days 2645.00
TOTAL COST, \$10,550
Bond, \$5290. Sureties, Chas. Schlesinger and John H. Brickwedel. Forfeit, none. Limit, 60 days. Plans and specifications filed.

ALTERATIONS AND ADDITIONS

(2168) SE SCOTT AND LOMBARD S 100xE 27-6. All work for alterations and additions to one-story and basement frame building into three-story and basement frame apartments.
Owner.....G. Gulsti, Nevada Bank Bldg., San Francisco.
Architect...Wm. Mooser, Nevada Bk. Bldg., San Francisco.
Contractor..Montani & Stefanini, 1753 Greenwich, S. F.
Filed July 24, '15. Dated July 13, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$8300
Bond, \$4200. Sureties, N. Capurro and F. Boicetti. Limit, 80 days after notification. Forfeit, \$5. Plans and specifications filed.

RESIDENCE

(2169) N WASHINGTON 103 W Spruce N 127-3/4xW 62-6. Plumbing and heating work for two-story and basement concrete and wood residence.
Owner.....Margaret E. Sudden, 62 Jordan Ave., San Francisco
Architect...G. A. Applegate, Claus Spreckels Bldg., S. F.
Contractor..Scott Co., 243 Miuna, S. F.

Filed July 24, '15. Dated July 22, '15.
Install as work progresses.... 75%
Usual 35 days..... 25%
TOTAL COST, \$4345
Bond, none. Limit, rapidly as practicable. Forfeit, none. Plans and specifications filed.

FRAME UNDERTAKING PARLORS

(2170) SE SYCAMORE AVE AND Valencia 35x80. All work for two-story frame undertaking parlors.
Owner.....Moore Investment Co.
Architect....C. S. McNally, 57 Post, San Francisco.
Contractor..J. S. Hannah, Williams Bldg., San Francisco.
Filed July 26, '15. Dated July 23, '15.
Frame up\$1386.85
Enclosed 1386.85
Brown coated 1386.85
Completed and accepted..... 1386.85
Usual 35 days..... 1849.50
TOTAL COST, \$7397.00
Bond, \$3698.50. Sureties, J. D. Hannah and G. W. Cushing. Limit, 90 days. Forfeit, \$25. Plans and specifications filed.

ALTERATIONS

(2171) N VALLEJO 137-6 W Buchanan 35x137-6; No. 2132 Vallejo. All work for alterations and additions to make a two-story attic and basement frame flats.
Owner.....Anita Bertheau, 2132 Vallejo, San Francisco.
Architect...Chas. J. Rousseau, 46 Kearny, San Francisco.
Contractor..John G. Kincanon, 215 Montgomery, S. F.
Filed July 26, '15. Dated July 22, '15.
Ready for plastering.....\$550
Balance of payments as follows:
12 notes of \$123.75 each payable monthly, same to bear interest at 6% per annum.....
Deed to lot S Washington 106-3 E Steiner 25x127-8 1/4 at value of\$4250
TOTAL COST, \$6285
Bond, none. Limit, 90 days from July 28. Forfeit, none. Plans and specifications filed.

ADDITION

(2172) SE CLEMENT & TWENTY-fourth Ave S 100xE 30. Excavating, concrete, carpenter, mill, roofing and stair work, glazing, plastering, hardware for addition of two stories to a one-story building (flats and offices).
Owner.....Anna R. Wissmann, 24th Ave. and Clement, S. F.
Architect...H. Geiffuss & Son, 46 Kearny, San Francisco.
Contractor..Fred Jones, 110 Jessie, San Francisco.
Filed July 26, '15. Dated July 19, '15.
Frame up\$1034
Enclosed, roofed and partitions set 1034
Brown coated 1034
White coated and outside completed 1034
Completed and accepted..... 1034
Usual 35 days..... 1034
TOTAL COST, \$6895
Bond, \$3450. Sureties, Robt. H. Rusch and H. C. Bennett. Limit, 75 days from recording. Forfeit, \$10. Plans and specifications filed.

FRAME FLATS

(2173) W ELEVENTH AVE 275 N Fulton N 25xW 120. All work for two-story and basement frame flats.

Owner.....P. H. Brooks, 433 13th St., Oakland.
Architect....None.
Contractor..Moore & Watson, 212 Sharon Bldg., San Francisco.
Filed July 27, '15. Dated July 26, '15.
Rough frame up.....\$1275
Plastering completed 1200
Building completed 1200
Usual 35 days..... 1625
TOTAL COST, \$6500
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS AND ADDITIONS

(2174) W EIGHTEENTH AVE 125 N Judah. Excavating, concrete foundations, rat proofing, lumber, carpenter and mill work, inside stairs, plumbing, tinning, plastering painting and electrical work for alterations and additions to two-story frame residence.
Owner.....D. W. Sawyer, 1375 18th Ave., San Francisco.
Architect...Theo. W. Lenzen, Humboldt Bank Bldg., S. F.
Contractor..A. Weber and C. Shaw, 729 Andover, San Francisco.
Filed July 27, '15. Dated July 26, '15.
Foundations in place.....\$ 85
Frame of addition up, walls sheathed, roof on and steps up.. 258
Completed and accepted..... 373
Usual 35 days..... 249
TOTAL COST, \$995
Bond, none. Limit, 30 days from issuing permit. Forfeit, none. Plans and specifications filed.

CONCRETE WORK, ETC.

(2175) N POST 164-3 E Hyde 75-9x 137-6. Concrete, plumbing, carpenter, mill, hardware and glass for building.
Owner.....W. H. Bowen.
Architect....None.
Contractor..J. S. Malloch, 510 Page, San Francisco.
Filed July 27, '15. Dated July 12, '15.
30% completed\$511.50
75% completed 511.50
Completed and accepted..... 511.50
Usual 35 days..... 511.50
TOTAL COST, \$2046.00
Bond, none. Limit, 30 days from July 26. Forfeit, \$10. Plans and specifications, none.

(2176) STRUCTURAL STEEL, CONSISTING OF TRUSSES, COLUMNS BRACING, PURLINS, LINTELS, ETC., ON ABOVE.

Contractor..The Schrader Iron Works, 1247 Harrison, S. F.
Filed July 27, '15. Dated July 19, '15.
On completion\$1500
Usual 35 days..... 590
TOTAL COST, \$2090
Bond, none. Limit, 25 days from July 22. Forfeit, \$10. Plans and specifications, none.

STORE BUILDING

(2178) S GRARY 87-6 E Mason E 25x S 105. Furnishing and erecting all

structural steel for one-story and basement steel and frame store building.

Owner.....Mrs. Clara Herrscher, 429 Front, San Francisco.
Architect...Rousseau & Rousseau, 110 Sutter, San Francisco.

Contractor...Judson Mfg. Co., 819 Folsom, San Francisco.

Filed July 27, '15. Dated July 26, '15.
Completed and accepted..... 75%
Usual 35 days..... 25%

TOTAL COST, \$2300

Bond, \$1150. Surety, Hartford Accident & Indemnity Co. Limit, 40 days from July 26. Forfeit, \$15. Plans and specifications filed.

(2179) ALL WORK EXCEPT STRUCTURAL steel on above.

Contractor...Barrett & Hilp, Sharon Bldg., San Francisco.

Filed July 27, '15. Dated July 26, '15.

Lot excavated, all bulkheading executed, foundation walls and piers in place.....\$1200
Ceiling joists set and all reinforced concrete work filled up to that point 2250
Brown coated 1000
Completed and accepted..... 950
Usual 35 days..... 1720

TOTAL COST, \$7150

Bond, \$3575. Surety, Hartford Accident & Indemnity Co. Limit, 35 days after structural steel is set. Forfeit, \$15. Plans and specifications filed.

FRAME RESIDENCE

(2180) SW GALVEZ AVE (7th Ave)
150 NW Mendell (M) NW 25xSW 100.
All work for one and one-half-story frame residence.

Owner.....Louis Mahler.

Architect...None.

Contractor...T. L. Sharman, 1440 Shaft-er Ave., San Francisco.

Filed July 27, '15. Dated July 23, '15.

Concrete wall and frame completed\$487.50
Plastering completed 487.50
Completed and accepted..... 487.50
Usual 35 days..... 487.50

TOTAL COST, \$1950.00

Bond, \$375. Sureties, Leon J. Hermitta and J. E. Donoghue. Limit, 65 days from July 28. Forfeit, none. Plans and specifications filed.

FRAME BUILDING

(2181) E NOR 30 N 21st N 27xE 105 M B 108. All work for two-story frame building.

Owner.....John D. and Maria M. Gillies, 435 Hill, S. F.

Architect...Plans by Contractor.

Contractor...Emil Nelson.

Filed July 28, '15. Dated July 20, '15.

Rough frame up.....\$712.50
Brown coated 712.50
Completed 712.50
Usual 35 days..... 712.50

TOTAL COST, \$2850.00

Bond, none. Limit, 60 days. Forfeit, none. Plans and specifications filed.

APARTMENTS

(2182) S CALIFORNIA 137-6 W Taylor W 137-6X8 137-6. Terra cotta tile roof for five-story and basement apartment house.

Owner.....Towne Realty Co.

Architect...None.

Contractor...Pibrostone & Roofing Co., 971 Howard, San Francisco

Filed July 28, '15. Dated July 23, '15.

Completed and accepted.....\$905

Usual 35 days..... 305

TOTAL COST, \$1210

Bond, \$605. Surety, U. S. Fidelity & Guaranty Co. Limit, 40 days. Forfeit, \$20. Specifications only filed.

ADDITION

(2183) SE BUSH AND HYDE. Addition to Florence N. Ward Hospital.

Owner.....Dr. Florence N. Ward.

Bush and Hyde, S. F.

Architect...None.

Contractor...E. T. Leiter & Sons, Inc., 251 Post, San Francisco.

Filed July 29, '15. Dated July 1, '15.
Bet. 1st and 15th of each month. '75

Usual 35 days..... 25%

TOTAL COST, \$40,000

Bond, none. Limit, 100 days. Forfeit, none. Plans and specifications, none.

NOTE—Plans by Edgar A. Mathews, 251 Post, San Francisco.

FRAME FLATS

(2184) E PARKER AVE 150 N St. Roses Ave N 25xE 103-4. All work for two-story frame flats.

Owner.....Harry and Julia Cohen.

Architect...None.

Contractor...Martin Hansen.

Filed July 29, '15. Dated July 21, '15.

Frame up\$1000

Brown coated 1070

Completed and accepted..... 1070

Usual 35 days..... 1300

TOTAL COST, \$4446

Bond, \$1110. Surety, Edwin Peterson Limit, 70 days after July 26. Forfeit, \$5. Plans and specifications filed.

ALTERATIONS

(2185) NO. 685 COMMERCIAL, bet Kearny and Montgomery. All work for alterations to building.

Owner.....Hermann Estate.

Architect...August Headman, 74 Montgomery, San Francisco.

Contractor...The Fink & Schindler Co., 218 13th, San Francisco.

Filed July 29, '15. Dated July 27, '15.

Glass in show windows installed.....\$280

Completed and accepted..... 280

Usual 35 days..... 190

TOTAL COST, \$750

Bond, none. Limit, 30 days. Forfeit, \$5. Plans and specifications filed.

FRAME RESIDENCE

(2186) SW PALOU AVE 125 SE Newhall SE 25xSW 100. All work for one and one-half-story frame residence.

Owner.....Benj. H. Miller, 1125 Mendell, San Francisco.

Architect...None.

Contractor...Patrick H. Madden, 1527 Jerrold Ave., S. F.

Filed July 29, '15. Dated July 28, '15.

Frame up\$541.25

1st coat plaster on..... 541.25

Completed and accepted..... 541.25

Usual 35 days..... 541.25

TOTAL COST, \$2165.00

Bond, \$1100. Sureties, Thos. R. O'Day and Leo W. Hardy. Limit, 70 days. Forfeit, none. Plans and specifications filed.

ELECTRIC WORK

(2187) N WASHINGTON 103 W Spruce N 127-8½XW 62-6. Electrical work for residence.

Owner.....Margaret E. Sudden, 62 Jordan Ave., S. F.

Architect...G. A. Applegarth, Claus Spruckels Bldg., S. F.

Contractor...Butte Engineering Co., 683 Howard, S. F.

Filed July 29, '15. Dated July 22, '15.

On 1st of each month..... 75%

Usual 35 days..... 25%

TOTAL COST, \$596

Bond, none. Limit, as fast as possible. Forfeit, none. Plans and specifications filed.

DWELLING

(2188) LOT 16 BLK 29 Map Blks 27 to 34, Forest Hill Extension. All work for two-story and basement dwelling.

Owner.....Otto A. Brown, SW Stockton and California, S. F.

Architect...Rousseau & Rousseau, 110 Sutter, San Francisco.

Contractor...McMullin-Von Voorhies Co 110 Jessie, San Francisco.

Filed July 29, '15. Dated July 26, '15.
Completed and accepted.....\$5000

TOTAL COST, \$5000

Bond, \$2500. Surety, Pacific Coast Casualty Co. Limit, 70 days from receiving permit. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(2189) SW CALIFORNIA AND HELEN. Alter interior of store.

Owner.....J. Nurok, Premises.

Architect...Theo. W. Lenzen, Humboldt Bank Bldg., S. F.

Day's work. COST, \$1200

ALTERATION

(2190) NO. 965 MARKET. Enlarge width of arch.

Owner.....N. Y. & S. F. Amusement Co., Premises.

Architect...J. R. Miller, 213 Lick Bldg. San Francisco.

Contractor...G. P. W. Jensen, 320 Market, San Francisco.

COST, \$1000

REPAIRS

(2191) NO. 3324 TWENTIETH. Repair fire damage.

Owner.....F. Cohen, 1540 Willow, San Francisco.

Architect...None.

Contractor...Steur & Burg, 1465 O. Farrell, San Francisco.

COST, \$400

FRAME DWELLING

(2192) W CHENERY 288 S Roanoke. One and one-half-story and basement frame dwelling.

Owner.....Ernst Backman, 135 Diamond, San Francisco.

Architect...None.

Day's work. COST, \$1250

REPAIRS

(2193) N BROAD 422 E Orizaba. Repair exterior and interior of dwlg.

Owner.....Mary Marlow, 223 29th, San Francisco.

Architect...None.

Contractor...Mark Hardy, 65 Steuben, San Francisco.

COST, \$300

ADDITION

(2194) NO. 631-A HAIGHT. Add store and make alterations.

Owner.....Max Heymann, 46 Kearny, San Francisco.

Architect...H. Gelfuss & Son, 46 Kearny, San Francisco.

Day's work. COST, \$100

ALTERATIONS

(2195) NO. 223 VIENNA. Alter dwlg.
Owner.....W. E. Sparks, Premises.
Architect...None.
Contractor...Geo. L. Streshly, 111
Naples, San Francisco.
COST, \$450

DWELLING

(2196) E SILLMAN 90 S University.
One-story and basement frame dwlg.
Owner.....Noah Williams, 816 Sillman,
San Francisco.
Architect...None.
Day's work. COST, \$1000

FRAME DWELLING

(2197) N PALOU 275 W Quint. One-story and basement frame dwelling.
Owner.....Henri Vella, 1901 Palou,
San Francisco.
Architect...None.
Day's work. COST, \$500

ALTERATIONS

(2198) NO. 1375 EIGHTEENTH AVE.
General alterations and repairs for dwelling.

Owner.....D. W. Sawyer, Premises.
Architect...Theo. W. Lenzen, 709 Humboldt Bank Bldg., S. F.
Contractor...A. Webber, 218 Miramar Ave., San Francisco.
COST, \$1000

FRAME FLATS

(2199) N CALIFORNIA 102-6 E 15th Ave. Two-story and basement frame (2) flats.
Owner.....W. L. Hemminga, Inc., 1600 Fell, San Francisco.
Architect...None.
Day's work. COST, \$5000

ADDITIONS

(2200) NO. 297 EDGEWOOD. Additions and alterations to make a building into a 6-room residence.
Owner.....Chas. Bills, Premises.
Architect...None.
Day's work. COST, \$2000

CONCRETE FLOOR

(2201) NOS. 2125-32 MARKET. Concrete floor.
Owner.....A. Hieshberg, 928 Broadway, Oakland.
Architect...None.
Contractor...Chas. Qarntonio, 3126-A Laguna, San Francisco.
COST, \$600

ALTERATIONS

(2202) N SERVICE 130 W Steiner. General alterations for dwelling.
Owner.....S. Constant, 35 Service, San Francisco.
Architect...None.
Contractor...E. Bormardel, 34 Service, San Francisco.
COST, \$400

ALTERATIONS

(2203) NO. 1823 IRVING. Alter garage
Owner.....Chas. G. Minifie, 814 Crocker Bldg., S. F.
Architect...None.
Contractor...Sass & Son, 134 St. Anne, San Francisco.
COST, \$400

DWELLING

(2204) S ROLPH 67 E Prague. One-story and basement frame dwelling.

Owner.....A. Bredlow, 3137 Folsom, San Francisco.
Architect...None.
Day's work. COST, \$1200

BRICK WORK

(2205) S SUTTER 115-S E Powell S 137-6XE 45-6. Brick work for eight-story Class "A" building.
Owner.....Pacific Gas & Electric Co., 445 Sutter, San Francisco.
Architect...Edgar A. Mathews, 251 Post, San Francisco.
Contractor...Arthur Arlett, 251 Post, San Francisco.

Filed July 30, '15. Dated July 23, '15.
Brick work of basement and 1st story done\$2595
Brick work of 2nd, 3rd and 4th stores done 2950
Brick work of 5th, 6th and 7th stores done 2950
Brick of remainder of building done 2750
Usual 35 days 3750
TOTAL COST, \$14,995

Bond, \$7500. Surety, The Aetna Accident & Liability Co. Limit, due diligence. Forfeit, none. Plans and specifications filed.

FRAME FLATS

(2206) W DELMAR 185 S Waller 25x 87-3. All work for two-story frame (2) flats.

Owner.....Anton Wipfler, 281 4th, San Francisco.
Architect...Theo. W. Lenzen, Humboldt Bank Bldg., S. F.
Contractor...H. C. Mangels, 2677 McAllister, San Francisco.
Filed July 30, '15. Dated July 29, '15.
Frame up\$1300
Brown coated 1400
Completed and accepted 1496
Usual 35 days 1400
TOTAL COST, \$5596

Bond, none. Limit, 80 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

(2207) NE YNEZ & CAPESTRANO Aves, Mission Terrace. All work for one-story frame residence.
Owner.....P. Cenbrano.
Architect...None.
Contractor...Dolder & Derrickson.

Filed July 30, '15. Dated July 29, '15.
Frame up 1/4
Brown coated 1/4
Completed and accepted 1/4
Usual 35 days 1/4
TOTAL COST, \$1650

Bond, limit, forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

(2208) S NORIEGA 57-6 E 11th Ave E 25xS 100. All work for two-story frame residence.
Owner.....J. B. & Jennie Cavanaugh.
Architect...Koenig & Christiansen, 814 Humboldt Bank Bldg., San Francisco.
Contractor...H. C. Christiansen, 1345 4th Ave., San Francisco.

Filed July 30, '15. Dated July 28, '15.
Frame up\$687.50
Brown coated 687.50
Completed and accepted 687.50
Usual 35 days 687.50
TOTAL COST, \$2750.00

Bond, none. Limit, 70 days. Forfeit, \$5. Plans and specifications filed.

SEWER, ETC.

(2209) IN POTRERO NUEVO BLKS 10), 131, 132 on Vermont and 15th Streets. Constructing and installing sewer, manholes and Y branches in front of property of Western Pacific Railway Company.

Owner.....Frank G. Dunn & Warren
ern Pacific Railway Co., Mills Bldg., San Francisco
Architect...None.

Contractor...Manuel I. Pires, Chronicle Bldg., San Francisco.

Filed July 30, '15. Dated July 29, '15.

Completed and accepted 75%
36 days after 25%
TOTAL COST, \$1153
Bond, \$600. Surety, Massachusetts Bonding & Insurance Co. Limit, 90 days. Forfeit, none. Plans only filed.

LEASE.

July 24, 1915—NO. 4121 EIGHTEENTH S line bet. Castro and Collingwood. H F Stoltz to H E McCall. 3 years. \$1650.

July 29, 1915—NE TENTH 100 SE Howarn SE 125xNE 100. Margaret Lynch to Lodovico Tomaquini. 10 years. \$12,540.

July 25, 1915—SE LOMBARD AND Scott S 100XE 27-6. Grisostomo Giusti to C L Conte. 5 years. \$5728.75 and option to renew.

INCORPORATIONS

Sonoma Express Co. Capital Stock, \$100,000; subscribed, \$500; shares, \$100 each. Directors—J. Loughnane, B. F. Cox, L. F. Ingram, D. H. Fyfe, H. J. Cox, 1 share each. Place of business, S. F. Eilers Talking Machine Co. Capital stock, \$100,000; subscribed, \$15,000; shares, \$100 each. Directors—F. A. Levy, G. F. Eilers, 74 shares each; R. S. Irvine, L. Eegebaum, 1 share each. Place of business, S. F.

California Farm and Finance Company. To colonize lands. Capital Stock, \$100,000; 1000 shares at \$100 each amount subscribed, \$300. Place of business, San Francisco. Directors—A. H. Garland, G. A. Plutt, T. Baicigalupi, 1 share each.

Morgen Loan and Security Co. General loan and jewelry business. Capital Stock, \$100,000; 1000 shares at \$100 each amount subscribed, \$500. Place of business, San Francisco. Directors—Max Morgen, E. R. Jesson, J. L. Sale, L. N. Jesson and C. Reiff, 1 share each.

NOTICE OF NON-RESPONSIBILITY.

July 29, 1915—NO. 736 MARKET. Bankers' Investment Co as to improvements on leased property.
July 28, 1915—CLIFF HOUSE ptn Cliff House stable and lands lying S of Cliff House. Emma L Merritt, extrx Estate Adolph Sutro, decd as to improvements on leased property

COMPLETION NOTICES

San Francisco

July 24, 1915—N ANZA 72-6 E 15th Ave 27-6x95; N Anza 100 E 15th Ave 27-6x95. John Johnson and Gus Thunberg to whom it may

concern, July 24. Same to Same
 July 24, 1915—N DORLAND 326-4 E
 Dolores 25-SxN 70. Jas L Sweeney
 to Ahlhaach & Healy Co. July 23, '15
 July 26, 1915—SE TWENTY-SECOND
 Ave and Lincoln Way S 600x6 120.
 Theodore H Hittell to Peter Mc-
 Hugh and Sunset Constr Co.
 July 19, 1915
 July 26, 1915—W MASON 31-1 N
 O'Farrell N 33-11xW 50. D L Ran-
 dolph to Frank A Wilkie. July 26, '15
 July 26, 1915—S GREEN 206 W
 Leavenworth 65x137-6. Thomas F
 Barry to whom it may concern.
 July 26, 1915
 July 26, 1915—W THIRD AVE 100 S
 Clement. Geo B and Sarah J Hill-
 ard to Percy J Cole. July 26, 1915
 July 26 1915—E TENTH AVE 200 S
 Balboa S 25x6 120. Andrew J
 Brangan to Ruegg Bros. July 24, '15
 July 27, 1915—S GREENWICH 116 W
 Devisadero W 40xS 137-6. B Ten-
 nysen to Jno V Scott. July 26, 1915
 July 27, 1915—E SCOTT 60 N Green
 50x137-6. Maude James Graves to
 Jesse E Steere. July 17, 1915
 July 27, 1915—SW CLEMENT AND
 15th Ave W 55 S 56 E 25 N 6 E 30
 N 50. A Lynch to whom it may
 concern. July 22, 1915
 July 27, 1915—LOT 44 Lyon & Hoags
 Sub Ashbury Terrace. James F
 Brennan to John Diestel Co.
 July 26, 1915
 July 28, 1915—N OCTAVIA 125 N
 Broadway W 137-6xN 25. Belle A
 Weeks to L N Vezina. July 23, 1915
 July 28, 1915—W THIRTY-FIRST
 Ave 288-9 S California S 27-3/4xW
 120. Emil Nelson to whom it may
 concern. July 23, 1915
 July 28, 1915—W TWENTY-FIFTH
 Ave 225 S California 25x120. A M
 Sylvia to whom it may concern.
 July 26, 1915
 July 28, 1915—EXPOSITION SITE.
 Panama-Pacific International Ex-
 position Co to M P Mortensen.
 July 16, 1915
 July 29, 1915—E THIRTIETH AVE
 200 N Taraval 50x120. Mrs James
 R Kelly to H C Christiansen.
 July 29, 1915
 July 29, 1915—LOT 25 BLK 17-A The
 C S Allred Sub Blks 17 and 18 West
 End Map No. 1. Dominic Tiscornia
 to whom it may concern. July 29, 1915
 July 29, 1915—N CHESTNUT 120 W
 Grant Ave W 20xN 70. Elvira Mori
 to whom it may concern. July 1, 1915
 July 29, 1915—E FORTIETH AVE 175
 S Balboa S 28-6xN 120. Thomas J
 O'Connell to J J Heaphy. July 29, 1915
 July 29, 1915—NW BUSH AND ST.
 George Alley N 215 E 48 S 155-6 E
 24 S 59-6 E 24. Chas F Hanlon to
 P A Palmer. July 29, 1915
 July 30, 1915—NW FRONT AND
 Union W 125xN 70. Sperry Flour
 Co to Clinton Fireproofing Co.
 July 19, 1915
 July 30, 1915—S SACRAMENTO 137-6
 E Drumm E 108-8 1/2 S 67-8 W 20 S
 24 W 88-8 1/2 N 91-8. Terminal
 Investment Co to American Concrete
 Co. James T Conway, Relgie
 & Jamison, Alex Coleman, Mealy &
 Collins, H Maundrell, Louis R Holm
 Co, American Elec Eng Co.
 July 30, 1915
 July 30, 1915—W TREAT AVE 95 N
 22nd N 30xW 122-6. H P Chad-
 bourne to Ellingson & Holt.

..... July 29, 1915
 July 30, 1915—W COLLINS 140 N
 Geary N 25xW 123-0 1/2. Jeanette
 Yates to Wm F Yates. July 26, 1915
 July 30, 1915—E CUVIER 200 N Bos-
 worth 25x76. Jennie C and Oliver
 Evans to whom it may concern.
 July 29, 1915
 July 30, 1915—E DOUGLASS 135 N
 17th N 25x6 148. Christian and
 Teresia Sorenson to whom it may
 concern. July 29, 1915
 July 30, 1915—LOT 98 1/2 BLK 5, Aca-
 demy Tract. Lawrence Costello
 and Michael McDonough to whom
 it may concern. July 29, 1915
 July 30, 1915—S RUSSIA AVE 25 W
 Moscow 25x100. A Radivoj to
 Stevenson & Gowan. July 30, 1915
 July 30, 1915—W SIXTEENTH AVE
 25 S Balboa S 25xW 82-6. John S
 Purcell to whom it may concern.
 July 29, 1915
 July 30, 1915—N RIVOLI 152 W Cole
 26-4x100. Annie Fullerton to Karl
 Yngve. July 30, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

July 24, 1915—S FELL 100 E Steiner
 E 37-6xS 137-6. California Plate
 & Window Glass Co vs Isabella J
 Murray and Herbert C Cameron.
 \$17
 July 24, 1915—S FELL 100 E Steiner
 E 37-6xS 137-6. S Ginsberg & Co
 vs Elizabeth J Murray. \$60.50
 July 24, 1915—NO. 2638 HOWARD. E
 M Mathson vs Mary L Nelson. \$14.60
 July 24, 1915—S FELL 100 E Steiner
 E 37-6xS 137-6. Percy Sheet Metal
 Works, Inc. vs Isabella J or Isabel
 J Murray and Thomas F Murray
 and Herbert C Cameron. \$47.50
 July 24, 1915—E FLORIDA 29-9 1/2
 N Army N 30x6 75. R O'Connell
 vs Emil and Elsie Nelson. \$90.35
 July 26, 1915—S FELL 100 E Steiner
 E 37-6xS 137-6. Olson-Mahony
 Lumber Co vs Isabel J or Isabella
 J and Thomas F Murray and Her-
 bert C Cameron. \$467.72
 July 27, 1915—NE WEBSTER AND
 Vallejo E 50xN 130. C C Hildecker
 vs A H Turner and W S Cooper.
 \$157.78
 July 28, 1915—N UNION 82-6 E De-
 visadero E 27-6xN 137-6. W S
 Harvey vs Marguerite Farr. \$94.50
 July 28, 1915—SW ELLIS & LARKIN
 Fred Koldenstrod vs Marion and
 G Kennedy. \$40
 July 28, 1915—EXPOSITION SITE. A
 J Rain vs Combined Amusements
 Co et al. \$3734.14
 July 29, 1915—S FELL 100 E Steiner
 E 37-6xS 137-6. A F Larsen vs
 Thomas F and Isabel J Murray. \$12
 July 30, 1915—S FELL 100 E Steiner
 E 37-6xS 137-6. William H Claw-
 son vs Isabella J and Thos F Mur-
 ray and Herbert C Cameron. \$38.55
 July 30, 1915—N SUTTER 81 W Tay-
 lor W 56-6xN 137-6. Atlas Heat-
 ing & Ventilating Co vs Clara M
 Clayton, Josephine L Struve, Geo
 W Livingston, Edwin T Gaffney
 and Willetta H Henrickson. \$608

RELEASE OF BUILDING CONTRACT.

Aug. 2, 1915—S SHIPLEY 125 E Fifth
 E 35xS 75. Jean E de Greayer with
 Ira W Coburn, Inc. Released July 29
 1915.

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

July 27, 1915—N CHESTNUT 120 W
 Grant Ave W 20xN 70. Nic Muriale
 to Elvira and Modesto Mori.
 July 26, 1915—W TWENTY-SIXTH
 Ave 200 S Clement S 25 W 120-2 1/2
 m or 1 N 25 m or 1 E 122-9 1/2 m or
 1. John J Binet Co to Credit Clear-
 ance Bureau and Isaac L Cohen.
 July 26, 1915—N UNION 190 W Web-
 ster W 25xN 137-6. Olson Mahony
 Lumber Co to M M Finlayson.
 July 26, 1915—LOT 55 BLK 5 Holly
 Park Tract. H H Smith to John
 Naribehury and P McHugh. \$104.90
 July 26, 1915—W TWENTY-THIRD
 Ave 225 N Balboa N 25xW 110.
 Blanchard Brown Co to J D
 Sprueckels, Jr. \$357.35
 July 23, 1915—E SIXTEENTH AVE
 258-2 N Clement N 25x6 135. J
 H Kruse to W F & Jeanette Yates

BUILDING IN JUNE ACTIVE.

City Building Department Reports
 Over Million and One-Half In-
 vested in Building Construc-
 tion.

Approximately \$1,500,000 were spent
 in the erection of buildings during the
 month of July, according to the figures
 of the City Building Department. For
 this amount 620 permits were issued.

In the report is included the \$550,000
 hospital building to be erected at
 Fourth avenue and Parnassus by the
 Regents of the University of California,
 the second story addition to the
 Geary Street Municipal Car Barn at
 \$26,747 and a building for the Harbor
 Commissioners at an estimate of \$14,-
 281.

The complete report is as follows:

Class	No. of Bldgs.	Amount.
Class "C"	13	\$182,282
Frames	170	589,831
Alterations	434	146,065
State Building	1	550,000
Harbor Commissioners	1	14,281
Public Buildings	1	26,747
	620	\$1,500,206

OAKLAND AND ALAMEDA COUNTY.

RESIDENCE — 2 story and base,
 frame, Cost not stated, Berkeley, Ala-
 meda Co., Cal. Architects, Banning &
 Stewart, 5215 Broadway, Oakland.
 Owner, Mr. Blair. The dwelling will
 be erected at the corner of Uplands
 and El Camino Real, and has been de-
 signed for an eight-room house with
 bath and sleeping porch. Interior will
 be finished in pine and hardwood with
 white enamel in the bed rooms. Hard-
 wood floors will be used in the living
 room, dining room and reception hall.
 Plans provide for furnace heat and
 open fire places. Mantels will be of
 tile and brick. Bath room will have
 tile floor and wainscot. An automatic
 water heater will be installed. Exterior
 of the dwelling will be covered
 with cement plaster on metal lath.
 Plans are complete and figures are
 now being taken.

RESIDENCE — 1 story and base,
 frame, \$2,500. Oakland, Cal. Architect,

Home. Owner, William F. Neary, 1723 Telegraph avenue, Oakland. The dwelling will be erected at the corner of South Court and Walk streets, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the living room, dining room and reception hall. There will be open fire places and tile mantels. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$7,000. Oakland, Cal. Architect, Sidney B. Newsum, Nevada Bank Bldg., S. F. Owner, Sidney B. Newsum. The dwelling will be erected in Crocker Highlands, and has been designed for an eight-room house with two baths and sleeping porch. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat on open fire places. Mantels will be of tile and brick. A hot water circulating system will be installed. Bath rooms will have tile floors and wainscot. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are now being revised and new figures will be called for shortly.

RESIDENCES—3, 2 story and base, frame, \$1,500 each. Oakland, Cal. Architect, none. Owner, C. M. MacGregor, 470 13th street, Oakland. These dwellings will be erected on the north side of Mandana Boulevard west of Paloma, and each has been designed to contain eight rooms, bath and sleeping porch. Interior finish will be of pine, hardwood and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be furnace heat and open fire places. Mantels will be of tile and brick. Tile wainscot and floors will be used in the bath rooms. Plans provide for automatic water heaters. Exteriors will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE—2 story and base, frame, \$4,000. San Lorenzo, Alameda Co., Cal. Architects, Mau & Sprague, MacDonough Bldg., Oakland. Owner, J. P. Marlin. The dwelling will contain eight rooms and bath. Interior will be finished in pine and redwood with some elm panels. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire place. Mantel will be of tile or brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

STREET PAVING, GRADING AND CURBS—Cost not stated. San Leandro, Alameda Co., Cal. Engineer, City Engineer, San Leandro. Owners, City of San Leandro. Bids for a large amount of street work are now being received

by the Board of Trustees. Bids on the work close August 16th between 8 and 9 p. m. The following streets will be improved: Hays street, San Miguel street, Santa Rosa street between Callan and Estudillo avenue; San Rafael street from Estudillo and Juana avenue; San Leandro street from Joaquin to Juana avenues; Juana avenue from Santa Clara street to Grand avenue. The improvement will consist of construction of sidewalks, grading, paving, curbing and macadamizing, construction of cast iron and concrete culverts, etc. Plans together with full information regarding the work may be had from the City Engineer.

APARTMENT HOUSE—3 story and base, frame. Cost not stated. Berkeley, Alameda Co., Cal. Architect, C. M. Cook. Owner represented by Olin Offield, Phelan Bldg., S. F. The building will be erected at the corner of Durant Way and Telegraph avenue, and will cover an area of 80 by 130 feet. There will be a total of 84 apartments of 2wo and three rooms. Interior will be finished in pine and hardwood veneer. Some hardwood floors will be used. There will be steam heat and a hot water system. All suites will have wall beds and private baths. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken by Mr. Offield, Phelan Bldg.

APARTMENT HOUSE—3 story and base, frame, \$35,000. Oakland, Cal. Architects, Oliver & Thomas, Pantages Theatre Bldg., Oakland. Owner's name not given. The building will be erected at the corner of Harrison and Grand avenue, and has been designed to contain a total of 25 suites of two, three and four rooms, all with private baths and wall beds. Interior will be finished in pine with some elm panels and hardwood floors. Plans provide for steam heat, oil burning system and hot water system. Bath rooms will have tile wainscot. Marble and tile will be used in the entrance lobby. Exterior of the building will be covered with veneer pressed brick and cement plaster. Plans are being prepared.

Contracts Awarded.

APARTMENT HOUSE—3 story and base, frame, \$5,000. Oakland, Cal. Architect, J. Henry Boehrner, Delger Bldg., Oakland. Owner, Dora Krohner. Contractors, Boehrner & Legault, Delger Bldg., Oakland. Contract price, \$5,000.

Building Contracts Awarded

Oakland

No.	Owner	Contractor	Amt.
1430	Wallace	Wallace	400
1431	Larner	Larner	2000
1432	Larner	Larner	2000
1433	Gregory	Gregory	2500
1434	Cal Cotton	Cal Cotton	4900
1435	Neary	Neary	2500
1436	Bilger	Doss	2000
1437	Lenardini	Campomenesi	1550
1438	Thayer	Thayer	500
1439	Cannon	Lima	500
1440	Braun	Harris	400
1441	Braun	Harris	400
1442	Braun	Harris	400
1443	Braun	Harris	400
1444	Day	Vend	400
1445	Lasker	Schnebly	500
1446	Vincent	Vincent	500
1447	Freeman	Freeman	400
1448	St. Anthony's	Brochage	1600
1449	Hillard	Hillard	600

1454	Pateus	Pateus	450
1455	Larsen	Larsen	2000
1456	Larsen	Larsen	2000
1459	Rousseau	Bryson	1016
1460	Same	Anderson	16815
1461	Collins	Collins	2500
1462	MacGregor	MacGregor	4875
1463	Same	Same	4250
1464	Same	Same	4400
1465	Maier	Griffin	5250
1467	Campbell	Haines	398
1468	Forgeus	Annefeld	3018
1469	Krohner	Boehrner	5358
1470	Isola	Isola	2500
1472	Werle	Werle	2000
1473	Waldwin	Self	400
1477	Ellason	Schrader	1272

ALTERATIONS

(1450) NO. 1419 SEVENTY-SECOND Ave., Oakland. Alterations and additions.

Owner.....S. A. Wallace, Premises.
Architect...None.
Day's work.....COST, \$160

DWELLING

(1451) N ROSE 50 W Colby, Oakland. One and one-half-story five-room dwelling.

Owner.....Edward Larmer, 470 Boulevard Way, Oakland.
Architect...None.
Day's work.....COST, \$2000

DWELLING

(1452) NE ROSE AND COLBY, Oakland. One and one-half-story five-room dwelling.

Owner.....Edward Larmer, 470 Boulevard Way, Oakland.
Architect...None.
Day's work.....COST, \$2000

DWELLING

(1453) NW FORTY-SEVENTH AND Ygnacio Aves., Oakland. One and one-half-story 7-room dwelling.

Owner.....J. A. Gregory, 1607 41st Ave., Oakland.
Architect...M. L. Newsum, 1748 Broadway, Oakland.
Day's work.....COST, \$2500

FRAME FACTORY

(1454) E TWENTY SECOND AVE 260 S Railroad Ave., Oakland Two-story frame factory.

Owner.....California Cotton Mills Co. Premises
Architect...None.
Day's work.....COST, \$4900

DWELLING

(1455) SW SOUTH COURT & WALK, Oakland. One-story 5-room dwlg.

Owner.....Wm. F. Neary, 1723 Telegraph Ave., Oakland.
Architect...None.
Day's work.....COST, \$2500

OFFICE BUILDING

(1456) NE McADAM AND BROADWAY, Oakland. Two-story 3-room office building.

Owner.....F. W. Bilger, 1st Savings Bank Bldg., Oakland.
Architect...None.
Contractor...C. A. Doss, 2028 E-15th, Oakland.
COST, \$2000

DWELLING

(1457) NE CAVOUR AND SHAFTER, Oakland. One-story 5-room dwelling

Owner.....G. B. Lenardini, 5214 Shafter Ave., Oakland
Architect...None.
Contractor...E. Campomenesi, 5174 Miles Ave., Oakland.
COST, \$1350

ADDITION

(1438) NO. 5633 WALNUT AVE., Oakland. Addition.
Owner.....Mrs. Ella F. Thayer, Prem.
Architect...None.
Day's work. COST, \$500

STORE

(1439) N E-FOURTEENTH 200 E 56th Ave., Oakland. One-story one-room store.
Owner.....M. Cannon, 5120 Castro, Oakland.
Architect...None.
Contractor...M. Lima, 5132 Ygnacio Ave. Oakland.
COST, \$500

ALTERATIONS

(1440) NO. 1514 SEVENTH, Oakland. Alterations.
Owner.....F. A. Braun, 133 Wesley Ave., Oakland.
Architect...None.
Contractor...D. F. Harris, 1303 Carri-son, Berkeley.
COST, \$400

ALTERATIONS

(1441) NO. 1506 SEVENTH, Oakland. Alterations.
Owner.....F. A. Braun, 133 Wesley Ave., Oakland.
Architect...None.
Contractor...D. F. Harris, 1303 Carri-son, Berkeley.
COST, \$400

ALTERATIONS

(1442) NO. 1512 SEVENTH, Oakland. Alterations.
Owner.....F. A. Braun, 133 Wesley Ave., Oakland.
Architect...None.
Contractor...D. F. Harris, 1303 Carri-son, Berkeley.
COST, \$400

ALTERATIONS

(1443) NO. 1510 SEVENTH, Oakland. Alterations.
Owner.....F. A. Braun, 133 Wesley Ave., Oakland.
Architect...None.
Contractor...D. F. Harris, 1303 Carri-son, Berkeley.
COST, \$400

ALTERATIONS

(1444) NO. 2505 NINTH AVE., Oak-land. Alterations.
Owner.....F. V. Day, Premises.
Architect...None.
Contractor...C. Vend.
COST, \$400

ALTERATIONS

(1445) NO. 817 JEFFERSON, Oakland. Alterations.
Owner.....Mrs. Caroline Lisker, 1230 E-16th, Oakland.
Architect...None.
Contractor...Schnebly, Hostrowser & Pedgrift, 6th and Jackson, Oakland.
COST, \$500

ALTERATIONS

(1446) NO. 1603 THIRTEENTH AVE., Oakland. Alterations.
Owner.....H. A. Vincent, Premises.
Architect...None.
Day's work. COST, \$500

ALTERATIONS

(1447) NO. 5643 MILES AVE., Oak-land. Alterations.

Owner.....T. L. Freeman, Premises.
Architect...None.
Day's work. COST, \$100

ALTERATIONS

(1449) S E-SIXTEENTH, bet. 15th and 16th Aves., Oakland. Alterations.
Owner.....St. Anthony's Church, 1535 16th Ave., Oakland.
Architect...None.
Contractor...F. A. Brockhage, 1326 Na-toma, San Francisco.
COST, \$1600

WINDOWS

(1453) QUAY WALL, Oakland. Win-dows for warehouse.
Owner.....City of Oakland.
Architect...None.
Contractor...C. J. Hilliard Co., 19th & Minnesota, S. F.
COST, \$600

ALTERATIONS

(1454) NO. 4005 RHODA AVE., Oak-land. Alterations.
Owner.....M. A. Patcus, Premises.
Architect...None.
Day's work. COST, \$450

DWELLING

(1455) W THIRTIETH AVE 70 N E-12th, Oakland. One-story five-room dwelling.
Owner.....R. K. Larsen, 3404 Elm-wood, Oakland.
Architect...None.
Day's work. COST, \$2000

DWELLING

(1456) W THIRTIETH AVE 35 N E-12th, Oakland. One-story five-room dwelling.
Owner.....R. K. Larsen, 3404 Elm-wood Ave., Oakland.
Architect...None.
Day's work. COST, \$2000

FRAME APARTMENTS

(1459) E GRAND AVE and W Park View Terrace N on curve to right 97.67 NE 93.55 SE 40.56 SW 100.95, Oakland. Electric work for three-story and basement frame apart-ments.

Owner.....Chas. J. and Carrie B. Rousseau.
Architect...Charles J. Rousseau, 46 Kearny, San Francisco.
Contractor...B Bryon Elec. Constr. Co., 1534 8th Ave., S. F.

Filed July 27, '15. Dated July 23, '15.
Roughed in\$502
Completed and accepted.....260
Usual 35 days.....254
TOTAL COST, \$1016

Bond, none. Limit, as soon as possible
Forfeit, none. Plans and specifications filed.

(1460) PATENT PLUES. IRON WORK, carpenter work, lumber, roof, tin-ning, marble, tar paper, staff work, mill work, inside stairs, glazing, lath and plaster, rough hardware and deafening felt on above.

Contractor...N. P. Anderson & James Ringrose (Anderson & Ringrose), 320 Market, S. F.
Filed July 27, '15. Dated July 22, '15
Enclosed and brown coated.....\$1203
Standing finish on interior and exterior 2nd coat stucco on.....3204
Completed and accepted.....3204
Usual 35 days.....6204

TOTAL COST, \$16,815

Bond, none. Limit, as soon as possible.
Forfeit, none. Plans and specifications filed.

DWELLING

(1461) E PARK BOULEVARD 40 S E-37th, Oakland. One-story six-room dwelling.
Owner.....Collins Bros., 825 51st, Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING

(1462) N MANDANA BLVD. 368 W Pa-loma, Oakland. Two-story 8-room dwelling.
Owner.....C. M. MacGregor, 470 13th, Oakland.
Architect...None.
Day's work. COST, \$4375

DWELLING

(1463) N MANDANA BLVD. 418 W Pa-loma, Oakland. Two-story 8-room dwelling.
Owner.....C. M. MacGregor, 470 13th, Oakland.
Architect...None.
Day's work. COST, \$4250

DWELLING

(1464) N MANDANA BLVD. 318 W Pa-loma, Oakland. Two-story 8-room dwelling.
Owner.....C. M. MacGregor, 470 13th, Oakland.
Architect...None.
Day's work. COST, \$4400

FLATS

(1465) SE TWELFTH AVE AND E-15th, Oakland. Two-story 12-room flats.
Owner.....D. F. Maher, Premises.
Architect...None.
Contractor...C. M. Griffin, 746 5th Ave., Oakland.
COST, \$3250

PAINTING, ETC., DWELLING

(1467) NW TENTH AVE AND NE E-20th NW 150xNE 100, Oakland. All work for painting, papering and re-pairing dwelling.

Owner.....E. G. Campbell, Oakland.
Architect...None.
Contractor...Chas. D. Haines, 820 19th, Oakland.

Filed July 28, '15. Dated July 26, '15.
Order on Downey Paint & Glass Company for\$80
Order on J. A. Cahill & Co. for... 60
Order for labor.....75
CompletedBalance
TOTAL COST, \$398

Bond, none. Limit, 21 days. Forfeit, \$5. Plans and specifications, none.


ALTERATIONS

(1468) NOS. 1006, 08, 10, 12 BROAD-way, Oakland. Alterations, repairs, store fronts, etc.
Owner.....J. W. Forgeus, Williams, Colusa County, Cal.
Architect...A. W. Smith, 1010 Broad-way, Oakland.

Contractor...H. Ahnfeld, 1907 Univer-sity Ave., Berkeley.

Filed July 29, '15. Dated July 21, '15.
50% completed\$1000
Completed and accepted.....1000
Usual 35 days.....1018
TOTAL COST, \$3018

Bond, \$1510. Surety, U. S. Fidelity & Guaranty Co. Limit, 10th Sept. For-felt, none. Plans and specifications filed.



Structural Steel Contractors

**Works at
HARRISON ST.,
bet. 8th & 9th
San Francisco**

Telephone Markel 337

FRAME APARTMENTS

(1469) S SIXTEENTH 230 W West W 30xN 103-9, Oakland. All work except fire escapes, finish hardware, wall beds and electric fixtures for three-story frame apartments.

Owner.....Dora Krokner.

Architect...J. Henry Boehrer, Delger Bldg., Oakland.

Contractor...J. Henry Boehrer and Alfred Legault, Delger Bldg., Oakland.

Filed July 29, '15. Dated July 29, '15.

2nd floor joists in place.....	\$ 200.00
Frame up and roof sheathed.....	500.00
Ready for bath.....	500.00
Brown coated.....	500.00
Plastered.....	800.00
Completed.....	1418.50
Usual 35 days.....	1339.50
TOTAL COST, \$3558.00	

Bond, \$2679. Surety, Southwestern Surety Insurance Co. Limit, 90 days. Forfeit, none. Plans and specifications filed.

DWELLING

(1470) N FORTY-SECOND 124 E Linden, Oakland. Two-story 8-room dwelling.

Owner.....Charles Isola, Oakland.

Architect...P. F. De Martini, 2123 Powell, San Francisco.

Day's work. COST, \$2500

DWELLING

(1472) NE ELSTON AVE AND MIAMI Court, Oakland. One-story 6-room dwelling.

Owner.....C. A. Werle, 566 Frederick San Francisco.

Architect...M. L. Newson, 1748 Broadway, Oakland.

Day's work. COST, \$2000

ALTERATIONS

(1473) NO. 919 WASHINGTON, Oakland. Alterations.

Owner.....Mrs. I. Baldwin, 212 Lyon, San Francisco.

Architect...None.

Contractor...L. B. Seif, 365 24th, Okd. COST, \$400

REPAIRS

(1477) NO. 118 THIRTY-SIXTH, Oakland. Fire repairs.

Owner.....Mrs. Hanna C. Eliason, Premises.

Architect...None.

Contractor...J. F. Shrader, 520 16th, Oakland.

COST, \$1272

SHINGLE ROOF

(1474) W EIGHTH 100 S Alston, Berkeley. Shingle roof.

Owner.....City of Berkeley.

Architect...None.

Contractor...E. P. Pratt, 2133 Allston Way, Berkeley.

COST, \$400

SHINGLE ROOF

(1475) W LE ROY 100 S Virginia, Berkeley. Shingle roof.

Owner.....City of Berkeley.

Architect...None.

Contractor...E. P. Pratt, 2133 Allston Way, Berkeley.

COST, \$100

DWELLING

(1476) SE SACRAMENTO AND ALcatraz, Berkeley. One-story 5-room dwelling.

Owner.....Mathias Swanson, 3027 King, Berkeley.

Architect...None.

Day's work. COST, \$1800

Building Contracts Awarded**Berkeley.**

No.	Owner	Contractor	Amt.
1448	Olson	Olson	1800
1457	Turner	Whiting	2647
1458	Heron	Carlson	5704
1466	Brasch	Brasch	4000
1471	Berkeley	Pfarrang	3650
1473	Berkeley	Pratt	400
1476	Swanson	Swanson	1800

DWELLING

(1418) E MATHEWS 177 N Oregon, Berkeley. One-story 5-room dwlg.

Owner.....Arvid E. Olson, 721 10th, Oakland.

Architect...None.

Day's work. COST, \$1800

FRAME DWELLING

(1457) N WOOLSEY 50 W Dana, Berkeley. All work for one and one-half-story frame dwelling.

Owner.....W. E. Turner, 1947 Bancroft Way, Berkeley.

Architect...James W. Plachek, Acheson Bldg., Berkeley.

Contractor...Homer Whiting, Berkeley.

Filed July 28, '15. Dated July 23, '15.

Frame up	\$539.40
Electric and plumbing roughed in	529.40
Plastered	529.40
Accepted	529.40
Usual 35 days.....	529.40

TOTAL COST, \$2647.00

Bond, \$1323.50. Sureties, Elmer E. Nichol and Fred A. Nassie. Limit, 80 days. Forfeit, \$5. Plans and specifications filed.

BRICK STORES AND WAITING ROOM

(1458) S PTN LOTS 14, 15, 16, Terminal Tract, Berkeley. All work for one-story brick stores and waiting room.

Owner.....E. A. Heron, 607 Thomson Bldg., Oakland.

Architect...John Hudson Thomas, 1st National Bank Bldg., Bkly
Contractor...Herman Carlson, 1627 Parker, Berkeley.

Filed July 28, '15. Dated July 20, '15.

Side walls up.....	\$1069.50
Ready for plaster.....	1069.50
Plastered	1069.50
Accepted	1069.50
Usual 35 days.....	1426.00
TOTAL COST, \$5704.00	

Bond, none Limit, 60 days. Forfeit, none. Plans and specifications filed.

DWELLING

(1466) E ALAMEDA, head San Pedro, Berkeley. One and one-half-story 6-room dwelling.

Owner.....M. P. Brasch, 5836 Ocean View Drive, Oakland.

Architect...Universal Drafting Bureau, Inc., 1844 5th Ave., Oakland.

Day's work. COST, \$4000

DWELLING

(1471) W OXFORD 300 N Los Angeles, Berkeley. Two-story 7-room dwlg.

Owner.....Ethel Williams, 814 Oxford Berkeley.

Architect...None.

Contractor...C. J. Pfarrang, 5487 Claremont Ave., Oakland.

COST, \$3650

Building Contracts Awarded**Alameda.**

No.	Owner	Contractor	Amt.
1450	Cowart	Cowart	1700
1451	Peterson	Peterson	456
1452	Hillen	Hillen	2000

DWELLING

(1450) NO. 827 PARK, Alameda. One-story 5-room dwelling.

Owner.....Z. T. Cowart, 3275 Central Ave., Alameda.

Architect...None.

Day's work. COST, \$1700

ALTERATIONS

(1451) NO. 1587 PACIFIC AVE., Alameda. Alterations.

Owner.....J. O. Peterson, 1021 Regent Alameda.

Architect...None.

Day's work. COST, \$450

DWELLING

(1452) NO. 753 CENTRAL AVE., Alameda. One-story 5-room dwelling.

Owner.....R. C. Hillen, 420 Haight, Alameda.

Architect...None.

Day's work. COST, \$2000

NOTICE OF NON-RESPONSIBILITY.**ALAMEDA COUNTY.**

July 21, 1915—(1) S CENTRAL AVE 242-5 W Third Ave W 146 6-10 S to shore line Bay of S F, as same existed May 2, 1870; E to pt from which 1 extended N and parallel with Third Ave will intersect pt beg. N to pt beg. (2) Ptn Lot 23 Sec 11 Tp 2 S Range 4 W Mt. Diablo Base and Meridian; (3) Ptn Lot 24 Sec 11 Tp 2 S Range 4 W containing 2.21 acres, Alameda. Samuel L. Santer as to improvements on leased property

CONTRACTORS' BOND.

July 26, 1915—LOT 7 BLK 6 Claremont Park, Bkly. Owner, Herbert Heitman; contractor, H H Welder; surety Mary J. Paterson. Contract dated June 29, 1915.

COMPLETION NOTICES.

ALAMEDA COUNTY

July 10, 1915—LOT 36 BLK 8 Map Rock Ridge Park, Okd. C S Cherry Flittner to Jos Flittner. June 30, 1915 to Nelson & Carlson. July 7, 1915
July 15, 1915—LOT 1 BLK 1 Map Oaklawn; being sbdvn Blks R & S Lots 4 and 5 Blk "Q" Vernon Park. Okd. Rosa McCarthy to George W Patton. July 9, 1915
July 17, 1915—LOT 8 BLK 2, Colusa Ave Ext, Okd. W H Archer to F R Peake Co. July 7, 1915
July 20, 1915—N 20 LOT 4 and S 20 Lot 5 Blk 7, Solano Ave Terrace, Okd. Tp. Nathan Saxton and James Thomas to whom it may concern. July 19, 1915
July 20, 1915—LOT 23 AND NE 12 1/2 Lot 24 Blk 9 Map Key Route Heights, Okd. Jos and Mary July 21, 1915—NO. 940 ROSE AVE, being Lot "K" Revised Map of Sbdvn Lots 20, 21 and 22 Glen Echo Tract, Piedmont, Frederick E Sandelin to Erie Saxton. July 15, 1915
July 23, 1915—W ELARITH AVE 143 S Magnolia Ave S 70xW 90, Piedmont. O M Bullock to whom it may concern. July 21, 1915
July 22, 1915—LOTS 72 AND 73 and NW 15 Lot 70 and NW 15.03 Lot 71 Map Rosa Le Tract, Brooklyn Tp. Mrs Esther Seat to Jos Flittner. July 19, 1915
July 22, 1915—S POSEN AVE 50 W Colusa Ave W 42xS 100, Okd. Soren Jensen to whom it may concern. July 20, 1915
July 23, 1915—SW FREDERICK AND Terrace S 45.59 W 107.43 N 33.78 E 108.84, Okd. Wm H Blake to H R Abrahamson. July 21, 1915
July 24, 1915—LOT 2 BLK 5 4th Ave Heights, Okd. Mrs Josephine Marcum to E W Woodard. July 24, 1915
July 24, 1915—LOT 60 and N 10 Lot 61 Blk "H" Map Broadway Terrace, Okd. H Goranson to whom it may concern. July 24, 1915
July 26, 1915—W FIFTH 151 3-12 N Virginia N 50xW 150, Bkly. John Larsen to G Eriksen and Frederiksen. July 24, 1915
July 27, 1915—E ALICE 430 S 19th S 80x E 133.94, Okd. Security Investors Realty Co to whom it may concern. July 27, 1915
July 28, 1915—S E-TWENTY-SIXTH 132 W 14th Ave S 59x E 32, Okd. C E Fabiansen to E Maasberg. July 23, 1915
July 28, 1915—LOT 202 PLOT 33, Mountain View Cemetery, Okd. Carrie L Gregory to Frank D Donohue (G H Jones Co.). July 23, 1915
July 28, 1915—LOT 31 BLK 6 4th Ave Terrace being No. 2855 Park Blvd, Okd. James McGuinness to whom it may concern. July 1, 1915
July 28, 1915—COR. UNIVERSITY Ave and Home, Bkly. W J Acheson by James W Palachek to Arthur Arlett. July 23, 1915
July 29, 1915—LOT 45 and Ptn Lot

16 which lies W line parallel to W boundary line said lot and distant L 10 E therefrom Map Crocker Highlands, Okd. Alta Piedmont Land Co to G T Burchaell and D Crowley. July 27, 1915

LIENS FILED

ALAMEDA COUNTY.

July 15, 1915—LOT 31 BLK "Q" Map Central Oakland Tract, Okd. Spott Bros. \$181; Sunset Lumber Co, \$127.92 vs O M Bullock. July 17, 1915—N HASTE 182.46 E Shattuck Ave E 60 N 135 W 10 S 15 W 50 S 120, Bkly. Sunset Lumber Co vs C Takahashi. \$193.50
July 21, 1915—N Rose Terrace 183.44 E Arch NW 66.93 to pt beg NW 47 NE 33 NE 12.17 SE on curve 32.77 SE 25.53 SE 29.01 SW 95, Bkly. Chas F and E M Naylor, \$97.61; James Haverlin, \$99.20 vs Mrs J S Howley, A F Waid and R A Gilkey
July 22, 1915—LOTS 1 TO 24 incl. Map Noble Tract, Alameda. W Mattson, \$87.20; W A Hartlett, \$103 vs George H Noble, Geo F Ott and E W Cummings (Martinez Mfg Co)
July 23, 1915—N ROSE TERRACE 185.44 E Arch NW 66.93 to pt beg NW 47 NE 33 NE 12.17 SE on curve 32.77 SE 25.53 SE 29.01 SW 95, Bkly. Wm H Jones, \$162.50; R A Gilkey and J H Wilde, \$356.50; W J Rigney (Oakland Mantel Co), \$124.40 vs Mrs J S Hawley and A F Waid
July 24, 1915—LOT 16 Map Halcyon Court Tract, Bkly. Sunset Hardware Co vs George A Crawfis and George W Patton. \$345.71
July 24, 1915—LOT 31 BLK "Q" Map No. 2 of Sbdvn Ptn Central Oakland Tract E Telegraph Ave., Okd. Herbert Hansen vs O M Bullock and Frank M Dunn. \$190
July 24, 1915—NE TAFT AND COLLEGE Aves E 143-12 N 36 W 129 S 36.67, Okd. Sunset Lumber Co vs Hugh and Bridget O'Keane and W S Simpson. \$1550
July 24, 1915—NE TAFT AND COLLEGE Aves E 143-12 N 36 W 129 S 36.67, Okd. Jas C Thompson vs Hugh and Bridget O'Keane, W S Simpson and H H Weider. \$142.50
July 26, 1915—LOT 16 Halcyon Court Tract, Bkly. Swift & Wilcox vs Geo A Crawfis, Geo W Patton and H A Childers. \$434.50
July 26, 1915—LOT 16 and E 13.13 Lot 15 Map Halcyon Court Tract, Bkly. Geo H Tay Co vs Geo A Crawfis and Geo H Burg. \$484.23
July 26, 1915—LOT 15 Map Halcyon Court Tract, Bkly. Geo H Burg vs Geo A Crawfis and Geo W Patton. \$1564.45
July 26, 1915—LOT 14 BLK 161 Map Grason Tract, Bkly. Fred Simons vs J H Rourke. \$78
July 26, 1915—LOT 5 Map Piedmont Manor, Piedmont. Geo H Tay Co vs Ida and Fred Alene Broder and Hull Plumbing Co. \$57.90
July 27, 1915—LOT 16 Map Halcyon Court, Bkly. Strable Mfg Co vs Geo A Crawfis and C J A Mattson. \$240
July 27, 1915—LOT 16 Map Halcyon Court Tract, Bkly. Pacific Mfg Co vs George A Crawfis and Panama Lumber & Mill Co. \$910

July 27, 1915—LOT 16 Map Halcyon Court Tract, Bkly. W P Fuller & Co vs George A Crawfis and E B Tunstall. \$203.67
July 27, 1915—LOT 16 Map Halcyon Court Tract, Bkly. George W Patton vs George A Crawfis. \$10,000
July 27, 1915—LOT 16 Map Halcyon Court Tract, Bkly. Robert Howden, \$290; Panama Lumber & Mill Co, \$2677; Cobbledick-Kibbe Glass Co, \$510.37; Bird Rymer Co, \$152; R A Kronke, \$65; Otto Schubert, \$160; J H Green, \$45; Paul T Swedberg, \$87.50; N A Andersen and W S Gilbert, \$227; P H Franks, \$81.06 vs Geo W Patton and Geo A Crawfis.
July 26, 1915—LOT 16 Map Halcyon Court Tract, Bkly. L Huseman, Trustee Ashby Hardware Co vs Geo A Crawfis and H A Childers. \$129.75
July 27, 1915—LOT 16 and E 13.13 Lot 15 Map Halcyon Court Tract, Bkly. George H Burge vs G A Crawfis and Geo W Patton. \$1564.45
July 27, 1915—LOT 16 Map Halcyon Court Tract, Bkly. Hunter Lumber Co vs George A Crawfis and H A Childers. \$201.85
July 28, 1915—LOT 16 Map Halcyon Court Tract, Bkly. Marshall & Stearns Co vs George A Crawfis and George W Patton. \$725
July 28, 1915—LOT 16 and E 13.13 Lot 15, Map Halcyon Court Tract, Bkly. S T Johnson (S T Johnson Co), \$525 E B Tunstall, \$182.50 vs George A Crawfis, George W Patton and Geo H Burge
July 28, 1915—LOT 15 Map Halcyon Court Tract, Bkly. Pacific Hardware & Steel Co vs George A Crawfis and George W Patton. \$367.70
July 29, 1915—LOT 16 AND E 13.13 Lot 15 Map Halcyon Court Tract, Bkly. M Friedman & Co vs G W Patton and G A Crawfis. \$119
July 29, 1915—S BONITA AVE 100 E Blair E 100xS 140, Piedmont. K Patterson vs Geo Lovell and Jesse Robertson. \$6.10

RELEASE OF LIENS

ALAMEDA COUNTY.

July 28, 1915—LOT 31 BLK "Q" Map No. 2, Sbdvn Ptn Central Oakland Tract, E Telegraph Ave., Oakland, Sunset Lumber Co to F M Dunn and O M Bullock. \$427.92
July 28, 1915—LOT 31 BLK "Q" Map Central Oakland Tract, Okd. Spott Bros to F M Dunn & O M Bullock. \$181

SAN JOSE AND THE SANTA CLARA VALLEY.

RESIDENCE — 2 story and base, frame. Cost not stated. Burlingame, San Mateo Co., Cal. Architect, Carl Gieffuss, 46 Kearny street, S. F. Owner's name withheld. The dwelling will contain eight rooms, bath and sleeping porch. A separate garage will also be erected on the property. Interior of the house will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used throughout. There will be furnace heat and open fire places. Mantels will be of tile and marble. Bath room will have the floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will

be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

BRIDGES—2, reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the County Supervisors plans and specifications prepared by the County Surveyor for two bridges in Santa Clara County were approved, and the Clerk of the Board was instructed to receive bids for the same until August 23rd at 11 a. m. Both structures will be of reinforced concrete. One will be a slab type bridge with reinforced concrete culverts and will be erected on the Shannon road. The other will be a two-span girder bridge and will be erected on the Bodfish road over Bodfish Creek. Plans may be obtained from the County Surveyor.

ROAD CONSTRUCTION—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The County Supervisors have instructed the County Surveyor to prepare plans and specifications for the improvement of Stevens Creek road from San Jose to Meridian Corners, and Saratoga avenue from Meridian Corners to Saratoga. Plans were also ordered for improving the following roads: Saratoga avenue from Santa Clara to Meridian Corners and Stevens Creek road from Meridian Corners to Saratoga and Mountain View road; Saratoga and Mountain View road from San Francisco road to the town of Los Gatos; Alum Rock avenue from San Jose to Alum Rock Park; also Congress Springs and Summit road. On completion of plans bids will be called for.

Contracts Awarded

BRIDGES—10, reinforced concrete. \$20,575.57. Burlingame, San Mateo Co., Cal. Engineer, City Engineer, Burlingame. Owners, City of Burlingame. Contractor, Chris Larsen, Easton. Contract price, \$20,575.57.

ROAD IMPROVEMENT—Costs as follow. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, Ransome-Crummey Co., First National Bank Bldg., Oakland, improvement of Tully, White and San Felipe roads, \$31,854.05. John W. McDonald, Jr., San Jose, improvement of Ford road, Fontanso and Phelan avenues, \$14,887.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

DWELLING

LOT 24 BLK 35, Nicholl MacDonald Ave, Civic Center of Richmond. All work for one-story six-room dwelling with excavated basement.

Owner.....B. V. Pene, San Jose, Cal.
Architect...None.
Contractor, John & James E. Sullivan, Richmond.

Filed July 22, '15. Dated July 14, '15.
Basement completed\$500
House enclosed and rough plaster
on500
Completed, ready for occupation 500
Usual 35 days..... 500

TOTAL COST, \$2000
Bond, \$1000. Sureties, E. H. Kueffer and M. A. Hays. Limit, within space

of 75 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

PTN LOTS 7, 8, 9 BLK 63, Official Map of City of Pittsburg. All work for one-story frame dwelling.

Owner.....C. A. Hooper & Co., 274 Los Medanos, Pittsburg

Architect...None.

Contractor..D. H. MacQuiddy, Concord.

Filed July 22, '15. Dated July 13, '15.

Floor joists laid..... ¼
Roof completed ¼
Completed and accepted..... ¼
Usual 35 days..... ¼

TOTAL COST, \$1669

Bond, \$835. Sureties, J. E. Fahy and Max Grabstein. Limit, within 90 days. Forfeit, none. Plans and specifications filed.

FRAME AND CONCRETE BUILDING

LOS HUCCOS GRANT in San Felipe Valley, Santa Clara Co All work for frame and concrete building.

Owner.....R. F. Morrow, Kohl Bldg., San Francisco.

Architect...None.

Contractor..F. T. Edwards, San Jose.

Filed July 14, '15. Dated July 14, '15

Frame up\$1287
Brown plaster on..... 1287
When completed 1287
Usual 35 days..... 1287

TOTAL COST, \$5150

Bond, limit, forfeit, none Plans and specifications, filed.

FRAME COTTAGE

SECOND ST., near Martha, San Jose.

All work for one-story frame cottage

Owner.....P. N. Rossich, San Jose.

Architect...C. S. McKenzie, Bank of San Jose Bldg., San Jose.

Contractor..P. E. Peterson, San Jose.

Filed July 17, '15. Dated June 6, '15.

Frame up\$607.75
1st coat plaster on..... 607.75
When completed 607.75
Usual 35 days..... 607.75

TOTAL COST, \$2431.00

Bond, \$1250. Sureties, J. A. and S. H. Chase. Limit, 35 days. Forfeit, none. Plans and specifications filed.

FACTORY

NEAR COR. JULIAN AND TERRAINE

Sfs., San Jose. All work for factory building.

Owner.....Bean Spray Pump Co.,

Julian and Terraine, S. J.

Architect...Wm. Binder, Rea Bldg., San Jose.

Contractor..Z O. Field, San Jose.

Filed July 14, '15. Dated July 12, '15.

Between 1st and 4th of each month
..... 75%
Usual 35 days..... 25%

TOTAL COST, \$6421

Bond, \$3210. Sureties, W. M. Herman and F. O. Figel. Limit, 50 days. Forfeit, \$5 per day. Plans and specifications filed.

FRAME DWELLING

STRONG SUB., suburbs of Los Gatos.

All work for one-story frame dwlg.

Owner.....Mrs. H. W. Phillips.

Architect...O. N. Vrooman, 58 N-First St., San Jose.

Contractor..H. S. Waltz, San Jose.

Filed July 19, '15. Dated July 15, '15.

Frame up\$968.75
1st coat plaster on..... 968.75
When completed 968.75

Usual 35 days..... 968.75

TOTAL COST, \$3375.00

Bond, \$1935. Surety, U. S. Fidelity & Guaranty Co. Limit, 90 days. Forfeit, \$1 per day. Plans and specifications filed.

COMPLETION NOTICES

SANTA CLARA COUNTY.

RECORDED ACCEPTED

July 10, 1915—LOT 13 BLK 69 Naglee

Park Tract, San Jose. W L Bierbach to C S Collins.... June 18, 1915

MARIN, CONTRA COSTA AND SONOMA COUNTIES

RESIDENCE—2 story and base, frame, \$16,000. Yountville, Napa Co., Cal. Architect, Sidney B. Newson, Nevada Bank Bldg., S. F. Owner, Bertran E. Nixon. The dwelling has been designed to contain fifteen rooms, three baths and sleeping porches. A separate garage and summer house will also be erected on the grounds. Interior of the dwelling will be finished in pine and hardwood. Walls will be covered with painted canvas. Hardwood floors will be used in the principal rooms. There will be a vapor system of steam heat with wood burning furnace. Bath rooms will be finished in tile and equipped with showers. A hot water circulating system will be installed. Vacuum cleaning is specified. The grounds have been laid out in formal gardens and will contain a large lily pond. Exterior of the house will be covered with cement plaster on metal lath, brick and filed stone. Plans are complete and figures are being taken.

BOULEVARD CONSTRUCTION—\$38,665. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor E. E. Arnold, Martinez. Owners, Contra Costa Co. The Board of Supervisors has decided to call for bids for the construction of the first unit of the boulevard system to run through Contra Costa County. The first strip will extend for a distance of about three miles, ending about 150 feet below the bridge over San Pablo Creek. The construction of this road will cost about \$12,600 a mile, according to County Surveyor E. E. Arnold, the amount of the first contract being approximately \$38,665. Plans call for concrete road with macadam shoulder on each side, making a road about 22 feet wide.

SEPTIC TANK—\$800. Pittsburg, Contra Costa Co., Cal. Engineer, W. H. Castner, Pittsburg. Owners, Town of Pittsburg. All bids received by the Town Board for the septic tank have been rejected as they were higher than the estimate of W. H. Castner, designer of the system, which was \$800, while the lowest bid received was that of S. B. Withers at \$1,250.

STREET IMPROVEMENT—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. City Engineer Chapman has recommended to the City Council the improvement of First, Third and Fourth streets between Chanslor avenue and the Santa Fe right-of-way.

STREET IMPROVEMENTS—Cost not stated. Napa, Napa Co., Cal. Engineer, Town Engineer, Napa. Owners, Town

of Napa. All bids received by the City Council for the improvement of First street have been rejected and new bids have been ordered called.

STREET IMPROVEMENT — \$5,000. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Ten bids were received by the Council for the improvement of Laurel avenue in the Stege District. Galbraith & Jones, 156 S. 14th street, Richmond, it is thought, submitted the lowest bid at approximately \$8,000.

SUBSTATION — 1 story, reinforced concrete. Cost not stated. Lime Point, Marin Co., Cal. Engineer, Engineering Dept. Pacific Gas and Electric Co., S. F. Owners, Pacific Gas and Electric Co. Plans are complete and a contract will be let at once for a new substation which will be erected by the Pacific Gas and Electric Co. at what is known as their Lime Station in Marin County. The building will be 40 by 50 feet, and will have steel frame, steel roof trusses and reinforced concrete walls and roof. The steel work is being done by the Western Iron Works.

BANK—2 story and base, reinforced concrete. Cost not stated. Rio Vista, Solano Co., Cal. Architect, Henry C. Smith, Humboldt Bank Bldg., S. F. Owners, Bank of Rio Vista. The building will be designed in the classic style and will be a fireproof structure. The entire main floor and basement will be occupied by the bank. Upper floor will be used for offices. Interior will be finished in pine, hardwood and ornamental plaster. Fireproof vaults will be specified. There will be a central heating system with oil burning equipment. Exterior of the building will be faced with pressed brick. Plans are being prepared.

Contracts Awarded

BANK—1 story and base, brick and concrete, \$20,000. Rio Vista, Solano Co., Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, First National Bank of Rio Vista. Contractor, Harvey A. Klyce, Sheldon Bldg., S. F. Contract price, \$20,000.

BRIDGE REPAIRS—\$1,819. Napa, Napa Co., Cal. Engineer, Town Engineer, Napa. Owners, Town of Napa. Contractor, William M. Coffield, Napa. Contract price, \$1,819.

BUILDING CONTRACTS

MARIN COUNTY.

FRAME DWELLING

D AND BAY VIEW STS., Ptn Lot 2 Blk 4, Short's add'n to San Rafael. All work for one-story frame dwelling.

Owner..... Clarence W. Gibson.
Architect... Thos. O'Connor.
Contractor... J. E. Warner.
Filed July 28, '15. Dated July 27, '15.
Frame completed\$448.25
Building enclosed 448.25
Completed and accepted..... 448.25
Usual 35 days..... 448.25
TOTAL COST, \$1793.00

Bond, \$448.25. Sureties, Geo. Gibson and S. L. Eschen. Limit, 60 days. Forfeit, none. Plans and specifications filed

REPAIRS

SAN RAFAEL. Labor and materials for the repair of building.

Owner..... M. Herzog, San Rafael.

Architect...None.

Contractor... H. H. Jepsen.

Filed July 26, '15. Dated July 19, '15.
Brick walls up.....\$499
Roof on 499
When completed 499
Usual 35 days..... 499

TOTAL COST, \$1996

Bond, \$1000. Sureties, Robert A. Carey and J. Foppiano. Limit, 40 working days. Forfeit, none. Specifications only filed.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

BRICK BUILDING

LOTS 1 AND 2 BLK "A" Townsite of Santa Fe, Richmond. All work for one-story brick building 42.6x80 feet in length and 25 feet in height from foundation to top of fire wall.

Owner..... A. Celestini, M. Lecari and G. Garibotti, Richmond.

Architect...None.

Contractor... P. M. Sanford, Richmond.

Filed July 28, '15. Dated July 21, '15.
Walls up and joists laid.....\$333.00
Roof on 333.50
Usual 35 days..... 333.50

TOTAL COST, \$2500.00

Bond, \$1250. Sureties, J. H. Plate and F. B. Hood. Limit, within space of 35 days. Forfeit, none. Plans and specifications filed.

FLATS

LOTS 32 AND 33 BLK 28, Amended Map of City of Richmond. All work for two-story flat building.

Owner..... Saul B. Kurtz, 429 Macdonald Ave., Richmond.

Architect...None.

Contractor... Raymond W. Seamans, Richmond.

Filed July 26, '15. Dated July 26, '15.
Roof completed\$750
1st coat plaster on..... 750
Accepted by owner..... 750
Usual 35 days..... 750

TOTAL COST, \$3000

Bond, \$1000. Surety, E. M. Tilden. Limit, within space of 60 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

CONTRA COSTA COUNTY.

RECORDED

July 21, 1915—STATION RESERVATION of Southern Pacific Co., Richmond. Southern Pacific Co to W R Jones & J J McGovern. July 15, '15
July 29, 1915—LOTS 1 AND 2 BLK 48, City of Richmond Tract, Richmond. Frank L. Grunhut to W H Ecker..... July 20, 1915

ACCEPTED

LIENS FILED

MARIN COUNTY.

RECORDED

July 24, 1915—YOLANDA COURT, San Anselmo. Rudolph Patcha vs Sarah L. Ehrenberg and husband.....\$350

AMOUNT

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

ROAD CONSTRUCTION — Cost not stated. Bakersfield, Kern Co., Cal.

Engineer, County Surveyor, Bakersfield. Owners, Kern County. Plans are complete and figures are now being taken for the construction of Division 10, Section 4, of the Bakersfield-Mojave road. The work consists of constructing about 6 1/4 miles of road, grading, culverts and concrete pavement. Bids will be opened on August 9th. Plans and specifications can be secured from the County Highway Commission, Bakersfield.

CHURCH—2 story and base, brick and steel, \$75,000. Fresno, Fresno Co., Cal. Architect, R. F. Hotchkiss, Fresno. Owners, First Church of Christ, Scientist. The building will be designed in the classic style and will cover a large ground area. There will be a main auditorium, Sunday school rooms and reading rooms. Interior will be finished in pine and ornamental plaster. Art glass windows are specified. Plans provide for a steam heating system. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are now being prepared.

SCHOOL—1 story, frame. Cost not stated. Modesto, Stanislaus Co., Cal. Architect, E. H. Zion, Masonic Bldg., Modesto. Owners, Town of Modesto. The building will contain four class rooms. Interior will be finished in pine. There will be modern school plumbing. Exterior will be covered with shiplap. Plans are complete and figures are being taken. Bids will be opened on August 6th. Plans and specifications can be secured from the architect.

BRIDGE—Reinforced concrete. Cost not stated. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. Bids will be received by the Board of Supervisors up to August 16, 1915, for the construction of a 40-foot reinforced concrete bridge across the Alta District Canal.

SCHOOL—1 story, frame. Cost not stated. Citrus Grove, Fresno Co., Cal. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owners, Citrus Grove School District. The building will contain four class rooms and an assembly hall. Interior will be finished in pine with some maple floors. Exterior will be covered with cement plaster on metal lath. Plans are complete and bids are being taken. Figures will be opened on August 7th. Plans and specifications can be secured from the architect.

Contracts Awarded.

FLUME—Reinforced concrete, \$60,602.95. Modesto, Stanislaus Co., Cal. Engineer, Chief Engineer, Modesto Owners, Modesto Irrigation District. Contractor, Ernest Green, Modesto. Contract price, \$60,602.95.

BUILDING CONTRACTS.

FRESNO COUNTY.

ALTERATIONS

LOTS 31 AND 32 BLK 82, Fresno.

Alterations.

Owner..... Telephone Co., 2028 Tulare St., Fresno.

Architect...None.

Contractor... Pacific Fire Extinguisher Co., 507 Montgomery, S. F.
COST, \$1000

COMPLETION NOTICES**FRESNO COUNTY.**

RECORDED **ACCEPTED**
 July 22, 1915—LOT 11 BLK 17 Hazelwood, Fresno. David Wells to Metzger & Weston.... July 20, 1915
 July 28, 1915—WEST END AVE, San Rafael. James Hornell to H H Jepsen..... July 27, 1915

LIENS FILED.**FRESNO COUNTY.**

RECORDED **AMOUNT**
 July 22, 1915—LOTS 42 AND 43 BLK 7, Van Ness Heights, Fresno C S Pierce Lumber Co vs H D Thornton and J S Brown.....\$120

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

BRIDGE—Steel and reinforced concrete. Cost not stated. Redding, Shasta Co., Cal. Engineer, County Surveyor, Redding. Owners, Shasta County. Plans A and B for a wagon bridge across Clear Creek on the Igo road were adopted at the last meeting of the County Supervisors and bids were ordered received until August 21st. Plan A calls for a reinforced concrete bridge and plan B for a steel structure. Plans and specifications together with full information may be had from the County Surveyor at Redding.

BRIDGE—Reinforced concrete. Cost not stated. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. Plans have been completed and approved for the construction of a highway bridge over Butte Creek on the State Highway between Nelson and Chico. Bids are now being taken and will be opened on August 17th. Plans and specifications can be secured from the County Clerk.

HIGHWAY CONSTRUCTION—Cost not stated. Sacramento, Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids were opened at the last meeting of the State Highway Commission for constructing highways in five counties. A complete list of these bids will be found under the heading of San Francisco in this issue.

STREET IMPROVEMENTS—Cost as follows. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Bids received for the improvement of Weber and Miner avenues, Market, Commerce, Sonora, Church, Washington, Sutter and San Joaquin streets, are as follows: Eaton & Smith, 407 11th street, S. F., \$84,556.70; Federal Construction Co., Sharon Bldg., S. F., \$98,007.55; Clark & Henery, Ochsner Bldg., Sacramento, \$99,003.02. All bids were taken under advisement. An award will probably be made at the next meeting.

SEWERS AND STREET IMPROVEMENTS—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has adopted plans and specifications and has ordered bids called for the construc-

tion of storm sewers in parts of Maple, Elm, North Commerce, North Center and North El Dorado streets. Plans for the work may be secured from the City Engineer at Stockton. The Council also adopted a resolution of intention of the improvement of East street between Park and Poplar streets, to consist of asphalt concrete paving and concrete curbs and gutters.

CHURCH—2 story, and base, reinforced concrete, \$30,000. Sacramento, Cal. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, Roman Catholic Church of Sacramento. The building has been designed in the Mission style and will contain an auditorium seating 750 people. The plans also provide for Sunday School rooms and a large hall. Interior will be finished in pine and ornamental plaster. There will be a central heating system. Art glass windows and marble altars will be provided. Exterior of the building will be faced with cement plaster. Plans are being prepared.

FIRE HOUSES—2, 1 and 1½ story and base, brick and frame. Cost as follows. Stockton, San Joaquin Co., Cal. Architects, Ralph P. Morrell, Odd Fellows Bldg., and W. B. Thomas, Yosemite Bldg., Stockton. Owners, City of Stockton. A. J. McPhee & Son, Stockton, presented the lowest figures for both the Rose street and California street fire houses and will probably be awarded the contracts. Their bid for the Rose street house was \$5,696.50, oak floor, \$150 extra, and slate roof, \$160 extra. California street house, \$6,978.

BRIDGE—Reinforced concrete. Cost not stated. Dunsmuir, Siskiyou Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Plans are complete and figures are now being taken for the construction of a large reinforced concrete bridge over the Sacramento River. The structure will be 332 feet long with one arch of 180 feet clear span and two arches of about 114 feet clear span. Bids will be opened on August 23rd. Plans and specifications can be secured from the State Highway Commission at Sacramento or its branch offices in San Francisco or Los Angeles.

SCHOOL—1 story, hollow tile construction, \$15,610. Galt, Sacramento Co., Cal. Architect, Clarence C. Cuff, Ochsner Bldg., Sacramento. Owners, Galt School District. Contractors, E. E. Etherton & Co., Monadnock Bldg., S. F. The contractors are now taking sub-figures on all parts of the work except the concrete and carpentry.

ROAD MACHINERY—Cost not stated. Sonora, Tuolumne Co., Cal. Engineer, County Surveyor, Sonora. Owners, Tuolumne County. The County Board of Supervisors are taking under advisement the purchase of a ten-ton gasoline roller, a six thousand pound scarifier and an immense grader for the improving of the county roads.

BRIDGE—Reinforced concrete, \$6,000. Ukiah, Mendocino Co., Cal. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Contractor, V. M. Price. Contract price, \$6,000.

BRIDGE—Reinforced concrete, \$28,235. Shasta Co., Cal. Engineer, State

Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Contractors, Ross Construction Co., Sacramento. Contract price, \$28,235.

BRIDGES—2 reinforced concrete, \$5,450. Shasta Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Contractor, F. Rolandi, S. F. Contract price, \$5,450.

Contracts Awarded

BRIDGE—Reinforced concrete, \$2,480. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractor, Frank H. Green, Eureka. Contract price, \$2,480.

STREET PAVING—\$15,700. Oroville, Butte Co., Cal. Engineer, City Engineer, Oroville. Owners, City of Oroville. Contractors, Clark-Henery Co., Ochsner Bldg., Sacramento. Contract price, \$15,700.

SCHOOL—1 story and base, hollow tile, \$14,410. Galt, Sacramento Co., Cal. Architect, Clarence C. Cuff, Ochsner Bldg., Sacramento. Owners, City of Galt. Contractor, E. E. Etherton, Monadnock Bldg., S. F. Contract price, \$14,410.

SCHOOL AUDITORIUMS—2, 1 story, frame, \$9,200 and \$2,700. Sacramento, Cal. Architect, none. Owners, City of Sacramento. Contractor, W. J. Mathews, City Hall, Sacramento. Contract price, Marshall School addition, \$9,200. Lincoln School addition, \$2,700.

SCHOOL ALTERATIONS AND ADDITIONS—\$2,700. Barry School District, Sutter Co., Cal. Architect, none. Owners, Barry School District. Contractors, Gould Bros., Yuba City. Contract price, \$2,700.

BANK AND OFFICES—7 story and base. Class A construction, \$200,000. Sacramento, Cal. Architect, R. A. Herold, Forum Bldg., Sacramento. Owners, Capitol National Bank. Contractors, McGillivray Construction Co., Nicholas Bldg., Sacramento. Contract price, \$200,000.

Low Bidders On Highway Jobs.

State Highway Commission Open Bids For Work in Five Counties. No Contracts Were Awarded.

(By Special Wire)

The following firms submitted the lowest bids for constructing State highways in the following counties:

Colusa Co. Div. 3, Route 7, Sec. A, about 3 miles. Clark & Henery Co., Ochsner Bldg., Sacramento, \$5,778.75.

Marin Co., Div. 5, Route 1, Sec. A, about 4 miles. R. B. Markle, Hearst Bldg., S. F., \$21,255.40.

Monterey Co., Div. 5, Route 2, Sec. D about 11.7 miles. Highway Paving & Constructing Co., S. F., \$54,507.

Santa Barbara Co., Div. 5, Route 2, Sec. D, about 11.4 miles. C. H. Hudson, Los Angeles, \$54,586.

San Luis Obispo Co., Div. 5, Route 2, Sec. B, about 10 miles, John Marsh. Bakersfield, \$67,809.45.

Complete List Of Bids For Highway.

Additional Information Received From Sacramento on Bids For State Highways In Five Counties.

In the issue of July 27 the "Builder" published a list of the low bidders on State Highway work in Monterey, Colusa, Santa Barbara, Marin and San Luis Obispo counties. In addition to this information the following complete list of the bidders, together with the engineer's estimate of the work and a list of the materials to be furnished by the State is given below. No awards have as yet been made.

Monterey Co., Div. 5, Route 2, Sec. D.

A. W. & C. H. Gorrell, S. F.	\$72,847.50
W. A. Dontanville, Salinas	69,064.30
Hoffman & McLaren, Oakland	63,395.00
Lou G. Hare, Salinas	76,527.10
Highway Paving & Constr. Company, S. F.	54,507.00
Twohy Bros., S. F.	55,437.00
Tieslau Bros., S. F.	73,966.00
Petersen & Grier, S. F.	65,733.00

Engineer's Estimate, \$83,019.77

Materials furnished by the State: Pipe railing, reinforcing steel, corrugated iron pipe, Portland cement, sand and coarse aggregate. Total, \$59,111.50.

Colusa Co., Div. 3, Route 7, Sec. A.

Clark & Henery Constr. Co., Sacramento	\$5,778.75
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Engineer's Estimate, \$5,570.25

Materials furnished by State, None.

Santa Barbara Co., Div. 5, Route 2, Sec. D.

M. Ryan & Son, El Centro	\$65,293.03
C. H. Hudson, Los Angeles	54,586.00
Fairbanks & Baechtel, Willits	69,919.32
Leigh G. Garnsey, L. A.	67,959.66
Tieslau Bros., S. F.	71,802.95
Richard Rothwell, L. A.	60,631.75
Bates, Borland & Ayer, Oakland	61,564.23
F. Rolandi, S. F.	73,685.73
Robert Sherer, Los Angeles	58,148.23
Occidental Construction Co., Los Angeles	69,655.55
F. L. Smith Co., Eureka	59,466.12
F. H. Green, Eureka	59,994.44
G. W. Connors, Eureka	63,004.55
E. F. Hunt, Santa Margarita	61,831.82

Engineer's Estimate, \$62,162.45

Materials furnished by State: Pipe railings, reinforcing steel, corrugated iron pipe, Portland cement, sand, coarse aggregate and rubble masonry. Total, \$25,650.30.

San Luis Obispo Co., Div. 5, Route 2, Sec. B.

F. Rolandi, S. F.	\$72,651.60
W. A. Dontanville, Salinas	74,491.90
Leigh G. Garnsey, L. A.	76,362.06
Twohy Bros., S. F.	82,791.15
Bent Bros., Los Angeles	72,435.36
Petersen & Grier, S. F.	75,191.25
Tieslau Bros., S. F.	74,902.80
Pacific Coast Constr. Co., Fresno	69,386.40
Bates, Borland & Ayer, Oakland	75,079.65
Seabury B. Peterson, S. F.	74,747.75
John D. Marsh, Bakersfield	67,809.45
C. H. & A. W. Gorrell, S. F.	70,864.45

Engineer's Estimate, \$71,700.40

Materials furnished by State: Pipe railing, reinforcing steel, corrugated iron pipe, Portland cement, sand and coarse aggregate. Total, \$56,736.10.

Marin Co., Div. 4, Route 1, Sec. A.

F. Rolandi, S. F.	\$29,088.60
Palmer & McBryde, S. F.	25,489.40
Twohy Bros., S. F.	52,084.30
The Daniel O'Day Co., S. F.	29,201.40
Tieslau Bros., S. F.	26,853.00
Bauer & Beard, Two Rivers, Cal.	27,421.90
W. J. Schmidt, Berkeley	34,872.00
Erickson & Peterson, S. F.	34,290.34
Spring Constr. Co., Berkeley	30,537.56
Sunset Constr. Co., S. F.	31,552.20
Bates, Borland & Ayer, Oakland	26,849.00
Fairbanks & Baechtel, Willits	29,960.70
R. B. Markle Jr., S. F.	21,255.40
Theo. Manetas, S. F.	26,504.50
J. H. Falconer, Pinole	23,498.60
G. W. Connors, Eureka	26,885.60
O'Brien Bros., Martinez	28,220.20
Contra Costa Constr. Co., Berkeley	27,532.40
P. H. Hoare, Oakland	24,475.30

Engineer's Estimate, \$28,280.11
Materials furnished by State: Pipe railing, reinforcing steel, corrugated iron pipe, Portland cement, sand and coarse aggregate. Total, \$2,934.87.

BUILDING CONTRACTS SACRAMENTO COUNTY.

FRAME COTTAGE

N 1/2 OF LOT 1, C, D, 25th and 26th Sts., Sacramento. One-story frame cottage.	
Owner.....W. E. Terwilliger, 2401 N St., Sacramento.	
Architect.....None.	
Contractor.....Cippa Bros., 314 21st St., Sacramento.	
Filed July 19, '15. Dated July 16, '15.	
	COST, \$2425

GARAGE

NO. 1819 F ST., on W 1/2 of Lot 6 Blk E, F, 15th and 19th, Sacramento. One-story private garage.	
Owner.....Mrs. Hunter W. Shannan, Premises.	
Architect.....None.	
Contractor.....A. W. Norris, 409 21st St., Sacramento.	
	COST, \$379

REPAIRS

S 1/2 LOT S, P, Q, 16th and 17th Sts., Sacramento. General repairs to residence.	
Owner.....L. W. Allspaugh, 1629 16th St., Sacramento.	
Architect.....None.	
Day's work.....	COST, \$325

FRAME APARTMENTS

NO. 2400 P ST., on W 1/2 Lot 1 Blk P, Q 24th and 25th Sts., Sacramento. Two-story frame apartments.	
Owner.....B. Woodbridge, Roseville.	
Architect.....None.	
Contractor.....E. E. Sydenstrecker, 2500 O St., Sacramento.	
	COST, \$6200

FRAME RESIDENCE

TWENTY-SECOND ST., bet 2nd and 3rd Aves, on Lot 131, West Curtis Oaks, Sacramento. Two-story 7-room frame residence.	
Owner.....J. C. Carly Co., 323 J St., Sacramento.	
Architect.....None.	
Contractor.....Corum & White, 2523 1st Ave., Sacramento.	
	COST, \$3700

FRAME RESIDENCE

NO. 3017 W ST., on W 1/2 Lot 6 Blk V, W, 30th and 31st Sts., Sacramento. One-story 5-room frame residence.	
Owner.....William Arnold, 429 1/2 O St., Sacramento.	
Architect.....None.	
Contractor.....W. B. Phillips, 4015 Cypress Ave., Sacramento.	
	COST, \$2000

FRAME RESIDENCE

SECOND AVE., on S 1/2 Lot 141, West Curtis Oaks, Sacramento. Two-story six-room frame residence.	
Owner.....C. T. Tinker, 21st, Boxler Tract, Sacramento.	
Architect.....None.	
Contractor.....Corum & White, 2523 1st Ave., Sacramento.	
	COST, \$2300

REMODEL STORE

NOS. 329-331 K ST., on S 100 feet Lot 5 Blk J, K, 3rd and 4th Sts., Sacramento. Remodel store front.	
Owner.....Commercial Investment Co.	
Architect.....None.	
Contractor.....Siller Bros., 1614 13th St., Sacramento.	
	COST, \$1000

REPAIRS

NO. 2501 Y ST., on W 1/2 Lot 8 Blk X, Y, 23th and 26th Sts., Sacramento. Repair and reshingle roof of residence.	
Owner.....P. L. Reed, 2613 28th St., Sacramento.	
Architect.....None.	
Day's work.....	COST, \$900

REMODEL HOUSE

NO. 416 ELEVENTH ST., on N 1/2 of Lot 5 Blk N, O, 10th and 11th Sts., Sacramento. Remodel frame tenement house.	
Owner.....Emma C. Klewe, Oakland.	
Architect.....None.	
Contractor.....E. Thomas, 2021 24th St., Sacramento.	
	COST, \$450

REMODEL

NO. 307 L ST., on E 20 feet of S 1/2 Lot 8 Blk K, L, 3rd and 4th Sts., Sacramento. Remodel store front in brick building.	
Owner.....Thereza Vogel, 700 12th St., Sacramento.	
Architect.....None.	
Contractor.....G. W. Kopp, 1511 15th St., Sacramento.	
	COST, \$300

PLUMBING ON ABOVE

Joaquin Bldg., Stockton. Contractor.....C. A. Towne, 927 N-Lincoln St., Stockton.	
Filed July 14, '15. Dated July 9, '15.	
Concrete work completed.....	\$500
Frame completed.....	1183
Building enclosed.....	1183
Building completed.....	1185
Usual 35 days.....	1183
	TOTAL COST, \$5234
Bond, none. Limit, 90 days. Forfeited, none. Plans and specifications filed.	
PLUMBING ON ABOVE	
Contractor.....Edward L. Gnekow, 647 E-Main St., Stockton.	
Filed July 14, '15. Dated July 9, '15.	
Work roughed in.....	\$333
Work completed.....	333
Usual 35 days.....	180
	TOTAL COST, \$946

Bond, limit, forfeit, none. Plans and specifications filed.

BUILDING

BLK E, F, 5TH AND 6TH STS., in Galt Building.

Owner.....Galt School District.

Architect...None.

Contractor...E. E. Etherton & Co.

Filed July 27, '15. Dated — 7, '15.
COST, \$14,410

FRAME ADDITION

Q ST., bet 4th and 5th on Lots 5, 6, 7, S, P, Q, 4th and 5th, Sacramento. All work for two-story and basement frame addition to Lincoln School.

Owner.....Board of Education.

Architect...None.

Contractor...W. J. Mathews, City Hall, Sacramento.

COST, \$9,200

FRAME ADDITION

NO. 2700 G ST., on N ½ Blk G, H, 27th and 28th Sts., Sacramento.

Frame addition to Marshall School.

Owner.....Board of Education.

Architect...None.

Contractor...W. J. Mathews, City Hall, Sacramento.

COST, \$4,700

PARTITIONS, ETC.

NOS. 411-419 L ST., on W ½ Lot 6 and E ½ Lot 7, K, L, 4th and 5th Sts., Sacramento. Partition and shelving in basement.

Owner.....Weinstock, Lubin Co., 418 K St., Sacramento.

Architect...None.

Day's work.

COST, \$2,000

CONCRETE PAVEMENT, ETC.

FROM E LINE SECOND ST. TO W line 12th St. on Jay St., Sacramento. Covering of concrete pavement with a flush coat and 1½ inches of sheet asphaltum.

Owner.....Pacific Gas & Electric Co., 1100 K St., Sacramento.

Architect...None.

Contractor...Clark & Henery Constr. Co., Ochsenr Bldg., Sacramento.

Contractor to furnish labor and all other acts at 7½ cents per sq. ft

BANK AND OFFICES.

516 "J," Sacramento. All work to erect class "A" bank and office building, 700 J on N 90 feet of lot 1, Blk J-K, 7-8, Sacramento.

Owner.....Capital National Bank, 516 "J," Sacramento.

Architect...R. A. Herold, Forum Bldg., Sacramento.

Contractor...McGillivray Construction Co., Nicholas Bldg., Sacramento.

COST, \$200,000

FRAME APARTMENTS

NO. 2717 P ST., W ½ Lot 6 Blk O, P, 27th and 28th Sts., Sacramento. Two-story frame apartment house 4 apartments 5 rooms each.

Owner.....Win Kleaser, 2120 T St., Sacramento.

Architect...None.

Contractor...W. R. Saunders, 2810 I St., Sacramento.

COST, \$600

FRAME TENEMENTS

NO. 2021 I ST., Sacramento. Two-story frame tenement 4 apartments of 4 rooms each.

Owner.....Mrs. Sarah Gorman, 1806 H St., Sacramento.

Architect...None.

Contractor...W. R. Saunders, 2810 I St., Sacramento.

COST, \$600

REMODEL

NO. 810 K ST., on E ½ of W ½ Lot 2 Blk K, L, 8th and 9th Sts., Sacramento. Remodel store front and remodel store.

Owner.....Nellie Turton et al, Care Hickman Coleman Can, McDowell & Harding, 724 K St., Sacramento.

Contractor...Thielbahr & Bender, North Sacramento.

COST, \$650

FRAME GARAGE

NO. 415 O ST., (rear) on E ½ of N ½ Lot 7 Blk N, O, 4th and 5th Sts., Sacramento. Frame public garage.

Owner.....H. Kishi, 1203 3rd St., Sacramento.

Architect...None.

Contractor...N. Horjuchi, 219 Japanese Alley, Sacramento.

COST, \$500

REMODEL RESIDENCE

NO. 2224 J ST., on W ½ of N ½ Lot 4 Blk J, K, 22nd and 23rd Sts., Sacramento. Remodel one-story frame residence.

Owner.....Susan F. Howard, 1714½ L St., Sacramento.

Architect...None.

Contractor...Dan Tatti, 2116 O St., Sacramento.

COST, \$500

BUILDING CONTRACTS

SAN JOAQUIN COUNTY.

BRICK RESIDENCE

NEAR COR. SAN JOAQUIN & LA Fayette Sts., Stockton. All work for three-story brick residence.

Owner.....Alexander & Maria Eymard, Stockton.

Architect...Ralph P. Morrell, 12-15 I. I. O. F. Bldg., Stockton.

Contractor...Bert Fisher, Stockton.

Filed July 24, '15 Dated July 22, '15.

1st story joists on.....\$2000

Gravel roof and rough plumbing completed.....2000

Inside wood trim and hardware.....1100

Usual 35 days.....1700

TOTAL COST, \$6800

Bond, \$——. Sureties, T. E. Fisher and E. L. Slaughter. Limit, 60 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

COR. BAKER AND ACACIA STS., Architect...Joseph Losekann, San Stockton. All work except plumbing for two-story frame residence.

Owner.....Dr. S. H. Hall, San Joaquin Bldg., Stockton.

LIENS FILED

SACRAMENTO COUNTY.

RECORDED

July 22, 1915—W ½ LOT 6, W, X, 23d and 24th Sts., Sacramento. W J

AMOUNT

E. H. Williams

Chalmer Munday

Munday & Williams

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O'Brien vs William M Morris....
July 23, 1915—E ½ LOT 8, I, J, 7th & 8th Sts., Sacramento. Hugh McCann and George Forbes vs The Seis Co\$55.70

RELEASE OF LIENS

SACRAMENTO COUNTY.

RECORDED AMOUNT
July 23, 1915—NW SIMON & POPLAR in Galt. J W Burch to John Currie\$20
July 22, 1915—FARMS 669 AND 663, Central California Tract Unit No. 10 Ehrhardt & Rhoades to Hamilton Investment Co\$140

LOS ANGELES AND SOUTHERN CALIFORNIA.

CHURCH—1 story and base, brick. Cost not stated. Riverside, Riverside Co., Cal. Architect, Thomas Franklin Power, Higgins Bldg., L. A. Owners, Roman Catholic Church. The building

has been designed in the classic style and will cover a considerable ground area. The main auditorium will seat 550 people. Plans also provide for Sunday school rooms. Interior will be finished in pine with ornamental plaster. Art glass windows are specified. Exterior of the building will be faced with cement plaster. Plans have been revised and new figures are being taken. The foundation work is complete.

FLATS—2 story and base, frame, \$30,000. Los Angeles, Cal. Architect, H. H. Whiteley, Story Bldg., L. A. Owner, Henry M. Jones. The building will be erected on West Washington street near Rose Hill, and will contain a total of 15 flats. The design is in the Italian patio style. Interiors will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. A central heating system will be installed. Bath rooms will be finished in tile. Exterior will be covered with cement plaster on metal lath. Plans are being prepared.

COUNTRY CLUB—1 story and base, frame, \$20,000. Los Angeles, Cal. Architects, Edelman & Barnett, Black Bldg., L. A. Owners, Concordia Country Club. The building will be erected about seven miles out of the city and has been designed for living rooms as well as the usual club rooms. There will be a large banquet hall, ball rooms and office. Interior will be finished in pine with some hardwood. Hardwood floors will be used throughout. Plans provide for a central heating system and open fire places. Mantels will be of field stone. Exterior of the building will be covered with cement plaster and shingles. Plans are now being prepared.

HOSPITAL GROUP—San Bernardino, San Bernardino Co., Cal. The main building will be a four-story structure and will contain the administration offices, reception rooms, consultation rooms, dispensary, nurses' quarters, etc. There will be two two-story wings to contain the operating rooms, wards and private rooms for patients. The tuberculosis ward, indigent quarters and criminal ward buildings will be located at different points on the site. The entire group of buildings will accommodate about 246 patients. The style of architecture will be Spanish Renaissance. The main building will be of reinforced concrete construction with plastered exterior and clay tile roof. The other buildings will be of metal stud and metal lath and plaster construction with tile roofs. The equipment will be modern in every particular with hospital plumbing, elevators, steam heat, marble and tile work, etc. There will also be a number of residences and cottages for the superintendent, doctors and other members of the hospital staff. Plans are being prepared.

JETTY—Earth and concrete. Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. The County Supervisors have directed the Surveyor to prepare plans and specifications for the construction of a jetty or such other improvements as may be necessary to confine the water of the

Santa Maria River in the channel of said river under the Santa Maria bridge at the Santa Maria River crossing.

CHURCH AND RECTORY—1 and 2 story, frame, \$20,000. Wilmington, Los Angeles Co., Cal. Architect, Albert C. Martin, Higgins Bldg., L. A. Owners, Roman Catholic Church. The church will cover an area of 50 by 140 feet and, besides the main auditorium, which will seat 400 people, there will be Sunday school rooms and a parish hall. The rectory will contain eight rooms, baths and sleeping porch. Interior of both the church and rectory will be finished in pine. Some hardwood floors will be used. There will be open fire places and tile mantels. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SCHOOL—1, 2 and 3 story, brick. Cost not stated. Los Angeles, Cal. Architects, Nedham & Cline, Broekman Bldg., L. A. Owners, City of Los Angeles. The building will be known as the Lincoln High School and will be erected on North Broadway. The auditorium will cover an area of 100 by 110 feet and will seat 500 people. The library building will be three stories, covering an area of 93 by 88 feet, and the music building, a two-story structure, covering an area of 54 by 110 feet. Interiors will be finished in pine with maple floors. There will be considerable marble and tile work and ornamental plaster. Plans provide for steam heat, modern school plumbing, vacuum cleaning and program clocks. Exterior will be faced with cement plaster. Roofs will be of clay tile. Plans are complete and figures are being taken.

SCHOOL—1 story and base, brick, \$30,000. Redondo Beach, Los Angeles Co., Cal. Architect, L. B. Pemberton, Auditorium Bldg., L. A. Owners, Redondo Beach Grammar School District. The building will cover an area of 213 by 187 feet and will contain eight class rooms, office, an auditorium seating 480 people and two play rooms. Interior will be finished in pine. Maple floors will be used in the class rooms. Plans provide for steam heat, oil burning furnace and modern school plumbing. Exterior of the building will be faced with ruffled brick. Plans are now being prepared.

SCHOOL—1 story and base, brick. Cost not stated. Los Angeles, Cal. Architects, O. P. Dennis and H. H. Hewitt, Fay Bldg., L. A. Owners, City of Los Angeles. The building will be erected on the 24th street lot, and has been out for figures recently. All bids were rejected and plans are now being revised. New bids will be called for shortly.

SCHOOL—2 story and base, brick, \$30,000. Los Angeles, Cal. Architects, J. J. J. & Schaeffer, Citizens' National Bank Bldg., L. A. Owners, City of Los Angeles. This building has recently been out for figures but all bids were rejected and plans are now being revised. New bids will be called for shortly. The building will be erected on the Annandale School site.

SCHOOL—1 story, brick and frame. Cost not stated. Saticoy School District, Ventura Co., Cal. Architect, G. S. Bliss, Thomas Bldg., Santa Barbara. Owners, Saticoy School District. The building will be partly of brick and

partly of frame construction. Interior will be finished in pine with some maple floors. Separate bids are being taken for the general construction, heating, plumbing, electric work and painting. Plans can be secured from the architect. Bids will be opened on August 2nd.

ROAD IMPROVEMENT—Cost not stated. Riverside, Riverside Co., Cal. Engineer, County Surveyor, Riverside. Owners, Riverside County. Plans are complete and figures will be opened on August 4th for the following: Improvement of a portion of divisions B and C, Route No. 2 (Murrieta to foot of Temecula grade) the improvement consisting in part of grading and paving with concrete 16 feet wide and 1 inches thick 8.6 miles of road; also a 60-foot concrete bridge which may be bid on separately. Plans are on file at the office of the County Clerk at Riverside.

LIBRARY—1 story and base, brick or hollow tile, \$35,000. Los Angeles, Cal. Architect, W. H. Dodd, Marsh-Strong Bldg., L. A. Owners, City of Los Angeles. The building will be erected at the corner of First and Chicago streets, covering an area of 100 by 80 feet. There will be two large reading rooms, stack room and office for the librarian. Interior will be finished in hardwood with hardwood floors. Hollow tile interior partitions and metal window sash and frames are specified. There will be steam heat, oil burning furnace and vacuum cleaning. Metal book stacks are specified. Exterior of the building will be faced with gray pressed brick trimmed with terra cotta. A clay tile roof will be used. Plans are complete and figures are being taken. Bids will be opened on August 20th.

Contracts Awarded.

STREET PAVING—\$10,606.01. Anaheim, Orange Co., Cal. Engineer, County Surveyor, Santa Ana. Owners, Orange County. Contractor, Oscar Ford, Riverside. Contract price, \$10,606.01.

RESIDENCE—2 story and base, frame and plaster. Cost not stated. Beverly Hills, Los Angeles Co., Cal. Architects, Milwaukee Building Co., Wright & Callender Bldg., L. A. Owner, King C. Gillette. Contractors, Milwaukee Building Co., Wright & Callender Bldg., L. A. Contract price not stated.

BRIDGE—Reinforced concrete, \$18,900. Santa Barbara, Santa Barbara Co., Cal. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractors, Munoz & Munoz, Central Bldg., L. A. Contract price, \$18,900.

RESIDENCE—2 story and base, brick and frame. Cost not stated. Los Angeles, Cal. Architects, Montgomery & Montgomery, Trust and Savings Bldg., L. A. Owner's name not given. Contractor, Charles H. Thompson, Shorcham Apts., L. A. Contract price not stated.

SCHOOL—1 story and base, reinforced concrete, \$22,500. Angeles Mesa, Los Angeles Co., Cal. Architect, Thomas Franklin Power, Higgins Bldg., L. A. Owners, Angeles Mesa School District. Contractors, The Mann-Knox Construction Co., Delta Bldg., L. A. Contract price, \$22,500.

SCHOOL—1 story and base, frame, \$32,351. El Centro, Imperial Co., Cal. Architect, Fred T. Harris, Holt Bldg., El Centro. Owners, City of El Centro. Contractors, Long Beach Construction Co., Long Beach. Contract price, \$32,351.

PORTLAND AND OREGON

SCHOOL—1 story and base, brick and hollow tile, \$23,500. Beaverton, Ore. Architects, Tourtellotte & Hummel, Rothchild Bldg., Portland. Owners, City of Beaverton. The building will contain eight class rooms, an auditorium, departments of domestic science and manual training and a large gymnasium. Interior will be finished in pine with maple floors in the class rooms. There will be steam heat, modern school plumbing and program clocks. Exterior of the building will be faced with pressed brick. Plans are now being prepared.

SCHOOL—2 story and base, brick or hollow tile, \$55,000. Seaside, Ore. Architect, Ernest Kroner, Worcester Bldg., Portland. Owners, City of Seaside. The building will contain eight class rooms, library, an auditorium, office and manual training and domestic science departments. Interior will be finished in pine with maple floors in the class rooms. There will be steam heat, a program clock system, vacuum cleaning and modern school plumbing. Exterior of the building will be faced with pressed brick or cement plaster. Plans are now being prepared.

SCHOOL—2 story and base, brick, \$50,000. Monmouth, Ore. Architect, John V. Bennes, Chamber of Commerce Bldg., Portland. Owners, State of Oregon. The building has been designed for a State Normal School and will cover an area of 128 by 84 feet. The first floor will contain an auditorium seating 240 people, three class rooms, offices and rest rooms. The second floor has been arranged for four class rooms, art and music departments and library. Manual training rooms and domestic science department will occupy the basement. Interior will be finished in pine with maple floors. Plans provide for steam heat, vacuum cleaning, program clocks and modern school plumbing. Exterior of the building will be faced with pressed brick. Plans are complete and figures are being taken.

Contracts Awarded.

SCHOOL—2 story and base, brick and concrete, \$15,362. Oregon City, Ore. Architects, Vonderahle & Forbes, Oregon City. Owners, Oregon City. Contractors, Stebbing Bros., 626 7th street, Portland. Contract price, \$15,362.

WATER SYSTEM—\$60,000. West Linn, Ore. Engineers, S. A. Cobb and H. A. Rands, West Linn. Owners, Town of West Linn. Contractors, Oregon Engineering and Construction Co. Contract price, \$60,000.

SUNDAY SCHOOL—2 story and base, brick and steel, \$20,000. Portland, Ore. Architects, Tourtellotte & Hummel, Rothchild Bldg., Portland. Owners, First Methodist Church. Contractor, E. B. White, Lumber Exchange Bldg., Portland. Contract price, \$20,000. This contract does not include the plumbing, heating, electric work, painting, sheet metal work or roofing.

RAILROAD CONSTRUCTION—\$1,500,000. Riverton to Crane Creek, Ore.

Engineer's name not given. Owners, Oregon-Easton Railroad Co., Portland. Contractors, Twoby Bros. Co., Railroad Bldg., Portland. Contract price, \$1,500,000.

SEATTLE AND WASHINGTON

Bridges, Steel and concrete. Cost as follows. Seattle, Wash. Engineer, City Engineer, Seattle. Owners, City of Seattle. Figures given out by E. A. Rapp, bridge engineer, regarding the two Lake Washington Canal bridges show the low bidders as follows: Fifteenth Avenue Bridge—Booker, Klehl & Whipple, substructure, \$95,115.50; Beers Building Co., superstructure, \$116,049.50. Substructure and superstructure: Beers Building Co., \$238,416; Hans Pederson, \$242,620.30. Svinger's estimate, \$316,391. Fremont Avenue Bridge—Pacific States Construction Co., \$112,651.50; Beers Building Co., superstructure, \$134,601. Substructure and superstructure, Beers Building Co., \$211,701.50; Hans Pederson, \$274,471. Engineer's estimate, \$360,076.

APARTMENT HOUSE—3 story and base, brick, \$49,000. Seattle, Wash. Architect, C. W. Saunders, Alaska Bldg., Seattle. Owner, Alice Cosgrove. The building will be erected at 1809 Broadway and has been designed to contain a total of 20 apartments of two, three and four rooms. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the principal rooms. There will be steam heat, a hot water system and vacuum cleaning. Bath rooms will be finished in tile. All apartments will have wall beds and private bath rooms. Exterior of the building will be faced with pressed brick. Plans are complete and figures will be called for at once.

Contracts Awarded

RESIDENCE—2 story and base, frame and stucco, \$30,000. Seattle, Wash. Architects, Somerville & Putnam, White Bldg., Seattle. Owner, Dr. A. I. Bouffleur. Contractor, M. Arveson, Downs Bldg., Seattle. Contract price, \$30,000.

BRIDGE—Steel and concrete, \$27,522. Tolt, King Co., Wash. Engineer, County Surveyor, Seattle. Owners, King County. Contractor, M. P. Zindorf, Alaska Bldg., Seattle. Contract price, \$27,522.

"American Builders' Week" at Panama-Pacific International Exposition

The most important coming event of the year to Builders is unquestionably "American Builders' Week" at the Panama-Pacific International Exposition in October next, from the 18th to the 23rd. Indeed it is doubtful whether any event in the history of the United States can possibly have any greater significance to Builders and the allied trades.

The importance of the Builder, as an individual as well as collectively, his intimate connection with all industrial and national progress, is at once manifest when we recall the fact that forty

per cent of the entire population of the United States is directly or indirectly dependent upon the Building industry and its success. No one line of business has more to do with progress than the builders of homes, of cities and towns and those public utilities upon which the comfort, among the building fraternity of this great nation, has ever occurred before, health, and happiness of our people depend.

No such opportunity as American Builders' Week, of promoting harmony nor could a more appropriate place or season for such a gathering have been selected.

The assembling of many thousands of Builders from every city and corner of the country to participate in such a Builders' celebration cannot fail to promote and foster an interchange of progressive thought upon technical and business matters or to more firmly establish good fellowship, educational and social intercourse.

Actively identified as Builders naturally are in the upbuilding and development of our cities and towns, these visitors to San Francisco this year will have not only the opportunity of viewing the greatest constellation of exquisitely beautiful Exposition buildings ever built, but in the City by the Golden Gate, renowned the world over for its progress and hospitality, they will find what is today, without doubt, the most up-to-the-minute, modern city, in the world.

From a mass of ashes, ruins, and complete desolation which covered over four square miles in April 1906, a new city has arisen! A new San Francisco, The "Queen of the West," and she stands today an eloquent monument to her local Builders, the men who are now cordially inviting their brethren and all who build, to come and view their finished work, to share their hospitality, and to contribute by their presence, to the joy and success of American Builders' Week.

It is eminently fitting therefore, that at this great international Exposition, which commemorates the bringing-together, the uniting of two great oceans Builders, that our national Builders in every line of activity, should also be brought together and be permanently united in lasting bonds of friendship, sympathy, and mutual support, upon a scale never before attempted.

We learn that a strong general committee embracing representatives from all branches of the building business in San Francisco, with numerous sub-committees, are actively engaged in making the necessary arrangements to insure the success of this great celebration of Builders. Invitations to attend are being sent to every Builders' Exchange and similar organizations, in the country and to the Building press.

It may be mentioned that the San Francisco Builders are receiving the cordial co-operation of the Exposition authorities who join in extending a special invitation to Builders to attend the Exposition during American Builders' Week.

It may also be stated that the leaders in every trade connected with the San Francisco Building industry, the local building material firms and supply houses are all heartily co-operating with the Builders in this movement.

By no means the least attractive feature of the gathering in October will be the attendance of the large number of ladies who will accompany the visiting Builders from every state in the union. These ladies will be welcomed by committees of ladies prominent in San Francisco society.

It is suggested that those Builders who already contemplate visiting the Exposition either before or after the period between the 15th and 23rd of October next, now try to make it convenient to visit the Exposition during American Builders' Week, as a special daily program of particular interest to visiting Builders is being arranged.

We are asked to state that additional information may be obtained by addressing the "Publicity Committee, American Builders' Week, Care General Contractors' Association, 110 Jessie Street, San Francisco."

Gold Metal Highest Award For Henderson's Metal Furring And Clamp System.

The jury of the Panma-Pacific International Exposition has awarded W. D. Henderson, Monadnock Bldg., San Francisco, the highest award, Gold Medal, on his improved metal partition construction exhibit in the Palace of Liberal Arts.

This exhibit shows the only hot roll channel partition system on the market and the only clamp for this particular purpose. These systems while only on the market a few months, are being used in the best of fireproof buildings in this part of the State. A thorough demonstration is given daily at the exhibit, showing the mechanical, economical and rapid installation of these systems. Many proposed builders have approved of same for residence work as well as other buildings on account of it being fireproof and a safety to life and property.

Send for descriptive catalogue to, W. D. HENDERSON, Patentee and Owner, Monadnock Bldg., San Francisco.

TO CUT ALASKAN TIMBER FOR U. S. RAILROAD.

Engineering Commission Gets Permit to Take 85 Million Feet From Chugach National Forest.

WASHINGTON, July 29.—The Alaskan Engineering Commission, which is to build the government railroad from Seward on the Pacific 471 miles to Fairbanks in the interior, has received a permit from the Forest Service to cut 85 million feet of timber in the Chugach National Forest for use in constructing the new line. The permit was issued by the District Forester at Portland, Oregon, who has direct supervision of the Alaskan forests, and is in conformity with the Act of March 4, last, which authorized the Secretary of Agriculture to permit the Alaskan Engineering Commission and the Navy Department to take from the national forests free of charge earth, stone, and timber for use in government works. The timber will be cut in designated areas along the right-of-

way of the proposed railroad, which runs through the Chugach National Forest for several miles.

Experiments and tests of Alaskan spruce and hemlock are being made at the Forest Service laboratory at Seattle, Washington, and so far have substantiated the opinion of foresters that Alaskan timber is sufficiently strong for practically all structural purposes. While these tests are going on Forest Service employees in Alaska are making the timber to be cut along the proposed railroad; the cutting to be done so that only mature trees are taken, the young trees being left uninjured and the condition of the forest improved.

This cut of 85 million feet will be the largest amount of timber ever felled on the Alaskan forests in one operation, and at the average rate per thousand board feet obtained for timber sold from the Chugach Forest during the fiscal year 1914, it is worth approximately \$145,000 on the stump. It will be nearly twice as much as the total quantity of national forest timber now cut and used annually for local purposes throughout Alaska, but only a little more than one-tenth of the estimated annual growth of the Alaskan forests. The two national forests of Alaska contain about 75 billion feet of merchantable timber and it is estimated by the Forest Service that more than 500 million feet could be cut every year forever without lessening the forests' productivity.

PLANING MILL OWNERS ADOPT NEW TRADE RULES.

Commencing August 1st, 1915, The Planing Mills of San Francisco will refuse to give estimates for partial lists of mill work.

It appears that of recent years several mills very often secured parts of the mill work for a job, one mill furnishing the outside mill work, another the doors and sash, another the inside trim, etc. The mills found by experience that this practice is demoralizing and the cause of endless disputes.

The following resolution, adopted by their association is very clear and self explanatory:

"BE IT RESOLVED, that from and after August 1st, 1915, we will figure only the Full Mill Bid of the S. F. Planing Mill Owners' Association, either from plans and specifications or on a complete list furnished; our Full Mill Bid or full list includes Panels, Cabinets, Cases, Sash and Doors, as well as all other millwork."

Our members have arrived at this decision after long and careful consideration as a means of saving time and expense and thereby giving better material to the owner and a much improved service to the contractor. The mill owner, having secured the contract for all the millwork when the building is started, will be able to plan and arrange his work accordingly, will have proper time for the seasoning of the lumber and can make his deliveries promptly when needed.

As the competition between the different mills remains entirely unrestricted, the increased efficiency and reduction of cost to the mill is sure to prove of benefit to the building business in general.

Having set forth our reasons for making this change, we respectfully ask your co-operation in this reform which is intended to be helpful to all parties concerned.

Yours truly,
S. F. PLANING MILL OWNERS' ASSN.,
By A. C. Bredford, Secretary.

NIGHT SCHOOL FOR ADULTS.

The Washington Evening School at the southwest corner of Washington and Mason streets is enrolling pupils who are working and who have attended Grammar and Primary Schools. The hours are from 7:15 to 9:15 P. M. Special classes for adults. (German, French, Spanish, Italian, Greek). Preparation for Civil Service Examinations. Phone Mission 3132.

Socialism in the industrial arts has long been established in this country in the form of corporations and trusts in which labor and products have been standardized and efficiency methods developed in producing a maximum of products at a minimum price. Socialism both in industry and politics has been developed in Germany to a surprising degree. Bismarck took the workable parts of the Socialistic doctrine and grafted it on to the Imperialistic system. The methods in the industrial arts they have applied to the military system and have made it paramount to everything else.

England and France have had to organize their military supply systems since the beginning of the war. They are developing efficiency systems in the production of munitions and supplies and in time will have a highly efficient system. They have been at a disadvantage since the commencement of the war and have had to waste time and money.

This standardization of product lessens the cost. The standardization of men, no doubt, increases their efficiency as a whole. There is a question as to whether or not it does not tend to lessen their individuality. Individualism and socialism are sometimes diametrically opposed to each other and in the high organization of industry where great numbers of men do one thing and one thing only, the question is whether or not the individual is not lost in the machine. Lord Northcliffe has characterized the German war machine as "massed mediocrity." Whatever it is it has terrible momentum, a momentum against which the individual, however brilliant can not stand.

Another result of this standardization of humanity is that it is essentially brutal and cold blooded. Men are looked upon and carried on the books as so many machines. They are sacrificed in war as so much ammunition or supplies. The women are looked upon to furnish forth a new supply. And in a country like Germany the only people that really count is the ruling class.

How far cold efficiency is to dominate the world remains to be seen. The human element is always to be reckoned with. And just as the spirit of patriotism makes men lay down their lives for their country so the human element will persist in spite of artificial conditions under which it is restrained.

The Hearst exhibit at the Exposition catalogues the great number of publications that Hearst is connected with. And among others the list of daily papers that he publishes include the Deutsches Journal. Seeing Hearst's

picture on the cover of "Fatherland" and reading the Examiner of yesterday, one wonders whether or not the "Fatherland" is not printed by Hearst and the editorials are written by German subjects instead of American citizens.

The last note of the American government to Imperial Germany is not a threat, much less an ultimatum. It states the rights of American citizens on the high seas, the common rights of all neutrals, and asserts that this government must uphold them at any cost. As such protest against barbarous customs it commands and demands the support of not only every American citizen, but of every citizen of a neutral nation as well. And the only attitude for an American citizen to take if he does not agree with the administration is that of Herman Ritter, who quoted the words of Carl Schurz in saying, "My country right or wrong," and further adds that if it is not right it is the citizens' duty to help make it right.

The curse of Europe has been militarism. The states that have existed there have been compelled to keep armed in order to, in some degree, protect themselves. This has necessitated universal military service. Those states that have depended upon voluntary service are now at a disadvantage both as to men and munitions so that the standard of militarism has forced an unequal issue. These facts have forced us to the conclusion that if we are to be of any effect in enforcing a world peace or in compelling nations to abide by solemn treaties we must ourselves prepare to fight. And in such preparation there should be some way of eliminating from the ownership and control of public newspapers such people as William Randolph Hearst, who claim the protection and privileges of this republic while they at the same time do everything in their power to injure it. If we should be compelled to go to war with any nation to protect our rights or in the name of humanity, one of the first acts of this government should be to get rid of Hearst in the name of humanity.

PRODUCTION OF GYPSUM IN 1914.

According to G. F. Loughlin, of the U. S. Geological Survey, the production of gypsum in the United States in 1914 was marked by a decrease in tonnage but an increase in value, an increase due to a strong advance in the price of calcined gypsum, which more than offset a decline in price of crude gypsum.

The quantity of crude gypsum mined in the United States in 1914 was 2,476,465 short tons, compared with 2,599,508 tons reported mined in 1913, a decrease of 123,043 tons. The gypsum sold without calcining and used principally as land plaster and as an ingredient in Portland cement and paint amounted to 413,657 short tons, valued at \$646,799, a decrease of 19,149 tons in quantity and \$50,267 in value in comparison with 1913, when the sales for similar purposes amounted to 465,136 short tons, valued at \$697,066. The material marketed as calcined plaster was 1,654,066 short tons, valued at \$6,249,190, as compared with 1,773,849 tons, valued at \$6,077,756, sold calcined

in 1913. The total value of all gypsum marketed in 1914 was \$6,895,989, as compared with \$6,774,822 in 1913, an increase of \$121,167.

Considerable quantities of gypsum plaster, or "stiff," were used in the Panama-Pacific Exposition buildings at San Francisco and in the Panama-California Exposition buildings at San Diego, but they were not sufficient to offset the general decline in tonnage elsewhere. A marked increase in the sales of calcined plaster was noted in 1902 and 1903, which also was largely due to the consumption of "stiff" for buildings at the Louisiana Purchase Exposition buildings at St. Louis.

Gypsum was produced in 18 States and in Alaska in 1914, the same States reporting output in this year as in 1913. The relative rank of the three leading States has remained unchanged for the last four years, New York ranking first, Iowa second, and Michigan third in the output of crude gypsum.

The quantity of raw gypsum ground and sold for land plaster amounted in 1914 to 52,945 short tons, valued at \$97,716, as compared with 54,815 tons, valued at \$95,953, reported in 1913. The quantity of raw gypsum sold for the manufacture of paint and of Portland cement and for various other purposes amounted to 390,742 short tons, valued at \$549,053, as against 408,321 short tons, valued at \$601,113, sold for similar purposes in 1913.

The total quantity of calcined gypsum sold in 1914 was 117,783 tons less than that sold in 1913, but the total value was \$171,434 greater. Nearly 95 per cent of the domestic calcined gypsum marketed in the United States, or 1,565,937 tons, is used for use as wall plaster, Keene's cement, plaster of Paris, and other uses. About 1,250,000 tons of this quantity represents mixed wall plaster.

There were 78 gypsum mines, including quarries and pits, reported active in the United States in 1914, one of which is in Alaska. These mines supplied 68 domestic mills, of which 61 were calcining plants and 7 produced ground gypsum only. Four new mills were reported in operation last year, three in California and one in New York. One mill, located in Nevada, was reported under construction in 1914. About one-half of the active plants which reported on business conditions reported business practically the same in 1914 as in 1913, and the other half found trade poorer. A few producers considered conditions better. The average price of crude gypsum throughout the country decreased 5 cents in 1914 as compared with the price reported for 1913, and the average price of calcined gypsum advanced 34 cents.

SEES HUGE TRADE FROM COAST TO AUSTRALIA.

[Honolulu Star-Bulletin, July 1.]

The development of an immense trade between Australia and the west coast of the United States, the prospects of adding larger steamers to the trans-Pacific service are at this time exceedingly bright, in the opinion of Capt. L. Thompson, master of the British freighter *Werrilee*, who will remain in this city a few days before steaming

to San Francisco or Portland, Ore., to complete his charter.

Australian importers are strongly inclined to favor American-made goods, reports brought to Honolulu to the contrary notwithstanding. I have moved among business and shipping interests at the principal ports on the southern continent for years, and believe I am sufficiently familiar with the situation to realize its great possibilities for expanded trade. Take it from me, American-made articles and American-grown produce will find a ready market throughout Australia. The difficulty of filling this demand at the present time is due solely to a shortage of ships.

A SAD REALITY.

Said the Architect to the Builder,

With a large and cheery sigh,

"I'd like to give this job to you

But, Holy Gee, you're high."

"Oh! never mind," the Builder said,

"I'll take it anyway,"

I'll just cut off ten thousand bucks

"And make the SUCKERS pay."

The SUBS came flocking 'round the job

Like flies around a pie,

But all the Builder said to them

Was, "Holy Gee, you're high."

He took their hide, he picked their bones

And scraped their carcass dry.

THEY found the money, brains and skill,

HE found the air and sky.

And when they got all through the job

They owed his ten percent

For hauling rubbish, watchman's fees

And SU PER IN TEN DENT.

PHILIPPINE VESSEL COMES VIA PANAMA.

[J. F. Boomer, correspondent, Manila, May 31.]

The schooner *A. J. West*, of 363 tons, equipped with auxiliary power, has sailed from Manila to New York via the Panama Canal. This vessel will be the first ship of Philippine registry to pass the canal. It carries a cargo of lumber shipped by a local firm, valued at \$99,050. The vessel is captained and officered by Americans. The engineers and carpenter are Japanese; the sailors are Filipinos. The *A. J. West* was purchased on the Pacific coast about two years ago, and has been engaged in the lumber-carrying business between Manila and the southern islands. The high freight rates prevailing have made it profitable for the vessel to undertake the voyage to New York.

NEW GOVERNMENT PUBLICATIONS.

The Superintendent of Documents, Washington, D. C., announces that he received in stock during the week ended July 17 the following new United States Government publications, which he will sell at the nominal prices affixed:

Test of structural timbers, Forest Service Bulletin 108, reprint.—Discussion of various timbers used for structural materials. Price, 20 cents.

Bitumens, and their essential constituents for road construction and maintenance, Public Roads Circular 93.—Discussion on the bituminous road materials. Price, 5 cents.



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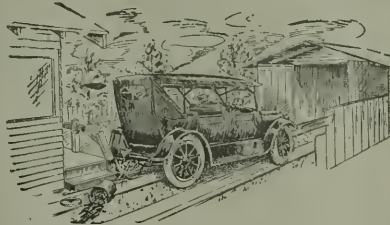
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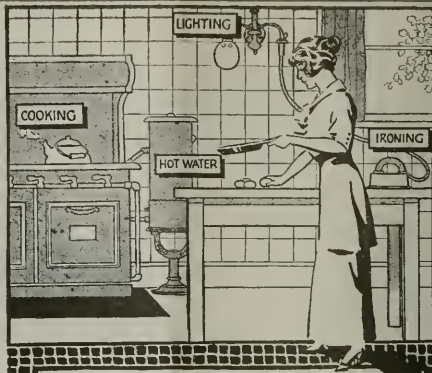
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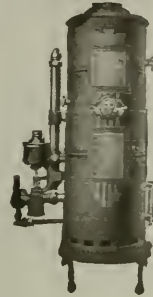
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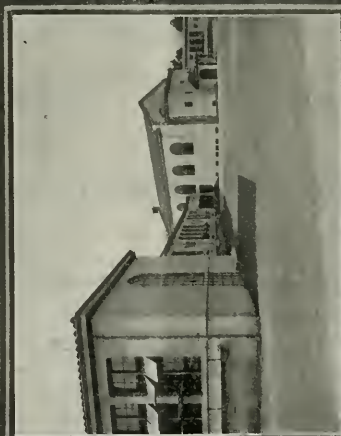
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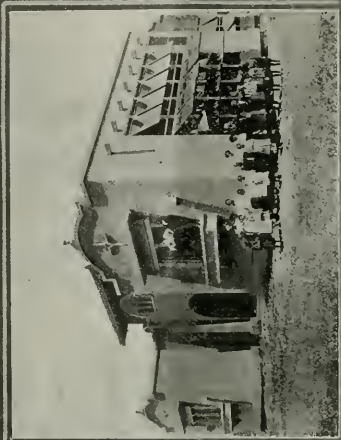
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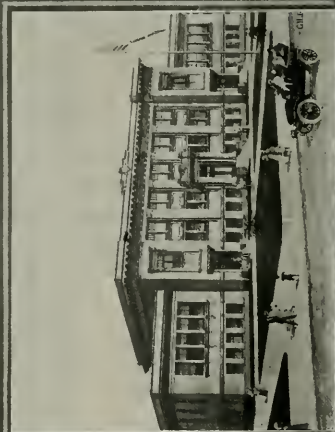
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Building and Engineering News

[Devoted to the Architectural, Building, Engineering and Industrial Activities
of the Pacific Coast.]

Issued Weekly, \$3.00 per year

San Francisco, August 11, 1915

Fifteenth Year, No. 27

As a general rule a Superintendent of Streets and Sewers in a small town is not very observant when it comes to the technical details of his work, especially not sewer pipe eight feet under ground and laid before he took office, but there are exceptions, and such an exception is Mr. T. E. Manning of the city of Imperial, Imperial County, California, who observed that the sewer pipe was deteriorating so fast that at times it was almost impossible to make house connections without injuring the main pipe.

The stability of sewer pipe is a matter of utmost importance to the profession as well as to the public at large, and upon hearing of these conditions in Imperial we at once got in touch with Mr. Manning, from whom we received the following communication which speaks for itself:

City of Imperial,

Imperial, Cal., Aug. 7, 1915.

Mr. George Nelson,

Editor Engineering Department,

Building and Engineering News,

360 Mission St., San Francisco, Cal.

Dear Sir:

In compliance with your request for a detailed statement for publication in regard to the condition of the vitrified clay sewer pipe of the Imperial sewer system, I am giving you the following data:

Before the paving was put down we connected all lots not already connected with the sewer, and had therefore occasion to observe the main sewer pipe and its general condition. In numerous instances we found it so soft and deteriorated that merely scraping it on top with a shovel would take off half the thickness of the pipe in a soft and almost muddy condition.

As particular instances, I shall cite a place on Main street near railroad depot, where the top of the pipe got so soft that it caved in and stopped up the sewer, and when we excavated it we found we had to replace six joints with new pipe. At a place on "N" street near Twelfth, where we connected a lot with the main 15-inch sewer, we found this in such a state of deterioration, that

instead of using a cold chisel for chopping a hole for the connection, we broke out some pieces with our hands and then concreted the connection to the main pipe.

In general, we found the pipe in poor condition wherever we had to make a connection, and in many instances the caps placed in the branches had been entirely cemented over and were harder than the main body of the pipe and branch, necessitating great caution in chiseling off the cap so as not to injure the pipe. As the soil here carries alkali, and the deterioration is in evidence both on the outside as well as on the inside, it is evident that both the alkali and the sewer gases are detrimental to the pipe.

Yours very truly,

T. E. MANNING,

Superintendent of Streets and Sewers.

The materials of engineering construction will receive special attention in the proceedings and discussions of the International Engineering Congress to be held in San Francisco September 20-25, next.

The field will be treated under 18 or more topics, covering: Timber resources; preservative methods; brick and clay products in general; life of concrete structures; aggregates for concrete; water proofing; volume changes in concrete; world's supply of iron; life of iron and steel structures; special steels; status of copper and world's supply; alloys; aluminum; testing of metals, of full sized members, and of structures.

Some twenty-five papers are expected for this volume, prepared by authors representing five different countries. The list of authors includes many of the most eminent names in this field of engineering work throughout the world.

These papers, together with discussions contributed by leading American and foreign engineers, will be published as volume 5 of the transactions, and will be illustrated with charts, diagrams and half tones. The volume will form a most valuable acquisition to the library of all engineers and others who may be interested in these phases of engineering work.

Brick and Tile Production Valued At Nearly 130 Million Dollars.

The great brick and tile industries of the United States in 1914 produced material to the value of \$129,588,822. This was a considerable decrease, according to the United States Geological Survey, from the value for 1913, which was \$143,296,757, but as compared with the output for a number of years preceding it shows a general growth for the industry. Compared with 1911, the figures for 1914 show an increase of \$1,871,201; compared with 1908 they show a gain of \$21,526,615.

Common Brick.

The principal clay product, considered as to value, is common brick, the value of which comprised over one-third of that of all brick and tile products in 1914. The quantity reported for 1914 was 7,146,571,000, valued at \$43,769,524, a decrease of 942,219,400 brick in quantity and of \$6,365,233 in value from 1913. The average price per thousand of common brick declined 8 cents, from \$6.20 in 1913 to \$6.12 in 1914. Illinois was the leading common brick producing State in 1914, reporting 941,343,000, valued at \$4,898,698. This was a decrease of 214,137,000 brick in quantity and \$1,547,123 in value. This decrease may be in some measure due to strikes in Chicago, the principal brick producing center of the States. New York was second, reporting 908,568,000 common brick, valued at \$4,666,037 in 1914, compared with 1,068,516,000 brick in 1913, valued at \$6,029,103, a decrease in quantity of 159,648,000 brick and \$1,363,066 in value. The average price per thousand in New York declined 51 cents in 1914 from 1913.

Common brick is made in every State of the Union and in the District of Columbia and in Porto Rico.

Fire Brick.

The second clay product in importance is fire brick, the output of which was valued at \$16,427,547 in 1914, compared with \$20,627,122 in 1913, a decrease of \$4,199,575. The value of fire brick in 1914 comprised 12.68 per cent of the value of all brick and tile products. Fire brick is used principally in the iron and steel and coke-making industries and its production naturally rises and falls with the fluctuations in these industries.

The leading State in the production of fire brick is Pennsylvania. This State reported for 1914, a production, including silica fire brick, of 396,519,000 nine-inch equivalent fire brick, valued at \$7,836,503 or \$19.76 per thousand. This was a decrease in quantity of 97,071,000 brick and \$1,867,231 in value. Pennsylvania produced nearly half the output of the country. Ohio was second in rank in 1914, reporting an output of 102,735,000 fire brick, valued at \$1,833,740, or \$17.85 per thousand, compared with 109,884,000 brick in 1913, valued at \$1,961,020 or \$17.85 per thousand, a decrease in quantity of 7,149,000 brick and in value \$127,280. Missouri ranks third, producing in 1914, 76,177,000 fire brick, valued at \$1,554,431, or \$20.41 per thousand, compared with 104,728,000 brick valued at \$2,138,368 in 1913, a decrease in 28,551 brick in quantity and \$583,937 in value from 1913. Kentucky and New Jersey ranked fourth and fifth, respectively.

Production of fire brick was reported from 33 States in 1914.

Sewer Pipe.

Sewer pipe, third product in value, with an output worth \$14,014,767, or 10.81 per cent of the total, was made in 28 States in 1914. The leading States in the production of sewer pipe in 1914, named in the order of their importance, were: Ohio, Missouri, California, Pennsylvania, Illinois, Georgia, Indiana, and Iowa. Ohio's output was valued at \$4,691,719 in 1914, a decrease of \$467,829 from 1913. Missouri, on the other hand showed a small increase, \$22,347, from \$1,213,889 in 1913 to \$1,236,236 in 1914. This output in California decreased from \$1,032,094 in 1913 to \$959,193 in 1914, a loss of \$72,901. The decrease in the total value of sewer pipe in 1914 compared with 1913 was \$857,336.

Vitrified Paving Brick.

Production of vitrified paving brick or block, valued at \$12,500,866, of 9.65 per cent of the value of all brick and tile products in 1914, was reported from 28 States. This is the only important clay product whose output increased in value in 1914. The increase was \$362,645, or 2.99 per cent over 1913. The quantity of vitrified brick decreased 27,356,000 brick from 1913, and the average price per thousand increased from \$12.66 to \$13.42 in 1914. Ohio was the leading State in the production and value of vitrified paving brick in 1914, reporting an output of 293,381,000 brick, valued at \$3,682,230, or \$12.55 per thousand, a decrease in quantity of 11,010,000 brick, but an increase in value of \$373,255 over 1913. Ohio reported about 30 per cent of the quantity and value of the vitrified brick of the country. Illinois ranks second, reporting 157,176,000, valued at \$2,086,344, an increase of 23,238,000 brick in quantity and of \$203,145 in value over 1913, and Pennsylvania ranks third.

Front Brick.

There were 810,495,000 front or face brick marketed in 1914, valued at \$9,289,623 or 7.17 per cent of the total, a decrease of 17,170,000 brick in quantity and of \$324,515 in value. Front brick was reported from 41 States in 1914. Pennsylvania leads in production and value, reporting 219,923,000, valued at \$2,402,361, an increase of 5,189,000 in quantity and of \$77,160 in value, over 1913. Ohio ranked second, reporting 188,074,000 for 1914, valued at \$1,944,486, an increase in quantity of 2,264,000 brick but a decrease in value of \$5,947. Indiana ranked third in this product, reporting 80,349,000 brick, valued at \$799,520, an increase of 1913 of 12,147,000 brick and \$90,775. These three States combined produced considerably more than one-half of entire quantity and value of front brick in 1914.

Drain Tile.

Drain tile ranked sixth among the brick and tile products in value in 1914. The output was valued at \$8,522,039, or 6.58 per cent of the total in that year, a decrease of \$36,281 from 1913. The Middle West is the great producing region for this product (though it was reported from 36 States in 1914). Ohio, Indiana, Michigan, Illinois and Iowa reporting over 88 per cent of the total in 1914. Iowa ranks first, reporting drain tile to the value of \$3,180,836 in 1914, and increase of \$382,020 over 1913. Ohio was second, with \$1,589,565 worth in 1914, an increase of \$81,001 over 1913. Indiana was third in 1914, with \$1,322,002, a decrease of \$263,288 from 1913.

Fireproofing.

Fireproofing, including hollow building tile, or block, ranked seventh among brick and tile products in value in 1914. It was reported to the value of \$8,385,337, or 6.47 per cent of the total, a decrease from 1913 of \$234,879. Ohio is the leading State, reporting fireproofing to the value of \$2,200,544, an increase of \$4,683 over 1913. New Jersey was second and Iowa third in 1914, New Jersey reporting \$1,599,295, a decrease of \$493,075 from 1913, and the latter \$1,083,397, an increase of \$320,828,834 over 1913.

Rank of States.

Ohio.—In 1914 Ohio was the leading State in the production of brick and tile, having passed Pennsylvania in the value of these products. As Ohio's products decreased in value this gain in rank was reached by a larger decrease in the value of Pennsylvania's products. The value of Ohio's brick and tile products in 1914 was \$21,815,392, or 16.83 per cent of the total, a decrease of \$53,015 from 1913. Ohio's principal brick and tile products in 1914 were sewer pipe, valued at \$4,691,719, vitrified brick, \$3,682,230, common brick, \$2,862,109, and tile not drain, \$2,331,079. Ohio was the leading State in the production of vitrified brick or block, sewer pipe, fireproofing and tile, not drain.

Pennsylvania.—Pennsylvania ranked second among the States in the value of brick and tile products, having been

displaced from first position in 1914 by Ohio. The value of Pennsylvania's brick and tile products in 1911 was \$20,100,195, or 15.51 per cent of the total for the country, a decrease of \$2,081,888 from 1913. Pennsylvania's principal brick and tile product in 1914 was fire brick, which, including silica brick, was valued at \$7,836,503, a decrease of \$1,867,231 from 1913. Its other large products in 1914 were common brick, valued at \$4,641,209, front brick, \$2,402,361, and vitrified brick, \$2,052,676. Pennsylvania was the leading State in the production of front brick, fancy or ornamental brick, and fire brick.

Illinois.—Illinois ranked third among the States in the value of brick and tile products in 1914, as in 1913, reporting wares valued at \$12,538,374, or 9.67 per cent of the total. This was a decrease of \$1,742,237 from 1913. Illinois' principal brick and tile products in 1914 were common brick, valued at \$4,898,698, vitrified paving brick, \$2,086,344, architectural terra cotta \$1,632,945, and drain tile \$1,041,927. Illinois was the leading State in 1914 in the production of common brick, and terra cotta, and second in the production of vitrified paving brick or block. Illinois reported for 1914 every variety of brick and tile products as classified in this report.

New Jersey.—New Jersey was the fourth State in the production of brick and tile products in 1914, as in 1913. Its wares in 1914 were valued at \$8,353,296, or 6.45 per cent of the total. This was a decrease of \$2,513,537 from 1913. New Jersey's principal brick and tile products in 1914 were: Common brick, valued at \$1,944,806, architectural terra cotta \$1,620,791, fireproofing, \$1,599,295, and tile, not drain, \$1,139,895. New Jersey is the leading State in the production of enameled brick, and is second in

terra cotta, fireproofing, and tile, not drain. New Jersey reported for 1914 every variety of brick and tile products as classified in this report.

New York.—New York was the fifth State in rank in the value of brick and tile products in 1914, as in 1913, reporting wares valued at \$6,923,141, or 5.34 per cent of the total, a decrease of \$1,704,677 from 1913. This decrease was principally in the value of common brick, which decreased in value from \$6,029,103 in 1913 to \$4,666,037 in 1914, or \$1,363,066. Common brick was New York's chief clay product, and terra cotta (valued at \$889,468 in 1914) was its second.

Value of Brick and Tile Products in 1914.

	Value.	Percent- age of total
Common brick	\$43,769,524	33.77
Vitrified paving brick	12,500,806	9.65
Front brick	9,289,623	7.17
Fancy or ornamental brick	124,459	.10
Enameled brick	1,075,026	.83
Drain tile	5,522,039	6.58
Sewer pipe	14,014,767	10.81
Architectural terra cotta	6,087,652	4.70
Fireproofing	8,385,337	6.47
Tile, not drain	5,705,583	4.40
Slive lining	520,585	.40
Fire brick	16,427,547	12.68
Miscellaneous	3,165,814	2.44
	129,588,822	100.00

Building operations for the month of July have moved on at about the same rate as the months immediately preceding, the total for the month amounting to \$1,347,248; this figure was composed of the following items: Brick and concrete construction, \$404,674; frame buildings, \$267,737; alterations and additions, \$102,606; city buildings, \$50,429; street and sewer work, \$70,241; Municipal Railway construction, \$78,250; State work, \$14,281.

Private construction for the month amounted to \$1,134,017, so that the amount of money expended for public work was negligible. Comparing with the former months of the year the record is as follows:

January, 1915	\$1,284,898
February, 1915	1,637,148
March, 1915	2,048,534
April, 1915	1,993,396
May, 1915	1,212,413
June, 1915	1,679,028
July, 1915	1,347,248

Like the former months the majority of the construction for the past month consisted of frame building, the main deficit consisting of brick and concrete construction. Compared with former years the record for July for the last ten years is as follows:

July, 1906	\$1,959,290
July, 1907	4,687,516
July, 1908	2,921,152
July, 1909	3,144,482
July, 1910	1,506,613
July, 1911	2,126,720
July, 1912	2,217,215
July, 1913	3,826,998
July, 1914	3,685,402
July, 1915	1,347,248

The above figures taken from the files of the Daily Pacific Builder include all construction for the past three years. Prior to 1913, the record consisted only of private construction. The comparison for the past seven months shows about an average result. Considering the general condition of business the record is not discouraging.

One of the very best things about the Pan-American action proposed by Mr. Wilson for the Mexican troubles is that it may disarm the suspicion of the Mexican people and enlist their co-operation. And such Pan-American action may very well be the first quite definite step toward a solid Pan-American League, of which Mexico, restored to tranquility, will be a leading member.

The possible bigger significance in the whole business is indicated in this paragraph of an article by Arthur Bullard in the Century Magazine:

There can be little doubt that a league of American republics would mean peace for us—order and justice within and safety from outside aggression. No matter who wins in this devastating European war, no one will lightly pick a quarrel with all the Americas united. Great oceans protect us from such invasions as fell on Belgium and East Prussia. And within six months Great Britain was able to organize and equip a volunteer army which was bigger than any expeditionary force could be.

President Wilson could not give more convincing proof of the unselfish motives of the United States concerning Mexico. In such immediate action, or in such a continuing league, there is no assumption of authority or of superiority, on the part of the Northern republic. The Monroe Doctrine becomes a partnership affair among all the nations affected by it. Upon the Western Hemisphere there would be such an international confederacy as has been dreamed of for Europe. And the international "police duties" would be but a minor part of the mutual service. Perhaps then—"The league of American republics could most cordially urge other countries to similar action, could lend a powerful helping hand to every peace movement," as Mr. Bullard writes; "and as soon as any new group became organized, a union would be possible. So might we reach the federation of the world."—Kansas City Star.

The Chronicle finds fault with the bookkeeping methods of the government in that the government railroad, now being constructed in Alaska, is allowed to cut timber free of charge from the national forest and to use the same in construction of the road. What concerns the Chronicle is not that the government owns both the timber and the railroad, but that the proper charge will not be made against construction cost so that when comparisons are made with the cost of private construction there will not be shown the proper relation.

In all probability the Chronicle is exercised over the fact that the cost of government construction may show up anew the gigantic frauds that have been perpetrated in railroad construction, the enormous amount of water that should be squeezed out of the capitol stock of the present systems in order to arrive at a proper physical valuation, and will again demonstrate what an enormous amount of the national resources the railroads grabbed in the land grants they obtained for building a trans-continental system. It will be interesting to see just what the Alaskan railroad will cost, built under the difficult conditions under which it must be built.

The Sacramento Bee in speaking of the Exposition and the prospect of every person visiting its says: "The question for them to decide is not whether I can afford to see the Exposition, but can I afford **not** to see it," which statement seems to about express the idea. For few people can afford not to spend the time and money for the benefit a visit to the great Exposition would give them. It is the latest wonder of the world, the latest inventory of progress, the most beautiful show that has ever been given anywhere or at any time.

ADVANCE NEWS

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$15,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, William Linden, 1100 Dolores street, S. F. The building will be erected on the east side of 7th street south of Howard, and has been designed to contain a total of 41 small apartments with private baths and wall beds. Interior will be finished in pine. There will be steam heat, oil burning equipment and hot water system. Bath rooms will be finished in imitation tile. Marble wainscot will be used in the entrance. Exterior will be covered with rustic and brick veneer. Plans are complete and figures are being taken.

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$5,000. Architects, O. R. Thayer and Charles C. Frye, 20 Montgomery street, S. F. Owner, George Gruenig. The building will be erected on the north side of Bryant street east of 25th, and has been designed to contain four small apartments. Interior will be finished in pine throughout. All suites will have wall beds and private baths. There will be a hot water supply. Exterior will be covered with rustic and cement plaster on metal lath. Plans are complete and a contract will be let at once.

OAKLAND, CAL.—Apartment house, 4 story and base, brick, \$48,000. Architects, Richardson & Burrell, Albany Brigham. The building will be erected at the corner of 11th and Oak streets, and has been designed to contain a number of two, three and four room apartments. Interiors will be finished in pine, elm and white enamel. Hardwood floors will be used in the living room, dining rooms and reception halls. Plans provide for steam heat, an automatic elevator, hot water system and vacuum cleaning. All suites will have wall beds and private bath rooms. Bath rooms will be finished in tile. Marble wainscot will be used in the entrance. Exterior of the building will be faced with pressed brick and cement plaster. Plans are complete and figures will be called for at once.

MARTINEZ, CONTRA COSTA CO., CAL.—Apartment house and stores, 2 story and base, brick and concrete, \$12,000. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, Frank Prosser. The building has been designed to contain three stores on the first floor besides the entrance. Upper floor will be arranged for seven suites of three rooms and bath. Interior will be finished in pine. Wall beds are specified. Patent store fronts will be used. Bath rooms will have tile wainscot. Exterior of the building will be faced with pressed brick. Plans are now being prepared.

BONDS.

SACRAMENTO, CAL.—Two and one-half million dollars worth of state highway bonds were sold by the State Treasurer at a sale held recently. The counties which purchased bonds and the amounts they bought are as follows:

Butte, \$150,000; Mono, \$50,000; Stanislaus, \$35,000; Merced, \$100,000; Inyo, \$100,000; Placer, \$250,000; San Luis Obispo, \$135,000; Tulare, \$265,000; Kings, \$55,000; Imperial, \$60,000; Mendocino, \$75,000; Monterey, \$160,000; Colusa, \$120,000; Glenn, \$50,000; Tuolumne, \$35,000; San Diego, \$50,000; Kern, \$50,000; Santa Cruz, \$6,000; Humboldt, \$300,000; Santa Barbara, \$275,000; Santa Clara, \$125,000.

The proceeds of the entire sale will provide funds for highway work to be accomplished in the various counties.

NEWPORT, ORANGE CO., CAL.—The proposition to form an improvement district to include all Orange County and the issuance of bonds to provide for the development of a good harbor has received a hearty endorsement from the Associated Chamber of Commerce, at a meeting held recently at Huntington Beach. Circulation of petitions for a county vote on the question of forming a harbor district has already begun.

VALLEJO, SOLANO CO., CAL.—C. S. Jackson, of Aberdeen, Wash., is now in Vallejo with the intention of locating a business college. A site for the proposed institution is now being considered. Jackson has received the cooperation of the Vallejo Chamber of Commerce, who will render every possible assistance in having the school established in Vallejo.

MERCED, MERCED CO., CAL.—Preliminary discussion, looking forward to a bond issue agitation, has begun by the City Trustees of Merced relative to the eventual municipal ownership of the electric lighting distributing system. The idea is for the city to take over the distributing properties of the light and power corporation, and look to the company for power only.

DINUBA, TULARE CO., CAL.—Dinuba Grammar School District will hold an election, August 19, for the purpose of voting on a proposition to issue \$12,000 bonds for school purposes, the issue to be covered by thirteen \$1,000 bonds.

LOS ANGELES, CAL.—To provide for certain municipal improvements declared to be necessary this year the Los Angeles City Council is considering the calling of an election for the purpose of voting a bond issue of \$3,000,000.

CANADA SCHOOL DISTRICT, LOS ANGELES CO., CAL.—The voters of the Canada School District have requested the School Trustees to call an election for the purpose of voting bonds of \$20,000 to erect a school building.

FRESNO CO., CAL.—The Chowchilla School District is among the several in Fresno County which recently held

elections to authorize the issuing of bonds for building purposes. It now transpires that the trustees were not correctly advised as to the manner of holding the elections, and they must be held again. The defect was in failure to conform to a law enacted by the recent legislature, which requires that the polls be kept open from 8 o'clock in the morning until 6 in the evening. In the elections held, the polls were open in the afternoon only.

FLORIN, SACRAMENTO CO., CAL.—Bonds of \$10,000 have been voted for the purchase of additional land and the erection of a school. The site for the proposed structure is now under consideration.

OAKDALE, STANISLAUS CO., CAL.—The Oakdale Irrigation District Board will order a special election to be held at an early date to vote on a special assessment for certain improvements, repairs, etc., for the district. It is thought that \$75,000 will be the sum voted upon.

HILLSBOROUGH, SAN MATEO CO., CAL.—Bonds of \$25,000 will be voted here on August 16th for the erection of a school building.

RED BLUFF, TEHAMA CO., CAL.—The Board of Supervisors has set September 3rd as the date for voting bonds of \$140,000 to cover the cost of construction of three bridges to be erected in the county. Contracts for these structures have already been let.

RIVERSIDE, RIVERSIDE CO., CAL.—E. M. Bonnett has purchased a site on Seventh street and will erect a modern bakery building. From advices received, no architect has been selected.

BAKERSFIELD, KERN CO., CAL.—Bids on the \$60,000 bond issue of the Conley High School District, the \$15,000 bond issue of the Maricopa High School District, and the \$2,500 issue of the Rosemond School District were opened by the Supervisors last week. All were sold and the construction of the proposed buildings for which the bonds were voted will soon be under way.

REDONDO BEACH, LOS ANGELES CO., CAL.—The City Clerk has been instructed to advertise for bids for the sale of \$121,000 worth of bonds, which were voted for the erection of a pleasure pier. The contract for the construction of the proposed pier has already been let.

GLOBE, ARIZONA.—The Board of Supervisors of Pinal County has sold the \$150,000 highway bond issue to R. M. Grant & Co. of Chicago.

LUNA COUNTY, ARIZONA.—The Board of Supervisors of Luna County has called a special election for September 14, 1915, for the purpose of voting \$100,000 in bonds for the construction of bridges and county highways.

WILLIAMS, ARIZONA.—At a mass meeting held last week action was taken toward the calling of a bond election to vote \$350,000 for the construction of a county highway system.

HUNTINGTON PARK, ORANGE CO., CAL.—The proposed bond issue in the sum of \$48,000 for the erection of new school buildings failed to carry at the special election held last Monday.

BAISTOW, SAN BERNARDINO CO., CAL.—Bonds in the sum of \$15,000 for the erection of a new grammar school building were voted at the special election held last Saturday. The trustees

of the new Union High School District, who were elected last Saturday, will meet and organize at once.

BRAWLEY, IMPERIAL CO., CAL.—The Board of Supervisors of Imperial County will receive bids up to August 16 for the sale of the \$14,000 bond issue of the Brawley School District. The funds will be used in remodeling and repairing the present school buildings.

BRIDGES AND DAMS

PATERSON, STANISLAUS CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, A. L. Clary, Modesto. Owners, Stanislaus County. According to word received from this city, County Surveyor A. L. Clary has prepared plans and specifications for the construction of a cement bridge over the Salida Creek, where it crosses the county road immediately north of the town. Bids will be invited at an early date.

VISALIA, TULARE CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, stated. Engineer, County Surveyor, and specifications prepared by County Surveyor Byron O. Lovelace have been approved by the Highway Commission for the construction of two bridge in Tulare County. The Supervisors have issued a call for bids on the work. The work will include the construction of one 400-foot span of the Kings River bridge on the line of the state highway, and one bridge of 40 feet across the Alta District or old "76" canal at Traver. Plans and specifications may be had from the County Surveyor at Visalia.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Bridge reinforced concrete, \$8,199. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, San Luis Obispo County. Engineers Leonard & Day, Rialto Bldg., have received word from the Board of Supervisors at San Luis Obispo to the effect that Allison & Cole, San Luis Obispo, were the low bidders for the reinforced concrete bridge to be erected over the San Luis Obispo Creek about two miles out of San Luis Obispo. Their bid was \$8,199 and an official award of contract will be made at once.

SAN JOSE, SANTA CLARA CO., CAL.—Bridges, 4, timber construction. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans have been completed and have received official approval for the construction of four timber bridges with approaches. Bids are now being taken. Bids will be opened on August 23rd. Plans can be secured from the office of the County Clerk at San Jose.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans are complete and bids will be opened on August 23rd for the construction of a reinforced concrete bridge over Guadalupe Creek. Plans can be secured from the County Clerk at San Jose.

SALINAS, MONTEREY CO., CAL.—Bridge repairs, steel and concrete. Cost not stated. Engineer, County Surveyor, Salinas. Owners, Monterey County. The plans and specifications for repairs to the Chualar bridge have

been approved by the County Supervisors and the Clerk has been instructed to advertise for bids on the work. Bids close August 20th, the next meeting of the Board. Plans and specifications, together with full information, may be had from the County Surveyor at Salinas.

SANTA PAULA, VENTURA CO., CAL.—Bridges, 12, reinforced concrete and steel. Cost not stated. Engineer, County Surveyor Petit, Santa Paula. Owners, Ventura County. Plans and specifications for twelve bridges and culverts to be constructed throughout Ventura County are being prepared in the office of County Surveyor Petit. The plans include the construction of the Saticoy bridge, which will cost approximately \$45,000. On completion of the drawings bids on the work will be called for.

MAITINEZ, CONTRA COSTA CO., CAL.—Bridges, 3, reinforced concrete. Cost not stated. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, Contra Costa County. At the last meeting of the Board of Supervisors of Contra Costa County plans submitted by Engineers Leonard & Day were accepted for three reinforced concrete bridges to be erected in that county. Bids were called for at the same meeting and the opening date was set for August 23rd. Plans can be secured from either the offices of the engineers or from the County Clerk at Martinez.

FAIRFIELD, SOLANO CO., CAL.—Bridges, 3, reinforced concrete. Cost not stated. Engineer, County Surveyor, Fairfield. Owners, Solano County. Bids are now being received by the County Supervisors for the construction of three bridges to be constructed on the state highway. The first will be over Pleasant Valley Creek at the Finch ranch in Vacaville Township. The second will be over Green Valley Creek near Nightingale ranch. The third will cross Green Valley Creek near Cordelia. Plans, together with full information, may be had from the County Surveyor at Fairfield.

Contracts Awarded.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete, \$4,360. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, R. H. Jamison, San Jose. Contract price, \$4,360.

SALINAS, MONTEREY CO., CAL.—Bridge construction. Costs as follows. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, Bradley bridge to W. L. Gilman & Son, 113 West Santa Clara street, San Jose, at \$14,400; repairs to San Lucas bridge to McLaren & Peterson, Williams Bldg., S. F., at \$18,000; jetties at Hilltown awarded to Lou G. Hare, Salinas, at \$5,417.

REDWOOD CITY, SAN MATEO CO., CAL.—Bridges, 3, timber, \$3,189.93. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Contractor, Henry Layaz, Redwood City. Contract price, \$3,189.93.

RIVERSIDE, RIVERSIDE CO., CAL.—Bridge, reinforced concrete, \$2,938. Engineer, County Surveyor, Riverside. Owners, Riverside County. Contractors, Munoz & Munoz, Central Bldg., L. A. Contract price, \$2,938.

REDONDO BEACH, LOS ANGELES CO., CAL.—Pleasure pier, timber and

concrete, \$108,300. Engineer's name not given. Owners, City of Redondo Beach. Contractors, Leyden-Orfseiten Co., Redondo Beach. Contract price, \$108,300.

EUREKA, HUMBOLDT CO., CAL.—Bridges, steel and concrete. Cost as follows. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractors, F. L. Smith, Eureka, suspension bridge over Trinity River, \$3,786; Farnell & Robinson, Eureka, repairs to North Fork bridge, \$1,692; F. L. Smith, Eureka, suspension bridge over Salt River, \$16,490.

RED BLUFF, TEHAMA CO., CAL.—Bridge, reinforced concrete arch girder type, \$109,000. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors, Ross Construction Co., Forum Bldg., Sacramento. Contract price, \$109,000.

RED BLUFF, TEHAMA CO., CAL.—Bridges, 2, reinforced concrete, \$14,000 and \$17,000. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors, McLaren & Peterson, Sharon Bldg., S. F. Contract price, \$14,000 and \$17,000.

RED BLUFF, TEHAMA CO., CAL.—Bridge repairs, \$14,890. Engineer, County Surveyor Lunning, Red Bluff. Owners, Tehama County. Contractors, Ross Construction Co., Forum Bldg., Sacramento. Contract price, \$14,890.

CHURCHES

FRESNO, FRESNO CO., CAL.—Church, 2 story and base, brick and steel, \$75,000. Architect, R. F. Hotchkiss, Fresno. Owners, First Church of Christ, Scientist, Fresno. An announcement has just been made of the selection of an architect to design the structure, and no details of the building have been given out. It is understood that the architect and Building Committee will shortly make a tour of the principal cities of the state with the intention of securing ideas for the building. Further mention will be made of the work.

FACTORIES AND WAREHOUSES.

SAN FRANCISCO—Winery, 2 story and base, reinforced concrete, \$40,000. Architect, P. Righetti, Phelan Bldg., S. F. Owners, Promotion Wine and Liquor Co. The building will be erected at the corner of Lombard and Columbus avenue, and will cover a large ground area. Construction will be fireproof. Interior of the front portion of the building will be finished in pine. There will be a number of large storage tanks. Exterior will be faced with cement plaster. Plans are complete and figures are being taken.

SAN FRANCISCO—Shop addition, steel and concrete, \$15,000. Engineer, Allen G. Ramsay, Union Iron Works, S. F. Owners, Union Iron Works. Plans have been prepared for a considerable addition to the company's mill and joiner shops. The work will require structural steel and concrete besides the addition of special machinery. Plans are complete and figures will be called for at once.

SANTA CLARA, SANTA CLARA CO., CAL.—Motion picture studio, 5, 1 and 2 story, frame, \$40,000. Architects, Ellis & Skilling, Garden City Bank Bldg., San Jose. Owners, San Jose Film Company. This group of buildings will consist of a large studio,

scenery lofts, living quarters and stables. Interior finish will be of pine and redwood. Special laboratory facilities are provided. Exterior will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

PATTERSON, STANISLAUS CO., CAL.—Oil distributing plant, concrete and steel. Cost not stated. Engineer, Engineering Department Standard Oil Co., S. F. Owners, Standard Oil Co. C. O. Flint, assistant superintendent of construction of the Standard Oil Company, has secured a site on Fifth street, upon which the Standard will erect a distributing plant. Three steel storage tanks, 10½ feet in diameter and 30 feet long, each having a capacity of 388 barrels, will be installed—one for distillate, one for gasoline and one for coal oil. In addition to this there will be erected a warehouse and office building 32x40, a pump house 10x20, a stable 22x32 and a wagon shed 22x30.

Contracts Awarded

FRESNO, FRESNO CO., CAL.—Warehouse, 1 story, frame and corrugated iron, \$12,000. Architect, none. Owners, Associated Warehouse Co. Contractors, Hansen Construction Co., Fresno. Contract price, \$12,000.

FIRE HOUSES AND JAILS.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Jail, 1 story, reinforced concrete. Cost not stated. Architect, none. Owners, City of San Luis Obispo. Plans and specifications prepared by Street Superintendent Burch for the new jail building have received the approval of the City Council. The structure will contain five cells each 8x5 feet in size and one dark cell. Bids will soon be called for.

PATTERSON, STANISLAUS CO., CAL.—Jail, 1 story, reinforced concrete. Cost not stated. Engineer, County Surveyor A. L. Clary, Modesto. Owners, Town of Patterson. The building will be of fireproof construction. No details of construction have been given out. Plans are being prepared and figures will be called for shortly. Further mention of the work will be made.

Contracts Awarded

STOCKTON, SAN JOAQUIN CO., CAL.—Fire houses, 2, 1 and 1½ story, frame and brick, \$6,996.50 and \$5,696.50. Architects, Ralph P. Morrell, Odd Fellows Bldg., and W. B. Thomas, Yosemite Bldg., Stockton. Owners, City of Stockton. Contractors, A. J. McPhee & Sons, 316 North California street, Stockton. Contract price, Rose street house, \$5,696.50 and South California street house, \$6,966.50.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$3,500. Architect, none. Owner, I. C. Conner, 578 10th avenue, S. F. The building will be erected on the west side of 4th avenue south of Clement street, covering an area of 25 by 60 feet. The building will contain two modern flats of five and six rooms. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile mantels. Bath rooms will be finished in tile. Automatic water heaters will

be installed. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

GARAGES

OAKLAND, CAL.—Garage, 1 story brick, \$5,000. Architect, none. Owners, Harris & Hudson, 1957 East 38th street, Oakland. The building has been designed for a commercial garage and will be erected on the west side of Fruitvale avenue north of Hopkins street. There will be a concrete floor. Interior will be finished in pine. Special gasoline storage tanks are specified. Exterior of the building will be faced with pressed brick. Plans are complete and in the hands of the owners who will do the work by Day Labor. Materials are now being purchased.

Contracts Awarded

BERKELEY, ALAMEDA CO., CAL.—Garage, 1 story, brick, \$5,000. Architect, J. Henry Boehrer, Delger Bldg., Oakland. Owner, J. H. Wright. Contractors, Boehrer & Legault, Delger Bldg., Oakland. Contract price, \$5,000.

GOVERNMENT WORK & SUPPLIES

SAN FRANCISCO—Officers' quarters and morgue, 1 and 2 story, brick and concrete, \$400,000. Engineer, Construction Quartermaster's Office, Fort Mason. Owners, United States Government. The Army Appropriation Bill for 1916, which has passed Congress, provides funds for the construction of forty-one officers' quarters and a large morgue building to be erected in the Presidio of San Francisco. The new buildings will replace the old wooden frame quarters which will be torn down, the new buildings being arranged in streets. Construction will be of brick and concrete and is estimated to cost in the neighborhood of \$400,000, and will be carried out under the direction of the Constructing Quartermaster's office at Fort Mason. A part of the work will be out this summer although no additional information is as yet at hand.

San Diego, Cal., Building.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for constructing seven buildings at the U. S. naval radio station, San Diego, Cal.:

Item 1, price for the work complete, including the construction of a power house, operating building, pump house, quarters for commanding officer, double quarters for chief operators, and quarters for operators; 2, deduct from item 1 for omitting copper gutters and down-spouts; 3, deduct from item 1 for substituting asbestos shingles; 4, deduct from item 1 or item 9 if heating system be omitted from commanding officer's quarters; 5, price for power house; 6, price for operating building; 7, price for storehouse; 8, price for pump house; 9, price for quarters for commanding officer; 10, price for double quarters for chief operators; 11, price for quarters for operators; 12, add to prices under items 1 and 9 if attic of commanding officer's quarters be lathed and plastered and trimmed.

The William Simpson Construction Co., San Diego, Cal., item 1, \$50,082.65;

\$1,247; 3, \$1,000; 4, \$375; 5, \$11,166; 6, \$8,713.30; 7, \$2,650.05; 8, \$1,448; 9, \$8,103.40; 10, \$7,709.85; 11, \$11,205; 12, \$182.
Lewis A. Geisler & Son, 3688 Indiana street, San Diego, Cal., item 1, \$52,851; 2, \$942; 3, \$1,758.50; 4, \$386; 5, \$7,347.73; 6, \$9,777.79; 7, \$2,925.12; 8, 70.85; 9, \$7,789.60; 10, \$5,086; 16, 11, 1,595.58; 12, \$88; sewer work, \$917; bestos shingles, \$150.10.

A. F. Keyes, 3rd and E streets, San Diego, Cal., item 1, \$48,564; 2, \$1,419; 3, 749; 4, \$386; 5, \$12,140; 6, \$8,541; 7, 716; 8, \$957; 9, \$8,337; 10, \$7,539; 11, 1,020; 12, \$137.

Evans & O'Neill, 611 Watts Building, San Diego, Cal., item 1, \$46,604; 2, \$1,832; 3, \$2,500; 4, \$386; 5, \$11,130; 6, \$7,673; 7, \$2,569; 8, \$955; 9, \$8,732; 10, \$7,912; 12, \$250.

Jacobs Construction Co., 518 Hellman Building, Los Angeles, Cal., item 1, 1,010; 2, \$1,145; 3, \$1,400; 4, \$300; 5, 1,000; 6, \$7,415; 7, \$2,440; 8, \$1,140; \$6,680; 10, \$5,980; 11, \$10,465; 12, \$85. Rambo & Trepte, San Diego, Cal., item 1, \$53,528; 2, \$1,580; 3, \$2,570; 4, 548; 5, \$14,986; 6, \$8,229; 7, \$3,518; 8, 441; 9, \$9,037; 10, \$7,678; 11, \$12,555; 12, \$245.

T. M. Russell, San Diego, Cal., item 1, 3,676; 2, \$1,419; 3, \$2,125; 4, \$560; 5, 3,514; 6, \$8,897; 7, \$3,725; 8, \$1,250; 9, 0,379; 10, \$8,336; 11, \$12,549; 12, \$328. Winter & Nicholson, San Diego, Cal., item 1, \$49,713; 2, \$1,300; 3, \$2,200; 4, 55; 5, \$13,500; 6, \$8,900; 7, \$2,800; 8, 225; 9, \$8,200; 10, \$8,300; 11, \$13,400; 12, \$350.

John Campbell, 1040 1st street, San Diego, Cal., item 1, \$56,722.23; 2, \$1,919; 3, \$2,287; 4, \$421; 5, \$15,668.75; 6, 1,715.38; 7, \$4,189.41; 8, \$8,389.79; 9, 0,846.87; 10, \$8,185.07; 11, \$12,315.92; 12, \$144.50.

W. N. Concanon, 525 Market street, San Francisco, Cal., item 1, \$56,970; 2, 445; 3, \$2,048; 4, \$400; 7, \$3,857; 12, 200.

Brown & De Cew, San Diego, Cal., item 1, \$51,315; 2, \$1,496; 3, \$2,467; 4, 186; 5, \$13,079; 6, \$7,557; 7, \$2,261.40; 8, \$1,015.50; 9, \$9,770; 10, \$7,846.85; 11, 2,045; 12, \$115.

Sparks & Hale, Union Building, San Diego, Cal., item 1, \$51,546.18; 2, \$797; 3, \$3,360; 4, \$386; 5, \$13,272.55; 6, 4,034.54; 7, \$3,338.70; 8, \$1,123; 9, \$8,19.75; 10, \$7,826.63; 11, \$11,379.71; 12, 238.

Billings, Mont., Vault Shelving.
The following bids were received by the supervising architect, Treasury department, Washington, D. C., for installing metal vault shelving in the U. S. post office at Billings, Mont.:
American Bank Protection Co., Minneapolis, Minn., \$223.
Van Dorn Iron Works, Cleveland, Ohio, \$273.50.
Crown Metal Construction Co., Bergen, N. Y., \$299.
Mergert Mfg. Co., Canton, Ohio, \$311.

Keyless Lock Co., Indianapolis, Ind., \$22.04.
Watson Mfg. Co., Jamestown, N. Y., \$10.
Canton Art Metal Co., Canton, Ohio, \$136.
General Fireproofing Co., Washington, D. C., \$361.
Steel Fixture Mfg. Co., Topeka, Kan., \$64.

Art Metal Construction Co., Jamestown, N. Y., \$385.

Siuslaw River, Wharves.

The contract for enlarging and repairing receiving wharves and tramways and extending jetties at mouth of Siuslaw River, Ore., bids opened July 12 by the engineer at Portland, Ore., has been awarded to the Miami Quarry Co., of Portland, Ore., at \$176,570.90.

San Francisco, Cal.—Repairs and Painting

The contract for repairs and painting in the U. S. post office and court house, San Francisco, Cal., has been awarded to the J. Llewellyn Co., Oakland, Cal., at \$1,850.

Panama Canal, I Beams.

The following bids were received by the general purchasing officer, Panama Canal, for furnishing 35 steel I beams: Belmont Iron Works, Philadelphia, Pa., \$1.55c per lb.

R. C. Hoffman & Co., Baltimore, Md., 1.59c.

Pennsylvania Steel Co., Baltimore, Md., 1.59c.

U. S. Steel Products Co., New York City, 1.535c; accepted.

Contracts Awarded.

FORT HUACHUCA, ARIZ.—Power house, etc. Cost as follows. Engineer, Constructing Quartermaster's Office, Fort Huachuca. Owners, United States Government. The following awards have been made by the War Department: To H. S. Tittle, S. F., power plant, except boiler, building, electric light and power distributing system, electric wiring, etc., \$21,200. To Charles C. Moore & Co., S. F., installing one Cyclops Iron Works traveling crane, \$2,031. To Vilter Mfg. Co., Milwaukee, Wis., furnishing ice machines, \$13,100. To New London Ship & Engine Works, Croton, Conn., 2 200-H. P. Deisel engines, \$24,585. To Gross Chandelieri Co., St. Louis, Mo., furnishing electric fixtures, \$3,344. To Russell Electric & Machinery Co., Tucson, Ariz., furnishing Westinghouse transformers and watt meters, \$1,853.

HALLS AND SOCIETY BUILDINGS

Contracts Awarded.

TILLAMOOK, ORE.—City Hall, 2 story and base, brick, \$19,388. Architect, Charles H. Burgraff, Albany. Owners, City of Tillamook. Contractor, F. Hyde, Tillamook. Contract price, \$19,388.

HOSPITALS

SAN JOSE, SANTA CLARA CO., CAL.—Cottage, 1 story, frame. Cost not stated. Architect, none. Owners, Santa Clara County. Plans have been completed and are now out for figures for the construction of a frame cottage to be erected on the County Hospital grounds. Bids will be opened on August 23rd. Plans and specifications can be secured from the County Clerk at San Jose.

LIBRARIES.

GRIDLEY, BUTTE CO., CAL.—Library, 1 story, brick and steel, \$6,600.

Architect Chester Cole, Chico. Owners, City of Gridley. The lowest bid submitted for the construction of the new Carnegie Library in this city was presented by Welsh Bros. & Haaman of Grass Valley at \$6,239 without the heating and \$6,689 with the heating. No official award has been made, but it is expected that such action will be taken at once.

HOTELS.

MT. DIABLO, CONTRA COSTA CO., CAL.—Hotel, 3 story and base, frame, cost not stated. Architect, G. A. Applegarth, Spreckels Bldg., S. F. Owners, Mt. Diablo Hotel Co. The building has been designed for a hotel and observatory. Interior will be finished in pine and redwood. A central heating system will be installed. Exterior will be covered with rustic and shingles. Plans are complete and figures will be taken at once.

WALLA WALLA, WASH.—Hotel, 6 story and base, brick and steel, \$150,000. Architect, George B. Purvis, Northern Bank Bldg., Seattle. Owners, New Grand Hotel Co. The building will cover an area of 70 by 120 feet and will provide for stores and the hotel lobby on the first floor. Upper floors will be arranged for a large number of modern hotel rooms, a large percentage of which will have private baths. Interior will be finished in pine with some hardwood. There will be steam heat, elevator service, hot water system and vacuum cleaning. Bath rooms will have tile floors and wainscot. Marble and tile and ornamental plaster will be used. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are nearly complete and figures will be called for by September 1st.

RAILROAD CONSTRUCTION AND EQUIPMENT.

SAN DIEGO, CAL.—Railroad construction. Cost not stated. Engineer, Chief Engineer James R. Parish, Los Angeles. Owners, Santa Fe Railroad. The Temecula branch of the Santa Fe may be rebuilt, according to word received in San Diego. Commissioner Frank R. Devlin, before whom the hearing was held, has taken the matter under advisement. It is the intention to get a new railroad through San Luis Rey Valley. The proposed railroad would replace the section through the Temecula Canyon, washed out by heavy rains many years ago. Chief Engineer Richard E. Sachs of the Railroad Commission has estimated the cost of the proposed road to be \$823,000. The replacement of the washed-out gap through the canyon would cost \$650,000, according to James R. Parish of the Santa Fe Company. The proposed new road would be slightly longer and would avoid the Temecula Canyon, going instead via the San Luis Rey Valley, Bonsall and Fallbrook.

TITLICK, STANISLAV CO., CAL.—Passenger depot, 1 story, brick and concrete. Cost not stated. Engineer, Chief Engineer Barlow, Flood Bldg., S. F. Owners, Southern Pacific Co. According to word received from this city the plans and specifications for

the proposed depot building to be erected by the Southern Pacific Company at Turlock have been approved by the Railroad Commission after the company agreed to make certain changes in the plans. Work is expected to be started on the new structure within two months.

Contracts Awarded

THE DALLES AND PILOT ROCK, ORE.—Roundhouse and shops, reinforced concrete. Cost as follows. Engineer's name not given. Owners, Oregon-Washington Railroad and Navigation Co. Word received from this city states that the contract for constructing roundhouses, machine shops, etc., at The Dalles and Pilot Rock, Ore., for the Oregon-Washington Railway and Navigation Co., has been let to Nettleton, Bruce & Eachbach, American Bank Bldg., Seattle, for about \$95,000. The work at The Dalles calls for a 12-stall brick and concrete roundhouse, 50x60 feet; machine shop, turntable pit and foundations, 30x34 feet; concrete and brick power house and stack, 40x60 feet; brick storehouse and platform. Cost, \$50,000. The work at Pilot Rock calls for a 10-stall roundhouse, turntable pit and foundations, 30x60 feet; power house and stack and a one-story, 40x65 feet storehouse. All buildings to be of concrete and brick and cost about \$45,000.

RESIDENCES.

SAN FRANCISCO — Residence, 1 story and base, frame, \$3,000. Architect, none. Owner, Peter Rooney, 2853 Folsom street, S. F. The dwelling will be erected on the north side of Bryant street east of 25th, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, J. N. Gillogley, 745 San Jose avenue, S. F. The dwelling will be erected on the west side of 15th avenue south of Irving, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the living and dining rooms and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot and floor. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$7,000. Architect, William Knowles, Hearst Bldg., S. F. Owner, H. F. Miller. The dwelling will be erected on the south side of Green street west of Scott, and has been designed to contain eight rooms,

two baths and sleeping porch. A basement garage is also provided. Interior will be finished in pine, hardwoods and white enamel. Hardwood floors will be used throughout. There will be furnace heat and open fire places. Mantels will be of tile. An automatic water heater will be installed. Bath rooms will have tile floors and wainscot. Exterior of the dwelling will be covered with rustic, shingles and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO — Residence, 2 story and base, frame, \$8,500. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owners, Allen Bros. The dwelling has been designed for an eight-room house with two baths, sleeping porch and a separate garage. Interior will be finished in mahogany and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. An automatic water heater will be installed. Bath rooms will have tile floors and wainscot. Mantels will be of tile and brick. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and segregated figures are being taken.

SAN FRANCISCO—Residence alterations, frame construction, \$1,500. Architect, William Knowles, Hearst Bldg., S. F. Owner, Mrs. Has Brouck. The work will be done at the property on Maple avenue near Pacific, and will include interior finish, hardwood floors, painting, plastering, electric work and plumbing. New mantels will be installed. Exterior will be of rustic. Plans are complete and the work will be done by Day Labor.

OAKLAND, CAL.—Residences, 2, 1 story and base, frame, \$2,500 each. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, M. H. Temple. These two houses will be erected in Elmhurst and each will contain six-rooms and bath. Interior will be finished in pine with some white enamel. Hardwood floors will be used in the living and dining rooms. There will be an open fire place in each living room. Mantels will be of tile or brick. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior of the houses will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$3,500. Architect, none. Owners, Welch & Rogers, 1734 Grove street, Oakland. The dwelling has been designed for a six-room house with bath and sleeping porch and will be erected on East 33rd street east of Fourth avenue. Interior will be finished in pine with some white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile or brick mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$4,500. Architect, none. Owner, C. M. MacGregor, 470 13th street, Oakland. The dwelling will be erected on Mandana Boulevard and has been designed for an eight-room house with bath and sleeping porch. Interior will be finished in pine and hardwood veneer with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, Joseph T. Hinch, 1748 Broadway, Oakland. The dwelling will be erected at the southeast corner of 36th and Adeline streets, and has been designed for a six-room house with bath. Interior will be finished in pine throughout. Hardwood floors will be used in the living and dining rooms. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, L. G. Pirang, 5447 Shafter avenue, Oakland. The dwelling will be erected on Glendale avenue west of Desmond, and has been designed for a six-room house with bath and sleeping porch. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms. There will be an open fire place and tile or brick mantel in the living room. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, J. Coward, 6081 Claremont avenue, Oakland. The dwelling has been designed for a six-room house with bath and sleeping porch and will be erected on the south side of Cabot street east of Pedestrian Way. Interior will be finished in pine throughout. Hardwood floors will be used in the living and dining rooms and reception hall. There will be a large open fire place in the living room. Mantel will be of brick. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$5,000. Architect, none. Owner, A. B. Chase, 1521 73rd avenue, Oakland. The dwelling will

be erected on Montgomery street east of Peralta, and has been designed for a nine-room house with bath and sleeping porch. Interior will be finished in pine, elm and white enamel. Hardwood floors will be used in the living and dining rooms and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$1,500. Architect, none. Owner, R. E. Stubbs, 1203 East 19th street, Oakland. The dwelling has been designed for an eight-room house with bath and sleeping porch, and will be erected on Mirra Vista avenue near Alta Vista. Interior will be finished in pine with some white enamel and elm panels. Hardwood floors will be used in the living and dining rooms and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, C. J. Pfarr, 5487 Claremont avenue, Oakland. The dwelling will be erected on the east side of Dover street south of 63rd, and has been designed for a five-room dwelling with bath and sleeping porch. Interior trim will be of pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place in the living room. Mantel will be of brick. Plans provide for an automatic water heater. Tile wainscot will be used in the bath room. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RICHMOND, CONTRA COSTA CO., CAL.—Residence, 1 story and base, frame, \$3,750. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, Walter La Selle. The dwelling has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine, elm panels and white enamel. Hardwood floors will be used in the living and dining rooms and reception hall. There will be a large open fire place and tile or brick mantel in the living room. An automatic water heater will be installed. Bath room will have tile floor and wainscot and will be equipped with high class plumbing fixtures. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

RICHMOND, CONTRA COSTA CO., CAL.—Residence, 2 story and base, frame, \$4,500. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, Charles Pulse. The dwelling will contain eight rooms, bath and sleeping porch, and will be erected in one of the most attractive

of the city's residence sections. Interior will be finished in pine with elm panels and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile or brick. An automatic water heater will be installed. Bath room will have tile floor and wainscot. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are being taken by the architect.

RICHMOND, CONTRA COSTA CO., CAL.—Residence, 1 story and base, frame, \$4,000. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, John Marchi. The dwelling has been designed to contain seven rooms, bath and sleeping porch. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. An automatic water heater will be installed. Bath room will have tile floor and wainscot. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

RICHMOND, CONTRA COSTA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, Walter Giarrella. The dwelling has been designed for a five-room house with bath. Interior will be finished in pine and redwood. Some hardwood floors will be used. Bath room will have tile wainscot. An automatic water heater will be installed. There will be a large open fire place in the living room. Mantel will be of tile or brick. Exterior of the house will be covered with rustic. Plans are now being prepared.

RICHMOND, CONTRA COSTA CO., CAL.—Residence, 2 story and base, frame, \$4,000. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, J. Vander Zwiep. The dwelling will contain eight rooms, bath and sleeping porch. Interior will be finished in pine with some white enamel and elm panels. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile or brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are now being prepared and figures will be called for shortly.

STOCKTON, SAN JOAQUIN CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, F. Holberg Reimers, 2125 Shattuck avenue, Berkeley. Owner, Dr. Goodman. The dwelling will be erected in Tuxedo Park, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine with considerable white enamel. Hardwood floors will be used in the living room, dining room and the doctor's office. Plans provide for furnace heat and open fire place. Mantel will be of tile or brick. An automatic water heater will be installed. Bath room will have tile floor and wainscot. Exterior of the dwelling will be covered with cement plaster on metal lath.

Plans are being revised and new figures will be called for shortly.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$2,750. Architect, none. Owner, W. D. McKoy, 3029 E street, Sacramento. The dwelling will be erected in Casa Loma Terrace, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine with some elm panels and white enamel. Hardwood floors will be used in the principal rooms. There will be an open fire place and furnace heat. Mantel will be of tile or brick. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

FRESNO, FRESNO CO., CAL.—Residence, 1 story, frame, \$1,500. Architect, none. Owner, J. R. Church, Fresno. The dwelling will be erected in the Riverdale Addition and has been designed for a five-room house. Interior will be finished in pine and redwood. There will be an open fire place in the living room. Mantel will be of tile or brick. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

FRESNO, FRESNO CO., CAL.—Residences, 3, 1 story and base, frame, \$2,500 each. Architect, none. Owner, H. W. Ackerman, 1221 U street, Fresno. These dwellings will each contain six rooms and bath, and will be erected in the Alta Vista Tract. Interiors will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be open fire places and brick mantels. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exteriors will be covered with cement plaster and rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$5,000. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner, Mr. Brown. The dwelling will be erected in Forest Hill and has been designed for an eight house with bath, sleeping porch and separate garage. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile wainscot and floor. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, J. S. Purcell, 856 Presidio avenue, S. F. The dwelling has been designed for a six-room house with bath and will be erected on the west side of 16th avenue south of Balboa street. Interior finish will be of pine throughout. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place in the living room with a brick man-

tel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$5,000. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner, Mr. Brown. The dwelling will be erected on 45th avenue between Anza and Geary streets, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine with some southern gum. Hardwood floors will be used in the living, room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are now being prepared.

SAN FRANCISCO — Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, A. R. Lapham, 511 12th avenue, S. F. The dwelling has been designed for a six-room house with bath and sleeping porch, and will be erected on the west side of 12th avenue north of Clement street. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place with tile or brick mantel. Plans provide for an automatic water heater. Bath room will have tile floor and wainscot. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, E. A. Schkade, 240 20th avenue, S. F. The dwelling has been designed for a seven-room house and will be erected on the east side of 19th avenue south of California street. Interior will be finished in pine with elm panels and white enamel. Hardwood floors will be used in the living and dining rooms and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$5,000 each. Architects, Falch & Knoll, Hearst Bldg., S. F. Owners, Newell-Murdock Co. These houses will be erected in Forest Hill and each will contain eight rooms, bath and sleeping porch. Separate garages will be erected on the property. Interiors will be finished in pine with elm panels and white enamel. Hardwood floors will be used in the living and dining rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exteriors will be covered with cement plaster on metal lath. Plans are being revised and new figures will be called for shortly.

SAN FRANCISCO — Residence, 2 story and base, frame, \$5,000. Architect, Edward G. Bolles, 660 Market street, S. F. Owners, S. A. Born Building Co. The dwelling will be erected in Ashbury Terrace and has been designed for an eight-room house with bath and sleeping porch. Interior will be finished in pine and hardwood with white enamel in the bath rooms. Hardwood floors will be used throughout. Plans provide for furnace heat and open fire places. Mantels will be of brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$2,500. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, Charles Isola. The dwelling will be erected on 42nd street east of Linden, and has been designed for a six-room house. Interior will be finished in pine throughout. There will be an open fire place in the living room with a tile mantel. Exterior will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$5,000. Architect, Albert Farr, Foxcroft Bldg., S. F. Owner, Robert Sharon. The dwelling will be erected in Piedmont, and has been designed for an eight-room house with bath and sleeping porch. Interior will be finished in pine, hardwood veneer and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile or brick. An automatic water heater will be installed. Bath room will have tile floor and wainscot. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, Louis O. Hanson, 1128 The Alameda. The dwelling will be erected on the south side of Keith avenue west of Broadway, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine with some white enamel and elm panels. Hardwood floors will be used in the living and dining rooms and reception hall. There will be furnace heat and open fire places. Mantels will be of tile. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$5,000. Architect, Edward L. Cannon, Central Bank Bldg., Oakland. Owner, David Caig. The dwelling will be erected on Santa Ray avenue south of Rosal, and has been designed for a ten-room house with bath. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms. There will be furnace heat and open fire places. Mantels will be of tile or brick. An automatic water heater will be installed. Bath room will have tile wainscot. Exterior of the house will be covered with cement

plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SCHOOLS.

FRESNO, FRESNO CO., CAL. — School, 1 story and base, brick and tile, \$12,000. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owners, West Park School District. The building will be erected about 2½ miles out of Fresno, and has been designed for a four-room school. Interior will be finished in pine. Maple floors will be used in the class rooms. There will be a central heating system, probably steam heat with an oil burning furnace. Modern school plumbing and electric work is specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures will be called for at once.

BROWN SCHOOL DISTRICT, TEHAMA CO., CAL.—School, 1 story, frame. Cost not stated. Architect, none. Owners, Brown School District. The building will contain two class rooms. Interior will be finished in pine. Stoves will be used for heating. Exterior will be covered with rustic and shingles. Plans are complete and out for figures. Bids will be opened on August 16th. Plans and specifications can be secured from the County Superintendent of Schools, Odd Fellows Bldg., Red Bluff.

Contracts Awarded.

MARICOPA, KERN CO., CAL.—School 1 story and base, frame, \$11,250. Architect, Thomas B. Wiseman, Producers' National Bank Bldg., Bakersfield. Owners, Maricopa School District. Contractor, Fred Gribble, Maricopa. Contract price, \$11,250.

SEWERS, STREET WORK & WATER SYSTEMS.

RICHMOND, CONTRA COSTA CO., CAL.—Street paving, etc. Cost not stated. Engineer, City Engineer Chapman, Richmond. Owners, City of Richmond. City Engineer Chapman has recommended to the Council that Bay avenue be improved with a concrete base and bitulithic surface. Plans for this improvement will probably be ordered at the next meeting. Plans and specifications for the improvement of Twenty-first street and Anita street have been approved by the Council and bids will be ordered shortly.

PETALUMA, SONOMA CO., CAL.—Street improvement, grading, paving, and curbs. Cost not stated. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. The City Council has passed resolutions of intention to improve Sheldon street from the south line of Bassett street to the north line of lot 177, between its property lines be graded to the subgrade for its entire width, and between its curb lines macadamized with crushed rock, curbed with basalt blocks and guttered with concrete, except 200 feet of curb and 500 square feet of gutter on east side of Sheldon street, 100 feet south of south line of Bassett street. Bids will soon be called for.

MARTINEZ, CONTRA COSTA CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Plans have been completed and figures are now being taken for constructing a road with gravel base on

Division No. 2 of the Tunnel road, a distance of 7 miles and 300 feet. Bids will be opened on August 16th. Plans and specifications can be secured from the County Clerk.

SAUSALITO, MARIN CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Sausalito. Owners, City of Sausalito. The Town Engineer has been instructed to prepare plans and specifications for the paving of El Portal and Park avenues. The work will be under the 1911 act. On completion of the plans bids will be called for.

MARTINEZ, CONTRA COSTA CO., CAL.—Road construction, \$49,246.23. Engineer, County Surveyor Arnold, Martinez. Owners, Contra Costa County. Plans and specifications for seven more miles of permanent highway running from the Bryant bridge to Walnut Creek, have been completed and presented to the Supervisors by County Surveyor Arnold. The new stretch is estimated to cost \$49,246.23, or an average of \$7,035 per mile. There are to be three concrete and steel bridges to be erected. The road is to be 18 feet wide and will have a concrete base with asphaltum crown. There will be a two-inch wing.

SAN RAFAEL, MARIN CO., CAL.—Road repair, \$8,000. Engineer, County Surveyor, San Rafael. Owners, Marin County. The bid of S. B. McNear of \$8,000 to repair the road leading from Chicken Point to a point near the McNear brick yard, was rejected at the last meeting of the Supervisors. Supervisor Hansen was empowered to do the work.

SANTA ROSA, SONOMA CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Santa Rosa. Owners, City of Santa Rosa. The City Engineer has been instructed by the Council to prepare a plan showing property owners not signed up for the paving of Santa Rosa avenue and submit same at the next meeting so that bids on the work may be called.

SAN JOSE, SANTA CLARA CO., CAL.—Furnishing rock and sand. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the Supervisors, upon motion, it was ordered that the clerk advertise for bids for the following rock for road purposes: 3,500 cubic yards or more Saratoga rock crusher run, Leona Heights rock crusher run, first class creek gravel, to be delivered on the Alviso and Santa Clara road between Agnew and the town of Alviso, and on the Mt. View and Alviso road to the westerly line of Supervisor's District No. 4. Bids to be opened Monday, August 23rd. On motion it was ordered that the Clerk advertise for bids for 1,830 cubic yards of Saratoga crusher run rock, to be delivered at the following named roads: Pennsylvania avenue, Palm avenue, Walnut avenue, Wissickier avenue, Live Oak avenue, Chestnut avenue, Hernandez avenue, Ellsworth avenue, Belmont avenue, Backman avenue, in Road District No. 5. Also 1,000 cubic yards or more of crusher run Saratoga crushed rock to be delivered on the Los Gatos and Almadon road between Union avenue and Hardwood road in Road District No. 5.

MODESTO, STANISLAUS CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Modesto. Own-

ers, City of Modesto. Resolutions providing for the paving of L street between Seventh and Ninth streets have been adopted by the City Council, and bids on the work will be called for as soon as all necessary advertising requirements have been complied with.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer, South San Francisco. Owners, Town of South San Francisco. Resolutions providing for plans and specifications for the paving of Magnolia and Orange avenues, between Miller and Paden, were adopted at the last meeting of the City Board of Trustees. Bids for this work will probably be called at the next meeting.

SAN JOSE, SANTA CLARA CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans have been completed and approved for the improvement of the Oakland road through the town of Milpitas. Bids for this work will be opened on August 23rd. Plans and specifications can be secured from the office of the County Clerk at San Jose.

REDWOOD, CITY, SAN MATEO CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The County Supervisors have instructed the County Engineer to prepare an estimate of the cost of putting on 4 inches of macadam with two coats of screening and two coats of oil surfacing on the road from San Gregorio to Pescadero and from Tunitas to San Gregorio.

MONTEREY, MONTEREY CO., CAL.—Street paving, curbs, etc. Cost not stated. Engineer, City Engineer, Monterey. Owners, City of Monterey. Plans and specifications have been approved by the City Council for the improvement of Pacific street from the north line of Madison street to the south line of Jefferson street, by grading and paving with macadam from gutter line to gutter line, and the construction of gutters, sidewalks and curbs. Bids on this work will soon be called for.

REDWOOD, CITY, SAN MATEO CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. At the last meeting of the County Supervisors the County Surveyor presented plans and specifications for the building of two roads in the Fourth Road District, one from Sunshine Valley to Montara, and the other from Montara to Martini. Bids will soon be called for.

EUREKA, HUMBOLDT CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Eureka. Owners, Humboldt County. All bids received by the Supervisors for the construction of the three roads—Ettersburg, Honeydew and Bair's Hoopa roads—were rejected and readvertisement was directed for alternate bids on 10-foot and 12-foot roads.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving, curbs and gutters. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. At the last meeting of the City Council resolutions of intention were adopted for the improvement of Scotts avenue from Lincoln to Monroe street—Van Buren from Taylor to Hazelton,

Monroe from Taylor to Scotts avenue, and the west half of Monroe street from Scotts to Hazelton avenue. The improvements are to consist of concrete curbs and gutters and asphaltic bound macadam street pavement.

CHICO, BUTTE CO., CAL.—Street paving. Cost not stated. Engineer, County Surveyor Martin C. Polk, Oroville. Owners, City of Chico. The street bordering the children's playground and connecting Broadway with the Esplanade bridge over Big Chico Creek, will be paved with what is known as the Richmond Specification, with a mixture of oil and crushed rock, according to a statement of Supervisor R. F. Holmes. County Engineer Martin C. Polk has been directed to prepare plans and specifications for the work. The work will cost several thousand dollars.

CALEXICO, IMPERIAL CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Calexico. Owners, City of Calexico. Plans and specifications have been completed by the City Engineer for the improvement of Second street, and bids on the work will be called for in about two weeks.

RIVERSIDE, RIVERSIDE CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Riverside. Owners, Riverside County. Plans and specifications for route 16, 2½ miles, between Winchester and Coyote Pass of the county highway have been approved by the County Supervisors and bids have been ordered advertised to be received on August 18th at 10 a. m.

TURLOCK, STANISLAUS CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer Luyster, Turlock. Owners, City of Turlock. Plans and specifications for sewer work to be done in Minaret avenue and Rose street have been completed by the City Engineer and approved by the City Council, and bids on the work are now being taken. Plans and further information may be had from City Engineer Luyster.

LINDSAY, TULARE CO., CAL.—Street paving, etc. Cost not stated. Engineer, City Engineer, Lindsay. Owners, City of Lindsay. The Board of Trustees are making preparations for the improvement of Hermosa street from Mt. Vernon avenue to the westerly limits of the city, and Main street east to the city limits. A 16-foot pavement with a two-foot gravel and oil shoulder on each side will probably be laid on Hermosa street, while Honolulu street will be paved from curb to curb as far as the Santa Fe depot on Harvard avenue.

HEMET, RIVERSIDE CO., CAL.—Tank and tower, steel and concrete. Cost not stated. Engineer, Town Engineer, Hemet. Owners, Town of Hemet. The City Council is having plans prepared for a new steel water tower and tank to be erected at the municipal water plant. It is to have a capacity of 125,000 gallons.

Contracts Awarded.

SAN JOSE, SANTA CLARA CO., CAL.—Road improvement, \$10,300. Engineer, County Engineer, San Jose. Owners, Santa Clara County. Contractor, John F. Adams, San Jose. Contract price, \$10,300.

REDWOOD CITY, SAN MATEO CO., CAL.—Road construction, \$29,233.56. Engineer, County Surveyor, Redwood City. Owners, San Mateo County Con-

tractor, L. G. Hare, Salinas. Contract price, \$29,233.56. The contract covers 14,825 miles of road to be constructed in District No. 5.

RICHMOND, CONTRA COSTA CO., CAL.—Street paving, \$6,209.63. Engineer, City Engineer, Richmond. Owners, City of Richmond. Contractors, Galbraith & Jones, 156 14th street, Richmond. Contract price, \$6,209.63.

PETALUMA, SONOMA CO., CAL.—Sewer construction. Cost as follows. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. Contractor, J. B. Silva, Petaluma. Contract price, manholes, \$33 each; 6-inch iron stone sewer, including Y branches, 58c per lineal foot.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving, \$84,556.70. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, Eaton & Smith, 407 11th street, S. F. Contract price, \$84,556.70.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction, \$3,711.82. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, Leach & De Camp, 14 Montgomery street, S. F. Contract price, \$3,711.82.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Sewer construction, \$9,542. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. Contractor, W. J. Tobin, Santa Cruz. Contract price, \$9,542.

SACRAMENTO, CAL.—Street paving. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The contract for the paving of M street from the east line of Second to the west line of Third street has been awarded to the McGilliray Construction Co., 1007 7th street, Sacramento, by the City Commission. The Clark & Henery Construction Co., Ochsner Bldg., Sacramento, were awarded the contract for the improvement of Third avenue in Oak Grove, from the east line of Lower Stockton road to the west line of East avenue.

SANTA ANA, ORANGE CO., CAL.—Road construction, \$21,498. Engineer, County Surveyor, Santa Ana. Owners, Orange County. Contractor, Fred Hoffman, Long Beach. Contract price, \$21,498. At the same meeting the contract for furnishing and delivering 50,000 barrels of cement at \$1.31 per barrel with 2 per cent discount for cash, was awarded to the Riverside Portland Cement Co. An option was given on 30,000 barrels additional at the same price.

RIVERSIDE, RIVERSIDE CO., CAL.—Highway construction, \$28,010.36. Engineer, County Surveyor, Riverside. Owners, Riverside County. Contractors, Connors Construction Co., Higgins Bldg., L. A. Contract price, \$28,010.36.

STORES AND OFFICES.

SAN FRANCISCO—Stores and offices, 3 story and base. Class A construction. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner's name withheld. The building will be erected at the southwest corner of Davis and California streets, covering a large ground area. A pile foundation is necessary. There will be a complete steel frame, brick exterior walls, tar and gravel roof and hollow tile interior partitions. Interior will be finished in hardwoods, marble and tile. Metal

window sash and frames are specified. Plans provide for steam heat, oil burning furnace, three electric elevators and vacuum cleaning. Patent store fronts are specified. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and segregated figures are being taken.

SAN FRANCISCO—Store, 1 story, brick, \$3,500. Architect, none. Owner, J. J. Cummings, 244 Kearny street. The building will be erected on Mission street south of Sycamore, covering an area of 25 by 50 feet. There will be one store. Interior will be finished in pine. Patent store fronts are specified. Exterior will be faced with pressed brick. Plans are complete and the work will be done by Day Labor.

SAN FRANCISCO—Store fixtures, \$9,000. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner's name withheld. Plans are complete and figures are being taken for one of the largest jobs of store fixtures and interior trim which has been figured in some time. Mahogany and oak will be used almost throughout. Included in the work is a large amount of art glass, ornamental plaster and ornamental iron.

SAN FRANCISCO CAL.—Office Bldg. Mr. Newlands, of the Sharon Estate Co., stated to a representative that the statement published by the morning papers in which it was stated that the Sharon Estate would construct a building on their property in the rear of the Palace Hotel for the use of the Southern Pacific Co. was untrue. He further stated that only two pieces of Sharon Estate property were so located as to be of use to the Southern Pacific and that both of these were two small for the required building.

SAN FRANCISCO—Store, 1 story and base, frame, \$2,500. Architect, Frank S. Holland, 100 Haight St., S. F. Owner, J. P. McInerney. The building will be erected at the northeast corner of Capitol and Broad streets, covering an area of 35 by 65 feet. Interior will be finished in pine. Exterior of the building will be covered with rustic and shiplap. Plans are complete and figures are being taken.

OAKLAND, CAL.—Stores and theatre alteration, 3 story and base, brick, \$60,000. Architect, Carl Werner, Phelan Bldg., S. F. Owner, Charles Heeseman. The building at the gore corner of 17th, San Pablo and Clay streets will undergo extensive alterations. There will be provision for a theatre besides the stores on the first floor and upper floors will be arranged for a lodge hall. Included in the work will be interior trim, heating, plumbing, electric work, and painting. Exterior will be faced with pressed brick. Plans are now being prepared.

VALLEJO, SOLANO CO., CAL.—Cafe, 1 story, brick, \$5,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, Frank Powers. The building will be erected at 412 Georgia street, covering an area of 25 by 130 feet. Interior will be finished in pine and hardwood with some ornamental plaster. Patent store fronts are specified. Exterior will be faced with pressed brick. Plans are complete and figures are being taken.

MARTINEZ, CONTRA COSTA CO., CAL.—Office building, 1 story, brick, \$3,500. Architect, James T. Narbett, 704 MacDonald street, Richmond. Owners,

Pacific Gas and Electric Co. The building will contain the general office of the company. Interior will be finished in hardwood. A tile and marble floor will be used. Patent store fronts are specified. Exterior will be faced with pressed brick. Plans are now being prepared.

SEATTLE, WASH.—Publishing house and offices, 5 story and base, reinforced concrete, \$500,000. Architects, Charles H. Bebb and Carl Gould, Denny Bldg., Seattle. Owners, Times Publishing Co. The building will be erected at the corner of Westlake and 4th, and will cover a large ground area. Foundations have been designed to carry three additional stories. There will be a number of stores on the first floor besides the general office. Upper floors will be arranged for offices and the editorial and city rooms. Interior will be finished in pine and hardwood. There will be steam heat, elevator service and vacuum cleaning. Metal window sash and frames are specified. Exterior of the building will be faced with cement plaster. Plans are being prepared and will be ready for figures about September 1st.

THEATRES.

OREGON CITY, ORE.—Theatre, 1 story and base, brick, \$18,000. Architect, Aaron H. Gould, Henry Bldg., Portland. Owner, Charles Schram. The building will cover an area of 44 by 110 feet, and will be fireproof throughout. The theatre will seat 650 people. Interior will be finished in pine and ornamental plaster. Special electric work is specified. Exterior of the building will be faced with pressed brick. Plans are now being prepared.

SEALED PROPOSALS

PROPOSALS FOR BRIDGE.

BRIDGE—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Washington, D. C., until 2 o'clock p. m. September 8, 1915, for furnishing and erecting a steel bridge of three 100-foot spans and a structural steel movable crest with operating machinery for the Vandalla dam of the Milk River project, Montana. For particulars address the United States Reclamation Service, Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR VESSEL.

VESSEL—Sealed proposals will be received at the Coast and Geodetic Survey, Washington, D. C., until August 25, 1915, and then opened, and also on the same date at the office of the Inspector of Coast and Geodetic Survey, room 310, Custom House, San Francisco, Cal., for construction and equipment of the Coast and Geodetic Survey steamer Surveyor of about 1,000 tons displacement. Particulars may be had by addressing the superintendent, Coast and Geodetic Survey, Washington, D. C.

PROPOSALS FOR ELEVATORS.

ELEVATORS—Sealed proposals indorsed "Proposals for Freight Elevators" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 10 o'clock a. m. August 28, 1915, and then and there publicly opened, for three hydro-pneumatic freight elevators, installed complete, at the naval station, Pearl Harbor, Hawaii. Plan and specification may be obtained on application to the bureau or to the commandant of the

naval station named. WM. M. SMITH, acting chief of bureau.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 958—Proposals for Steel Reinforcing Bars, Bronze Wire Cloth, Screws, Cotter Pins, Screw Eyes, Cup Hooks, Staples, Cable Clips, Tacks, Hasps, Hinges, Night Latches, Chain Blocks, Snatch Blocks, Tackle Blocks, Steel Cams, Trunnions, Grindstones, Stable Brooms, Floor Brushes, Buckets, Oil Cans, Ladders, Life Preservers, Blow Torches, Anchor Lights, Window Glass, Pipe Cutter, Whistles, Awls, Pulleys, Steel Tapes, Rules, Lantern Globes, Oars, Tool Handles, Mop Handles, Mop Heads, Packing, Oakum, Crayons, Twine, Trapping Paper, Index Cards and Lumber.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. August 20, 1915**, at which time they will be opened in public for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 958) may be obtained from the office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; E. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR BUILDING

BUILDING—Port Rosecrans, Cal.—Sealed proposals will be received here until **3 p. m. August 26, 1915**, for constructing a storehouse. Further information on application to constructing quartermaster.

PROPOSALS FOR LIGHTING FIXTURES.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C. July 28, 1915.—Sealed proposals will be opened in this office at **3 p. m. August 18, 1915**, for furnishing and installing lighting fixtures in the United States Post Office at Denver, Colorado, in accordance with drawings and specifications, copies of which may be had at this office. Proposals are desired only from those qualified to produce work of the highest grade, both artistically and mechanically, and the right is refused to send the drawings and specifications to or to receive proposals from anyone who, in the opinion of the Supervising Architect, is not so qualified. JAMES A. WETMORE, Acting Supervising Architect.

PROPOSALS FOR RECLAMATION WORK.

RECLAMATION WORK—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service at St. Ignatius, Mont., until **3 o'clock p. m. August 18, 1915**, for the construction of materials, sublaterals and appurtenant structures on the Flathead project, involving about 33,000 cubic yards of excavation, 500 cubic yards of concrete, 3,500 square yards of paving, 100 tons of about 3,000 pounds of reinforcing steel and 74,000 feet, b. m., of lumber and the manufacturing and laying of about 1,000 linear feet of concrete pipe. The project is situated on the east side of the Flathead River, from 10 to 18 miles southwest of Polson and 9 to 16 miles northwest of Ronan, Mont. For particulars address the United States Reclamation Service, Washington, D. C.; Denver, Colo., or St. Ignatius, Mont. A. P. DAVIS, chief engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 956—Office of the General Purchasing Office, Panama Canal, Washington, D. C.—Sealed proposals will be received here until **August 10, 1915**, under circular 956 for furnishing the following: 50 brackets, brake shaft, 2,000 feet trolley wire, 20 reams manila paper, 40 cases iron posts, 1,200 feet vulcanized rubber strips, 500 spring plates, 12 machinists' vices, 50 lengths corrugated tender hose, 3 lengths steel rails, 108 hand saws, 2 water gauges, 500 handles, 72 hatchets,

24 vices, 288 wheels for Barnes pipe cutters, 12 air whistles, 21 adzes, 4 blacksmiths' anvils, 111 blacksmiths' chisels, 3,600 hacksaw blades, 24 breast drills, 72 saw frames, 12 buckets for ladder dredge and 24 manganese steel lips, 500,000 feet ceiling, 275,000 feet flooring, 200 feet siding, 2,200,000 feet service and rough lumber; also a quantity of files, bits, augers, cape and machine chisels, monkey and Stilson wrenches, machinists' hand taps, pipe cutters, drills, dies, claw machinists' and siege hammers, stocks and dies and condulets. For further information address F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR SUBMARINES.

SUBMARINES—The date for the opening of proposals for building submarine boats Nos. 62-77, as fixed by the department's advertisement of May 20, 1915, is hereby changed from **August 2 to September 29, 1915**. JOSEPHUS DANIELS, Secretary of the Navy.

PROPOSALS FOR WHARF.

WHARF—Sealed proposals indorsed "Proposals for Extension of Wharf" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m. August 21, 1915**, and then there publicly opened for extension of wharf at the naval training station, San Francisco, Cal. Plan and specification may be obtained on application to the bureau or to the commandant of the naval training station named. H. R. STANFORD, chief of bureau.

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

Sealed proposals will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, California, until **2 o'clock p. m., on August 23, 1915**, at which time they will be publicly opened and read, for construction in accordance with the specifications therefor, to which special reference is made, portions of state highway as follows:

Siskiyou County across the Sacramento River near Dunsmuir (11-Sis-3-A), a reinforced concrete bridge about 332 feet long with one arch of 150 feet clear span and two arches of about 114 feet clear span.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers' offices are located at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno and Los Angeles.

No bid will be received unless it is

made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANLY,
NEWELL, D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
ASTIN B. PLETCHER,
Highway Engineer.
WILSON R. ELLIS, Secretary.

PROPOSALS FOR CONCRETE PIERS.

CONCRETE PIERS—Sealed proposals endorsed "Proposals for Torpedo Boat Piers" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m. September 18, 1915**, and then there publicly opened, for constructing reinforced concrete torpedo boat piers at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR RAILROAD.

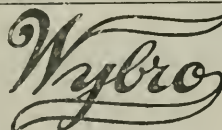
MARINE RAILWAY—Sealed proposals indorsed "Proposals for Marine Railway," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m. September 18, 1915**, and then there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR BUILDING.

BUILDING, ETC.—Treasury Department, Supervising Architect's Office, Washington, D. C.—Sealed proposals will be opened in this office at **3 p. m. August 24, 1915**, for the construction, complete (including mechanical equipment and approaches) of the United States post office at Grand Junction, Colo. Drawings and specifications may be obtained from the custodian of site at Grand Junction, Colo., or at this office, at the discretion of the supervising architect. JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR WHARF CONSTRUCTION.

WHARF—Sealed proposals indorsed "Proposals for Reinforced Concrete Wharf" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m. September 18, 1915**, and then there publicly opened, for constructing a reinforced concrete wharf at the United States naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.



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ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

RESIDENCE — 1 story and base, frame, \$3,600. San Francisco. Architect, none. Owner, Peter Rooney, 2853 Folsom street, S. F. The dwelling will be erected on the north side of Bryant street east of 25th, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE — 2 story and base, frame, \$3,500. San Francisco. Architect, none. Owner, J. N. Gillogley, 745 San Jose avenue, S. F. The dwelling will be erected on the west side of 15th avenue south of Irving, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the living and dining rooms and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot and floor. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE — 2 story and base, frame, \$7,000. San Francisco. Architect, William Knowles, Hearst Bldg., S. F. Owner, H. F. Miller. The dwelling will be erected on the south side of Green street west of Scott, and has been designed to contain eight rooms, two baths and sleeping porch. A basement garage is also provided. Interior will be finished in pine, hardwoods and white enamel. Hardwood floors will be used throughout. There will be furnace heat and open fire places. Mantels will be of tile. An automatic water heater will be installed. Bath rooms will have tile floors and wainscot. Exterior of the dwelling will be covered with rustic, shingles and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE — 2 story and base, frame, \$8,500. San Francisco. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owners, Allen Bros. The dwelling has been designed for an eight-room house with two baths, sleeping porch and a separate garage. Interior will be finished in mahogany and white enamel. Hardwood floors will be used in the living room, dining

room and reception hall. There will be furnace heat and open fire places. An automatic water heater will be installed. Bath rooms will have tile floors and wainscot. Mantels will be of tile and brick. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and segregated figures are being taken.

RESIDENCE ALTERATION—Frame construction, \$1,500. San Francisco. Architect, William Knowles, Hearst Bldg., S. F. Owner, Mrs. Has Brouck. The work will be done at the property on Maple avenue near Pacific, and will include interior finish, hardwood floors, painting, plastering, electric work and plumbing. New mantels will be installed. Exterior will be of rustic. Plans are complete and the work will be done by Day Labor.

RESIDENCE — 2 story and base frame, \$5,000. San Francisco. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner, Mr. Brown. The dwelling will be erected in Forest Hill and has been designed for an eight-room house with bath, sleeping porch and separate garage. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile wainscot and floor. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and figures are being taken.

RESIDENCE — 2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, J. S. Purcell, 856 Presidio avenue, S. F. The dwelling has been designed for a six-room house with bath and will be erected on the west side of 16th avenue south of Balboa street. Interior finish will be of pine throughout. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place in the living room with brick mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE — 2 story and base, frame, \$5,000. San Francisco. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner, Mr. Brown. The dwelling will be erected on 45th avenue between Anza and Geary streets, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine with some southern gum. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile floor

and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are now being prepared.

RESIDENCE — 2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, A. R. Lapham, 511 12th avenue, S. F. The dwelling has been designed for a six-room house with bath and sleeping porch, and will be erected on the west side of 12th avenue north of Clement street. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place with tile or brick mantel. Plans provide for an automatic water heater. Bath room will have tile floor and wainscot. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE — 2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, E. A. Schkade, 240 20th avenue, S. F. The dwelling has been designed for a seven-room house and will be erected on the east side of 19th avenue south of California street. Interior will be finished in pine with elm panels and white enamel. Hardwood floors will be used in the living and dining rooms and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$5,000 each. San Francisco. Architects, Falch & Knoll, Hearst Bldg., S. F. Owners, Newell-Murdock Co. These houses will be erected in Forest Hill, and each will contain eight rooms, bath and sleeping porch. Separate garages will be erected on the property. Interior will be finished in pine with elm panels and white enamel. Hardwood floors will be used in the living and dining rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exterior will be covered with cement plaster on metal lath. Plans are being revised and new figures will be called for shortly.

RESIDENCE — 2 story and base, frame, \$5,000. San Francisco. Architect, Edward G. Bolles, 560 Market street, S. F. Owners, S. A. Born Building Co. The dwelling will be erected in Ashbury Terrace, and has been designed for an eight-room house with bath and sleeping porch. Interior will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used throughout. Plans provide for furnace heat and open fire places. Mantels will be of

brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

APARTMENT HOUSE—3 story and base, frame, \$15,000. San Francisco, Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, William Linden 1100 Dolores street, S. F. The building will be erected on the east side of 7th street south of Howard, and has been designed to contain a total of 41 small apartments with private baths and wall beds. Interior will be finished in pine. There will be steam heat, oil burning equipment and hot water system. Bath rooms will be finished in imitation tile. Marble wainscot will be used in the entrance. Exterior will be covered with rustic and brick veneer. Plans are complete and figures are being taken.

APARTMENT HOUSE—2 story and base, frame, \$5,000. San Francisco, Architects, O. R. Thayer and Charles C. Frye, 20 Montgomery street, S. F. Owner, George Gruenig. The building will be erected on the north side of Bryant street east of 25th, and has been designed to contain four small apartments. Interior will be finished in pine throughout. All suites will have wall beds and private baths. There will be a hot water supply. Exterior will be covered with rustic and cement plaster on metal lath. Plans are complete and a contract will be let at once.

WINERY—2 story and base, reinforced concrete, \$40,000. San Francisco, Architect, P. Righetti, Phelan Bldg., S. F. Owners, Promotion Wine and Liquor Co. The building will be erected at the corner of Lombard and Columbus avenue, and will cover a large ground area. Construction will be fireproof. Interior of the front portion of the building will be finished in pine. There will be a number of large storage tanks. Exterior will be faced with cement plaster. Plans are complete and figures are being taken.

SHOP ADDITION—Steel and concrete, \$15,000. San Francisco. Engineer, Allen G. Ramsey, Union Iron Works, S. F. Owners, Union Iron Works. Plans have been prepared for a considerable addition to the company's mill and joiner shops. The work will require structural steel and concrete besides the addition of special machinery. Plans are complete and figures will be called for at once.

FLATS—2 story and base, frame, \$3,500. San Francisco. Architect, none. Owner, J. C. Conner, 578 10th avenue, S. F. The building will be erected on the west side of 4th avenue south of Clement street, covering an area of 25 by 60 feet. The building will contain two modern flats of five and six rooms. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile mantels. Bath rooms will be finished in tile. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OFFICERS' QUARTERS AND MORGUE—1 and 2 story, brick and concrete, \$400,000. San Francisco. En-

gineer, Construction Quartermaster's Office, Fort Mason. Owners, United States Government. The Army Appropriation Bill for 1916, which has passed Congress, provides funds for the construction of forty-one officers' quarters and a large morgue building to be erected in the Presidio of San Francisco. The new buildings will replace the old wooden frame quarters which will be torn down, the new buildings being arranged in streets. Construction will be of brick and concrete and is estimated to cost in the neighborhood of \$400,000, and will be carried out under the direction of the Constructing Quartermaster's office at Fort Mason. A part of the work will be out this summer although no additional information is at yet at hand.

STORES AND OFFICES—3 story and base. Class A construction, \$150,000. San Francisco. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner's name withheld. The building will be erected at the southwest corner of Davis and California streets, covering a large ground area. A pile foundation is necessary. There will be a complete steel frame, brick exterior walls, tar and gravel roof and hollow tile interior partitions. Interior will be finished in hardwoods, marble and tile. Metal window sash and frames are specified. Plans provide for steam heat, oil burning furnace, three electric elevators and vacuum cleaning. Patent store fronts are specified. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are complete and segregated figures are being taken.

STORE—1 story, brick, \$3,500. San Francisco. Architect, none. Owner, J. J. Cummings, 244 Kearny street. The building will be erected on Mission street south of Sycamore, covering an area of 25 by 80 feet. There will be one store. Interior will be finished in pine. Patent store fronts are specified. Exterior will be faced with pressed brick. Plans are complete and the work will be done by Day Labor.

STORE FIXTURES—\$9,000. San Francisco. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner's name withheld. Plans are complete and figures are being taken for one of the largest jobs of store fixtures and interior trim which has been figured in some time. Mahogany and oak will be used almost throughout. Included in the work is a large amount of art glass, ornamental plaster and ornamental iron.

Mr. Newlands, of the Sharon Estate Co., stated to a representative that the statement published by the morning papers in which it was stated that the Sharon Estate would construct a building on their property in the rear of the Palace Hotel for the use of the Southern Pacific Co. was untrue. He further stated that only two pieces of Sharon Estate property were so located as to be of use to the Southern Pacific and that both of these were two small for the required building.

STORE—1 story and base, frame, \$2,500. San Francisco. Architect, Frank S. Holland, 100 Ninth street, S. F. Owner, J. P. McInerney. The building will be erected at the northeast corner of Capitol and Broad streets, covering an area of 35 by 65 feet. Interior will be finished in pine. Exterior of the building will be covered with

rustic and shiplap. Plans are complete and figures are being taken.

Contracts Awarded

POWER HOUSE, ETC.—Cost as follows. Fort Huachuca, Ariz. Engineer, Constructing Quartermaster's Office, Fort Huachuca. Owners, United States Government. The following awards have been made by the War Department: To H. S. Tittle, S. F., power plant, except boiler, building, electric light and power distributing system, electric wiring, etc., \$21,200. To Charles C. Moore & Co., S. F., installing one Cyclops Iron Works traveling crane, \$2,031. To Vilter Mfg. Co., Milwaukee, Wis., furnishing ice machines, \$13,100. To New London Ship & Engine Works, Croton, Conn., 2 200-H. P. Diesel engines, \$24,55. To Gross Chandler Co., St. Louis, Mo., furnishing electric fixtures, \$3,544. To Russell Electric & Machinery Co., Tucson, Ariz., furnishing Westinghouse transformers and watt meters, \$1,853.

Building Contracts Awarded

San Francisco

No.	Owner.	Contractor	Am't.
2166	S F Realty	Brown	2000
2167	Hooper	Hooper	3500
2173	Bothscheider Lacomarino	Bothscheider	15977
2214	Tonola	Masarie	1110
2215	de Greayer	CoBurn	3690
2216	Rochex	Petterson	5500
2217	Bass	Bass	300
2218	Grabe	Maguire	600
2219	Brown	Wert	700
2220	Conner	Conner	3500
2221	Boehm	Boehm	5000
2222	Lapham	Lapham	2200
2223	Purcell	Purcell	2250
2224	Cummings	Cummings	3500
2225	Green	Mahony	6000
2226	Felton	James	15000
2227	Metro Invest	Carlin	—
2228	Same	Dunnivant	—
2229	Same	Woods	—
2230	Same	Gibbs	—
2231	Same	Sunset	—
2232	Same	Payne	—
2233	Same	Gladding	—
2234	Same	Gilmour	—
2235	Same	Slebert	—
2236	Same	Rutledge	—
2237	Same	Western Furnace	—
2238	Same	Eureka	—
2239	Same	Kawneer	—
2240	Same	Bell	—
2241	Same	Scheele	—
2242	Arata	Devencenzi	4000
2243	Grady	Woelfrey	2350
2244	Giblin	Burns	4465
2245	Olsen	MacArthur	4000
2246	Trevor	Moore	4235
2247	Sterling	Manseau	2750
2248	Same	Same	2750
2249	Same	Same	2750
2250	Same	Same	2750
2251	Bradbury	Bradbury	400
2252	Goldenberg	Glodenberg	400
2253	Woods	Jossa	450
2254	Dialot	Barnecom	400
2255	Crane	Fahlen	400
2256	Hansen	Sturges	500
2257	Michelson	Sturges	500
2258	Hong On Tong	Collin	800
2259	Beerman	Beerman	400
2260	Gleeson	Gleeson	400
2261	Calegari	Calegari	400
2262	Bernard	Robinson	400
2263	Rulfs	Rulfs	18000
2264	Gilligley	Gilligley	3500
2265	Nell	Nell	1900
2266	Morawski	Grahn	1865
2267	Quinn	Petersen	5265
2268	Holzmueller	Hamill	2900
2269	Pacific C & E	U S Metal	10385
2270	Johnson	Johnson	1100
2271	Hlas Brouch	Hlas Brouch	1000
2272	Meleovich	Porter	400
2273	Walsh	Vaish	400
2274	Heyman	Heyman	1950
2275	Ronald	Ronald	500
2276	Rossie	Carraro	5375
2277	S P	Ritchie	—
2278	Hiltner	Fairfield	1225

FRAME DWELLING

(2166) W FIFTEENTH AVE 188 S
Pacheco. Two-story and basement
frame dwelling.

Owner.....S. F. and L. A. Realty Co.,
307 Foxcroft Bldg., S. F.
Architect...None.
Contractor...Gus A. Brown, 123 Carl,
San Francisco.
COST, \$2000

FRAME DWELLING

(2167) E SEVENTEENTH AVE 175 S
Geary. Two-story and basement
frame dwelling.
Owner.....B. J. Hooper, 766 5th Ave.,
San Francisco.
Architect...None.
Day's work. COST, \$3500

APARTMENTS

(2212) N PARNASSUS 77-5 W Willard
W 35xN 94-4½. All work for three-
story and basement frame ap-
partments.
Owner.....Mary K. Carson.
Architect...O. E. Evans & Co.
Contractor...O. E. Evans & Co., 2861
Mission, S. F.
Filed July 31, '15. Dated July 30, '15.
Frame up\$2000
Brown coated 2000
Completed and accepted 2000
Usual 35 days 2800
TOTAL COST, \$10,800
Bond, Sureties, Forfeit, none. Limit,
75 days. Plans and specifications filed.

FRAME APARTMENTS

(2213) S ELLIS 68-9 E Steiner E
34-4½xS 112-6. All work for three-
story frame apartment building.
Owner.....Mrs. Emma Bothschelder,
1704 Eddy, San Francisco.
Architect...W. L. Schmolle, 166 Geary,
San Francisco.
Contractor...S. Lagomarsino, 278 29th
Ave., San Francisco.
Filed Aug. 2, '15. Dated July 28, '15.
Frame up 25%
Brown coated 25%
Completed and accepted 25%
Usual 35 days 25%
TOTAL COST, \$15,977
Bond, \$7988.50. Sureties, B. Cuneo and
N. Capurro. Limit, 90 days after Aug.
2. Forfeit, none. Plans and specifica-
tions filed.

FRAME COTTAGE

(2214) NE REVERE AVE (18th Ave
South) 100 SE Selby (S Street South)
All work except pouring concrete
and painting for one-story and base-
ment frame cottage.
Owner.....Angelo Tonola, 2166 Re-
vere, San Francisco.
Architect...Plans by Contractor.
Contractor...V. Masarie, 1121 Wiscon-
sin, San Francisco.
Filed Aug. 2, '15. Dated Aug. 2, '15.
Exterior completed ½
Completed ½
TOTAL COST, \$1110
Bond, none. Limit, 120 days. Forfeit,
none. Plans and specifications filed.

BRICK BUILDING

(2215) S SHIPLEY 125 E Fifth E 25x
S 75. All work for two-story brick
building.
Owner.....Jean de Greayer, Cr. Dist-
rict Attorney, Hall of Jus-
tice, San Francisco.
Architect...T. Paterson Ross, 310 Cali-
fornia, San Francisco.
Contractor...Ira W. Coburn, 547 Bran-
nan, San Francisco.
Filed Aug. 2, '15. Dated Aug. 2, '15.

2nd story joists on.....\$1300
Completed and accepted..... 1467
Usual 35 days..... 923
TOTAL COST, \$3690
Bond, \$1845. Sureties, A. Wagner and
T. P. S. Brown. Limit, 60 days from
filing. Forfeit, \$5. Plans and speci-
fications filed.

FRAME FLATS

(2216) SW NINETEENTH AND SHOT-
well S 35xW 90. All work for two-
story and basement frame (4) flats.
Owner.....Christine Rochex, 1044
Jackson, San Francisco.
Architect...None.
Contractor...Pettersen & Persson, 110
Jessie, San Francisco.
Filed Aug. 2, '15. Dated July 31, '15.
Frame up\$1375
Brown coated 1375
Completed and accepted..... 1375
Usual 35 days..... 1375
TOTAL COST, \$5500

Bond, \$2750. Sureties, H. C. Bennett
and Robt. H. Rusch. Limit, 90 days
from filing. Forfeit, \$5. Plans and
specifications filed.

FRAME GARAGE

(2217) S FIFTEENTH 25 E Noe. One
story frame garage.
Owner.....Chas. J. Bass, 2246 15th,
San Francisco.
Architect...None.
Day's work. COST, \$500

ALTERATIONS

(2218) NO. 2928 SAN BRUNO Alter
and add to dwelling.
Owner.....Mrs. F. Grabe, Premises.
Architect...None.
Contractor...Jos. Maguire, 2559 San
Bruno, San Francisco.
COST, \$600

REPAIRS

(2219) NO. 110 SUSSEX. Repair dwlg
Owner.....Mrs. Brown.
Architect...None.
Contractor...Wm. E. Wert.
COST, \$700

FRAME FLATS

(2220) W FOURTH AVE 200 S Cle-
ment. Two-story and basement frame
(2) flats.
Owner.....I. C. Conner, 578 10th Ave.,
San Francisco.
Architect...None.
Day's work. COST, \$3500

FRAME FLATS

(2221) E SIXTEENTH AVE 125 N Bal-
boa. Three-story and basement
frame (2) flats.
Owner.....F. J. Boehm, 4419 19th,
San Francisco.
Architect...Theo. S. Boehm, 4419 19th,
San Francisco.
Day's work. COST, \$5000

FRAME RESIDENCE

(2222) W TWENTY-FIRST AVE 150
N Clement. Two-story and basement
frame residence.
Owner.....A. R. Lapham, 511 12th
Ave., San Francisco.
Architect...None.
Day's work. COST, \$2750

FRAME DWELLING

(2223) W SIXTEENTH AVE 50 S Bal-
boa. Two-story and basement frame
dwelling.

Owner.....J. S. Purcell, 856 Presidio
Ave., San Francisco.
Architect...None.
Day's work. COST, \$2250

BRICK STORE BUILDING

(2224) W MISSION 35 S Sycamore.
One-story brick store building.
Owner.....J. J. Cummings, 244 Kear-
ny, San Francisco.
Architect...None.
Day's work. COST, \$3500

ADDITION

(2225) N JACKSON 104 E Laurel. Ad-
ditions and alterations to frame
residence.
Owner.....Chas. E. Green, 3368 Jack-
son, San Francisco.
Architect...Philip Overman, Shreve
Bldg., San Francisco.
Contractor...Mahony Bros., Crocker
Bldg., San Francisco.
COST, \$6000

ALTERATIONS

(2226) S MARKET 175 W Seventh.
Construct balcony, stairways and
mezzanine floor and office in Ameri-
can theatre building.
Owner.....The Felton Co., Mills Bldg.,
San Francisco.
Architect...Edw. Miller, Portland, Ore.
Contractor...Edwin T. James, Premises.
COST, \$15,000
NOTE:—Job nearly finished.

GRADING

(2227) N ELLIS 77-6 W Leavenworth.
Grading for five-story and basement
reinforced concrete apartments and
stores.
Owner.....Metropolitan Investment
Company.
Architect...O. R. Thayer, 20 Mont-
gomery, San Francisco.
Contractor...Carlin Bros., 110 Jessie,
San Francisco.
COST, \$—

NOTE:—Cost of entire work, \$65,000.

(2228) CONCRETE WORK & ROUGH

carpentry on above.
Contractor...Geo. Elder & Dunnivant-
Oakley Co., 1430 Powell,
San Francisco.
COST, \$—

(2229) REINFORCING BARS, ETC.,

on above.
Contractor...Woods, Huddart & Gunn,
444 Market, San Francisco.
COST, \$—

(2230) PLUMBING ON ABOVE

Contractor...J. Gibbs, 2505 California,
San Francisco.
COST, \$—

(2231) FIRE ESCAPES, ETC., ON

above.
Contractor...Sunset Iron Works, 1124
Folsom, San Francisco.
COST, \$—

(2232) IRON BOLTS, ETC., ON ABOVE

Contractor...Payne's Bolt Works, 133
Howard, San Francisco.
COST, \$—

(2233) TERRA COTTA WORK ON

above.
Contractor...Gladding McBean Co.,
Crocker Bldg., S. F.
COST, \$—

(2234) PLASTERING ON ABOVE.
Contractor..Wm. G. Gilmour, 1562 Val-
lejo, San Francisco.

COST, \$—

(2235) VACUUM CLEANING ON
above.
Contractor..Siebert Co., 1433 Divisadero
San Francisco.

COST, \$—

(2236) STAIR WORK ON ABOVE.
Contractor..Chas. T. Rutherford, 120
Day, San Francisco.

COST, \$—

(2237) GALVANIZED IRON WORK
on above.
Contractor..Western Furnace & Cor-
nice Co., 1645 Howard,
San Francisco.

COST, \$—

(2238) MILL WORK ON ABOVE.
Contractor..Eureka Sash, Door Mill &
Moulding Co., 13th and
Erie, San Francisco.

COST, \$—

(2239) PATENT STORE FRONTS ON
above.
Contractor..Kawneer Co., Eighth and
Dwight Way, Berkeley.

COST, \$—

(2240) WALL BEDS ON ABOVE.
Contractor..Bell Wall Bed Co., 262 7th,
San Francisco.

COST, \$—

(2241) ELECTRIC WORK ON ABOVE.
Contractor..M. Schimetschek, 543
Hayes, San Francisco.

COST, \$—

FRAME FLATS

(2242) S FILBERT 154 W Webster W
24xS 137-6. All work except mantels,
shades and gas and electric fixtures
for two-story and basement frame
flats.

Owner.....George Arata.
Architect...Fred J. Reinhardt, 2156
Filbert, San Francisco.

Contractor..Devenenzi Bros. & Co.,
1069 Union, San Francisco.

Filed Aug. 2, '15. Dated July 26, '15.
Frame up and enclosed.....\$1000
Brown coated 1000
Completed and accepted..... 1000
Usual 35 days..... 1000

TOTAL COST, \$4000

Bond, \$2000. Surety, L. Peirano. Limit,
90 days. Forfeit, \$250. Plans and
specifications filed.

COTTAGE

(2243) N TWENTY-SECOND 250 W
Sanchez W 25xN 114 M B 109. All
work for five-room and bath cottage.
Owner.....John J. and Mary Grady,
165 Lexington, S. F.

Architect...None.
Contractor..Jno. B. Woolfrey, 3168 21st,
San Francisco.

Filed Aug. 3, '15. Dated July 9, '15.
On signing contract.....\$100.00
Rough frame up and sheathing
on roof 562.50
Rough coat plaster on..... 562.50
Completed and accepted..... 562.50
Usual 35 days..... 562.50

TOTAL COST, \$2350.00

Bond, \$1175. Surety, Massachusetts
Bonding & Insurance Co. Limit, 90

days. Forfeit, none. Plans and speci-
fications filed.

FRAME FLATS

(2244) S NINETEENTH 200 W Guer-
rero S 114xW 23. All work except
plumbing, electric wiring and paint-
ing for two-story frame flats.

Owner.....Joseph Gihlin, 120 Capp,
San Francisco.

Architect...Jno. J. Foley, 46 Kearny,
San Francisco.

Contractor..John Burns, 2612 Mc-
Allister, San Francisco.
Filed Aug. 3, '15. Dated July 29, '15.
Frame up and roof on.....\$1116.25
Brown coated 1116.25
Completed and accepted..... 1116.25
Usual 35 days..... 1116.25

TOTAL COST, \$1465.00

Bond, \$2233. Sureties, Jos. Burns and
Jas. L. Hoover. Limit, 75 days. For-
feit, none. Plans and specifications
filed.

FRAME FLATS

(2245) E MISSION 50 S Santa Marina
being Lot 23 Bk 1, Fairs Sub Holly
Park. All work for two-story frame
flats.

Owner.....Carl E. Olsen, 3763 Mission
San Francisco.

Architect...None.
Contractor..H. E. & T. W. MacArthur,
1560 Fell, San Francisco.

Filed Aug. 4, '15. Dated July 31, '15.
Frame up, owner to deed to con-
tractor Lot 14 Bk No. 2 Holly
Park
Brown coated\$ 750
Completed and accepted..... 750
Usual 35 days..... 1000

TOTAL COST, \$4000

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

FRAME RESIDENCE

(2246) E FOURTH AVE 217-4 13-16 S
Cabrillo S 31xE 120. All work for
two-story and basement frame resi-
dence.

Owner.....Trevor & Co., 32 Mont-
gomery, San Francisco.

Architect...G. E. McCrea, 1st National
Bank Bldg., Oakland.

Contractor..Moore & Watson, Sharon
Bldg., San Francisco.

Filed Aug. 4, '15. Dated July 30, '15.
Frame up\$1073
Brown coated 1073
Completed 1073
Usual 35 days..... 1074

TOTAL COST, \$4293

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

FRAME DWELLING

(2247) E THIRTY-SEVENTH AVE 200
S Lincoln Way. Two-story and base-
ment frame dwelling.

Owner.....Sterling Realty Co., 129
Sutter, San Francisco.

Architect...None.
Contractor..E. E. Manseau, 1278 35th
Ave., San Francisco.

COST, \$2750

FRAME DWELLING

(2248) E THIRTY-SEVENTH AVE 225
S Lincoln Way. Two-story and base-
ment frame dwelling.

Owner.....Sterling Realty Co., 129
Sutter, San Francisco.

Architect...None.
Contractor..E. E. Manseau, 1278 35th
Ave., San Francisco.

COST, \$2750

FRAME DWELLING

(2249) E THIRTY-SEVENTH AVE 250
S Lincoln Way. Two-story and base-
ment frame dwelling.

Owner.....Sterling Realty Co., 129
Sutter, San Francisco.

Architect...None.
Contractor..E. E. Manseau, 1278 35th
Ave., San Francisco.

COST \$2750

FRAME DWELLING

(2250) E THIRTY-SEVENTH AVE 275
S Lincoln Way. Two-story and base-
ment frame dwelling.

Owner.....Sterling Realty Co., 129
Sutter, San Francisco.

Architect...None.
Contractor..E. E. Manseau, 1278 35th
Ave., San Francisco.

COST, \$2750

ALTERATIONS

(2251) NO. 6 HARRIS PLACE. Itaise
and add two rooms to dwelling.
Owner.....Mrs. J. J. Bradbury, Prem.
Architect...None.

Day's work. COST, \$100

ALTERATIONS

(2252) SE CAPP AND TWENTY-
fourth. Alter for storage rooms.

Owner.....G. C. Goldenberg, 655
Stockton, San Francisco.

Architect...None.
Day's work. COST, \$400

MARQUISE

(2253) NO. 66 GEARY. Erect marquise
Owner.....Frank H. Woods, 417
Montgomery, S. F.

Architect...None.
Contractor..Jossa Cornice Works, 1242
Mason, San Francisco.

COST, \$150

ALTERATIONS

(2254) NO. 2157 FILBERT. Alter and
enlarge wash room.

Owner.....Antone Dialot, Premises.
Architect...None.

Contractor..J. Barncom, 3354 Steiner,
San Francisco.

COST, \$100

CONCRETE FLOOR

(2255) NO. 2205 BUCHANAN. Concrete
floor.

Owner.....Mary Crane, 1684 Wash-
ington, San Francisco.

Architect...None.
Contractor..W. & C. Fahien, 1371
Greenwich, San Francisco.

COST, \$100

ALTERATIONS

(2256) NO. 578 FOURTH AVE. Alter
front for garage.

Owner.....Mrs. Hansen, Premises.
Architect...None.

Contractor..Benj. Sturges, 3931 Geary,
San Francisco.

COST, \$500

ALTERATIONS

(2257) NO. 130 SIXTEENTH AVE.
Extend room and tile bath.

Owner.....Mrs. Michelson, 326 Maple,
San Francisco.

Architect...None.
Contractor..Benj. Sturges, 3931 Geary,
San Francisco.

COST, \$500

ADDITION

(2258) NO. 657 JACKSON. Add six
rooms to rooming house

Owner.....Hong On Tong Society.
 Architect...None.
 Contractor...J. Collin, 1535 Hyde, S. F.
 COST, \$800

WATER TANKS
 (2259) NO. 1528 SUTTER. Intall 2
 400-gallon water tanks.
 Owner.....Mr. Beerman, Premises.
 Architect...Salfield & Kohlberg, 519
 California, San Francisco.
 Day's work. COST, \$400

FRAME STORE
 (2260) NE MOSCOW AND RUSSIA.
 One-story frame store.
 Owner.....Jos. Gleeson, 659 Moscow,
 San Francisco.
 Architect...None.
 Day's work. COST, \$800

ALTERATIONS
 (2261) SW UNION AND VARENNES.
 Alter for milk depot.
 Owner.....F. Calegari, 463, Union,
 San Francisco.
 Architect...None.
 Day's work. COST, \$400

ROOF SIGN
 (2262) NO. 617 MARKET. Roof sign.
 Owner.....Bernard & Murphy, Prem.
 Architect...None.
 Contractor...O. M. Robinson, 57 Minna,
 San Francisco.
 COST, \$400

BRICK APARTMENTS
 (2263) E HYDE 87-6 N Sutter. Four-
 story and basement brick (8) apart-
 ments.
 Owner.....Theo. E. Rulfs, 1167 Pine,
 San Francisco.
 Architect...Rousseau & Rousseau, 110
 Sutter, San Francisco.
 Day's work. COST, \$18,000

FRAME DWELLING
 (2264) W FIFTEENTH AVE 200 S
 Irving. Two-story and basement
 frame dwelling.
 Owner.....J. N. Gillogley, 745 San
 Jose Ave., San Francisco.
 Architect...None.
 Contractor...J. Gillogley & Sons, 745
 San Jose Ave., S. F.
 COST, \$3500

FRAME DWELLING
 (2265) W FORTY-FIFTH AVE 235 N
 Judah. One-story and basement
 frame dwelling.
 Owner.....Neil Bros., 1243 45th Ave.,
 San Francisco.
 Architect...None.
 Day's work. COST, \$1800

COTTAGE
 (2266) E JUPITER 100 S Thornton
 Ave. Lot 9 Blk "G." All work for
 four-room cottage and unfinished
 attic.
 Owner.....Jno. and Anna Morawski.
 Architect...None.
 Contractor...Wm. H. Grahn, 2840 Bry-
 ant, San Francisco.
 Filed Aug. 5, '15. Dated Aug. 3, '15.
 Frame up\$300
 Brown coated 300
 Completed 300
 Usual 35 days 300
 Mortgage for 665
 TOTAL COST, \$1865
 Bond, none. Limit, 90 days. Forfeit,
 plans and specifications, none.

ALTERATIONS
 (2267) S TWENTY-SIXTH 246 E
 Church E 50xS 114. All work except
 finish hardware, window shades and
 lighting fixtures for alterations and
 additions to two cottages into flats.
 Owner.....Hugh and Nellie Quinn,
 3847 26th, San Francisco.
 Architect...Ernest M. Essmann, 3895-A
 24th, San Francisco.
 Contractor...Einar Petersen, 3530 23rd.
 San Francisco.
 Filed Aug. 5, '15. Dated Aug. 4, '15.
 Frame of all alterations up.....\$1341
 Alteration and addition brown
 coated 1341
 Completed and accepted..... 1341
 Usual 35 days..... 1342
 TOTAL COST, \$5365
 Bond, \$2682.50 Sureties, Herman J.
 Axt and Berent Martin. Limit, 90 days.
 Forfeit, none. Plans and specifications
 filed.

FRAME RESIDENCE
 (2268) E SIXTEENTH AVE 250 S Anza
 S 25XE 127-6 O L 298. All work for
 two-story frame residence.
 Owner.....K. F. Holzmuller, 71 Lan-
 ders, San Francisco.
 Architect...None.
 Contractor...Thos. Hamill, 268 25th Ave.
 San Francisco.
 Filed Aug. 5, '15. Dated Aug. 5, '15.
 Rough frame up and roof boards
 on\$725
 Rough plumbing in and brown
 coated 725
 Completed and accepted..... 725
 Usual 35 days..... 725
 TOTAL COST, \$2900
 Bond, none. Limit, 70 days. Forfeit,
 none. Plans and specifications filed.

CLASS "A" BUILDING
 (2269) S SUTTER 115-9 E Powell S
 137-6XE 45-6. Window frames and
 other sheet metal work for eight-
 story Class "A" building.
 Owner.....Pacific Gas & Electric Co.,
 445 Sutter, San Francisco.
 Architect...Edgar A. Mathews, 251
 Post, San Francisco.
 Contractor...United States Metal Pro-
 ducts Co., 525 Market, S. F.
 Filed Aug. 5, '15. Dated Aug. 5, '15.
 1/3 of windows delivered and set
 in place\$2100
 Additional 1/2 delivered and set
 in place 2100
 Completed 1489
 Usual 35 days..... 2600
 TOTAL COST, \$10,389
 Bond, \$5500. Surety, New England
 Equitable Ins. Co. Limit, forfeit, none.
 Plans and specifications filed.

FRAME DWELLING
 (2270) S STAPLES 150 W Forester.
 One and one-half-story and basement
 frame dwelling.
 Owner.....W. E. Johnson, 455 Staples,
 San Francisco.
 Architect...None.
 Day's work. COST, \$1400

ALTERATIONS
 (2271) NO. 20 WALNUT. New brick
 steps, add bath and repair interior
 wood work of dwelling.
 Owner.....Mrs. J. Has Brouch, 2704
 Union, San Francisco.
 Architect...William Knowles, Hearst
 Bldg., San Francisco.
 Day's work. COST, \$1000

ALTERATIONS
 (2272) NO. 1535 STEINER Alter
 tamale factory.
 Owner.....Martin Melcovich, Prem.
 Architect...None.
 Contractor...Geo. H. Porter and P.
 Welsh, 1775 Geary, S. F.
 COST, \$400

ALTERATIONS
 (2273) NO. 1743 ELEVENTH AVE.
 Move, alter and repair dwelling.
 Owner.....Mrs. J. J. Walsh, Prem.
 Architect...None.
 Contractor...E. J. Walsh, Premises.
 COST, \$400

FRAME DWELLING
 (2274) E FORTY-FIFTH AVE 218.9 N
 Balboa. One-story and basement
 frame dwelling.
 Owner.....Oscar Heyman & Bro., 742
 Market, San Francisco.
 Architect...None.
 Day's work. COST, \$1950

FRAME DWELLING
 (2275) E SEVENTEENTH AVE 260 S
 Santiago. One-story and basement
 frame dwelling.
 Owner.....A. C. Ronard, 4 Dodge,
 San Francisco.
 Architect...None.
 Day's work. COST, \$500

FRAME FLATS
 (2276) S CALIFORNIA 53-6 E 18th
 Ave 26-Sx99. All work for two-story
 and unfinished basement frame flats.
 Owner.....Rosie Rossie, 1117 Lake,
 San Francisco.
 Architect...None.
 Contractor...G. Carraro & P. Carraro,
 750 Felton, San Francisco.
 Filed Aug. 6, '15. Dated July 24, '15.
 Frame up\$1343.75
 Brown coated 1343.75
 Completed and accepted..... 1343.75
 Usual 35 days..... 1343.75
 TOTAL COST, \$5375.00
 Bond, \$2687.50. Sureties, C. Chiosso &
 G. Bisio. Limit, 90 days after July 26.
 Forfeit, none. Plans and specifications
 filed.

CONCRETE CURBING, ETC.
 (2277) BLK BBED BY THIRD, 4TH,
 Townsend and King. Concrete curb-
 ing, asphalt pavement and asphaltic
 concrete sidewalk in front of station
 reservation.
 Owner.....Southern Pacific Co., Flood
 Bldg., San Francisco.
 Architect...None.
 Contractor...F. R. Ritchie & Co.,
 Chronicle Bldg., S. F.

Filed Aug. 6, '15. Dated July 30, '15.
 On 20th of each month..... 75%
 Usual 35 days..... 25%
 TOTAL COST—Asphaltic concrete laid
 10 1/2 cts per square foot.
 Concrete curb, 45 cts. per lineal ft.
 Asphalt pavement laid, 13 1/2 cts. per
 sq. ft.
 Granite curb, 20 cts. per lineal ft.
 Bond, \$600. Surety, Pacific Coast Casu-
 alty Co. Limit, Sept. 10. Forfeit, none.
 Plans and specifications filed.

FRAME COTTAGE
 (2278) S GEARY 104 E 40th Ave E 25
 x100. All work except plumbing and
 rat proofing for one-story and base-
 ment frame cottage.
 Owner.....Jos. T. Hlizinger, 143 Val-
 encia, San Francisco.
 Designer...O. D. Fairfield.

Contractor, Fairfield & Mason, 529 11st Ave., San Francisco.
 ed Aug. 6, '15. Dated July 28, '15.
 Frame up \$304
 rough plastered 307
 completed and accepted 307
 Total 35 days 307
 TOTAL COST, \$1225
 and, \$1250. Surety, National Surety
 Limit, 60 days. Forfeit, none.
 ns and specifications filed.

LEASES.

y 31, 1915—NW O'FARRELL AND
 Stockton N 15 or 16xW 58. D Samuels
 to Peter Rossi. Jan. 7, 1929.
 65.50 per month.
 y 31, 1915—SW TWENTY-SIXTH &
 York S 250 W 200 N 175 E 100 N 75
 2 190. Katherine R Higgins and
 George H. Annie M. and Fred Bur-
 2 to Regina Thorne and H F
 Crawford \$300. Option to renew.
 y 21, 1915—NO. 7000 GEARY. Mrs M
 to be Witt to John Patrick. 5 years.
 720.
 g. 2, 1915—SE MISSION AND BOND
 7 282-2½ S 85-1 W 281-3 N 81-6.
 rma Franziska Spreckels Roehl to
 The Pacific Telegraph & Telephone
 Co. 5 years. \$275 per month.
 g. 2, 1915—NO. 4049 EIGHTEENTH.
 William Fay to Joseph Furrer. 6
 years. \$35 per month, etc.

INCORPORATIONS.

The Kales Co. Capital Stock, \$25,-
 subscribed; \$300; shares, \$100 each.
 ectors—J. H. Mee, A. Haines, F. A.
 les, 1 share each. Place of busi-
 ness, San Francisco.
 I. C. Baker & Son. Capital Stock,
 \$1000; subscribed, \$3; shares, \$1 each.
 ectors—A. H. Holmes, I. H. McCar-
 J. A. McCarthy, 1 share each.
 ce of business, San Francisco.
 Hydrox Chemical Company of the
 eltic Coast. Capital Stock, \$25,000;
 subscribed, \$300; shares, \$100 each. Di-
 2ors—R. M. Hawk, A. N. Sears, G.
 Shaw, 1 share each. Place of busi-
 ness, San Francisco.

NOTICE OF NON-RESPONSIBILITY.

g. 6, 1915—N CHESTNUT 219-9 W
 an Ness Ave W 27-6xN 137-6.
 ames and Adele Venaglia as to
 improvements on leased property.
 g. 3, 1915—LOT 14 BLK 6441
 Crocker Amazon Tract Sub No. 2.
 Crocker Estate Co as to improve-
 ments on leased property.....

LEASE.

g. 4, 1915—NO. 615 BROADWAY SW
 orner Grant Ave. Mary Marsicano
 to P J Ithos and Geo Klaas. 5 years.
 32,750.

COMPLETION NOTICES

San Francisco

CORDED ACCEPTED
 y 31, 1915—E TWENTY-FOURTH
 Ave 125 N Anza N 25xE 120.
 William Davies and Albert Webb
 to whom it may concern..July 31, 1915
 y 31, 1915—N RIVERA 40 — 18th
 venue E 35 N 96-6 W 35 S 98-3.
 Vilhelmina Taylor to A. L. and J.
 2. Lundy.....July 21, 1915
 y 31, 1915—S CHESTNUT 162-6 E

Lachman E 50xS 120. A. and J.
 Dezerillo to Wm. McIntosh.....
July 27, 1915
 Aug. 2, 1915—SW BROADWAY AND
 Webster W 107-6xS 38-2½. S Low-
 einstein to F L Hansen..July 27, 1915
 Aug. 2, 1915—E FOURTH AVE 164 N
 Fulton N 31xE 120. Leo Gillig and
 Alma Gillig to Lelgh & Schultz...
July 30, 1915
 Aug. 2, 1915—N LOMBARD 114 W
 Leavenworth W 34-4½xN 137-6.
 Amy C Booth to J S Hannah.....
July 28, 1915
 Aug. 2, 1915—W TWENTIETH AVE
 206 N California N 25xW 120. J A
 Bowers to whom it may concern...
Aug. 2, 1915
 Aug. 2, 1915—E CONNECTICUT 511
 S 20th S 25xE 100. Firda Lundborg
 to M W Johnson.....May 25, 1915
 July 31, 1915—NW TWENTY-FIRST
 avenue and California. James P.
 McManus to H. U. Kiernan.....
July 29, 1915
 Aug. 3, 1915—W TWENTY-SEVENTH
 Ave 300 S Geary S 35xW 120. Er-
 nest E Dunn to whom it may con-
 cern.....Aug. 3, 1915
 Aug. 3, 1915—W BRODERICK 100 S
 Jackson S 27-8½xW 112-6. Edith
 R Young and Margaret M Roney to
 W H Morphy.....July 31, 1915
 Aug. 3, 1915—N FOURTH & NATOMA
 NW 51-2xNE 82-6. Morrie and Max
 Levy to William Little..Aug. 3, 1915
 Aug. 3, 1915—N TWENTY-SIXTH
 186-8 W Diamond. 26-8x114. N F
 Nilsson to Lindberg Bros..Aug. 3, 1915
 Aug. 3, 1915—N TWENTY-SIXTH 160
 W Diamond 26-8x114. N F Nilsson
 to Lindberg Bros.....Aug. 3, 1915
 Aug. 3, 1915—LOT 6 BLK "C" Addi-
 tions to Castro St. Add'n and Glen
 Park Terrace. Frank and Johanna
 J Monahan to Edward F Helms....
July 24, 1915
 Aug. 4, 1915—LOT 20 SE ½ LOT 19
 Blk "K," Mission Street Land Co;
 Lot 18 and NW ½ Lot 19 Blk "K,"
 Mission Street Land Co. Home-
 stead Realty Co to William H
 Grahn.....Aug. 3, 1915
 Aug. 4, 1915—W UTAH 150 N 24th N
 25xW 90. Annie Joyce to John T
 GraceAug. 4, 1915
 Aug. 4, 1915—E FORTY-SECOND AV
 275 S Balboa 25x120. Edward I
 Titlow to W F Duffer...Aug. 2, 1915
 Aug. 4, 1915—W ELEVENTH AVE
 250 N Balboa 25x120. A T Morris
 to whom it may concern..Aug. 4, 1915
 Aug. 4, 1915—N ELLIS 55 W Jones
 N 120xW 52-6. The Peter Windeler
 Co to Rainey & Phillips..July 27, '15
 Aug. 4, 1915—LOT 1 BLK 9 Sub No. 1
 Castro Street Addition. Chris W
 and Henrietta Vanderveen to D
 Houle.....July 31, 1915
 Aug. 5, 1915—S GREENWICH 87-6 E
 Powell 25x87-2. John and Augusta
 Aragni to Paul Demartini..Aug. 2, '15
 Aug. 5, 1915—W WISCONSIN 225 S
 22nd S 25xW 100. John Bogdanoff
 to whom it may concern..Aug. 3, 1915
 Aug. 5, 1915—N DUBOCE AVE 80 E
 Guerrero N 100xE 25. Albert W
 Wilson to F W Larmann..July 26, '15
 Aug. 5, 1915—E TWENTY-SEVENTH
 Ave 200 S Anza. J H Phillips to
 J H Phillips.....Aug. 5, 1915
 Aug. 6, 1915—N COLLEGE TERRACE
 175 W Mission W 25xN 52-9. J H
 Kruse to whom it may concern...
Aug. 4, 1915
 Aug. 6, 1915—N COLLEGE TERRACE

120 W Mission W 25xN 52-9. J H
 Kruse to whom it may concern...
Aug. 4, 1915
 Aug. 6, 1915—N COLLEGE TERRACE
 100 W Mission W 25xN 52-9. J H
 Kruse to whom it may concern...
Aug. 4, 1915
 Aug. 6, 1915—N COLLEGE TERRACE
 125 W Mission W 25xN 52-9. J H
 Kruse to whom it may concern...
Aug. 4, 1915
 Aug. 6, 1915—E JORDAN AVE 196-8
 N Geary N 33-4xE 120. Thos Scoble
 to whom it may concern..June 29, '15
 Aug. 6, 1915—E NINETEENTH AVE
 100 S Balboa (E) S 50xE 120. A V
 Anderson to whom it may concern
Aug. 6, 1915
 Aug. 6, 1915—N 25-6 LOT 65 and S G-6
 Lot 64 Allen & Co's Sub Windsor
 Terrace. Gertrude B Allen to
 whom it may concern..July 31, 1915
 Aug. 6, 1915—NW GROVE AND LA-
 guna 113 on Grove and 120 on
 Laguna. A S Johnson to W E
 Whalin.....Aug. 6, 1915
 Aug. 6, 1915—W STOCKTON 37-6 N
 Chestnut 27x50. M S Bacigalupi to
 Cuneo & Debenedetti et al.....
August 5, 1915
 Aug. 5, 1915—W THIRTY-THIRD
 Ave 25 S Lincoln Way S 25xW 90.
 E L Rolis to Lyon & Hoag.....
Aug. 3, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

July 27, 1915—SE LYON & LOMBARD
 S 59-9½ E 44-0½ N 59-8½ W 41-
 9½. Roy Crothers vs Pauline
 Franklin\$35
 July 31, 1915—S JACKSON 11-0½ W
 Columbus Ave W 21-8 S 68 E 11-0½
 N 68. J H Deming vs Carlo and
 Guido Farro (or Gus Ferro)...\$47.50
 July 31, 1915—N SUTTER 81 W Tay-
 lor N 137-6xW 56-6. F. L. Han-
 sen vs Clara M. Clayton, Josephine
 L. Struve, George W. Livingston,
 Edwin P. Gaffney and Willetta H.
 Hendrickson\$14,911.49
 Aug. 2, 1915—NW POWELL AND
 Ellis W 93-6xN 44. I. M. Coggins
 vs Paul Robinson, Mary E. Alice
 and Genevieve Butler\$87.50
 Aug. 5, 1915—LOT 13 BLK 2509 on
 Yorba W of 40th, 1 block north
 Sloat Blvd; No. 2514 Yorba. C
 Wickhous vs Luigi Baficio.....\$97.50
 Aug. 6, 1915—N SACRAMENTO 113-9
 E Larkin E 69-7 N 120 W 45-10
 17-6 W 23-9 S 137-6 James E Len-
 non Lime & Cement Co vs Pacific
 Plastering Co, D Yomini, Lillie
 Levison and Jennie Zellerbach...\$470
 Aug. 6, 1915—NW CHESTNUT AND
 Larkin N 56-3xW 137-6. C L Wold
 vs Alice K and Scott Burnham....
\$129.23

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

Aug. 2, 1915—SE EIGHTEENTH AND
 Douglass. The Mission Marble
 Works to John H McLaughlin, Wm
 Horstmeyer & Wm Horstmeyer Co
 Aug. 2, 1915—E CORBETT AVE 28-2
 SW Mono SW 28-2 E 132 m or 1 to
 a pt on E line Lot 11 dist 46-2½.
 S Mono N 22.7 W 128. Mission Lum-
 ber Co and Eureka Sash, Door &
 Moulding Mills to Jas J Flattery

and H Kessler
 Aug. 2, 1915—SE EIGHTEENTH AND
 Douglass E 25xS 75. A Seghieri &
 Bro., Inc to William Horstmeyer &
 Co and John H McLaughlin.....
 Aug. 3, 1915—SE CHESTNUT AND
 Scott S 25xE 110. Frank Glarritta
 to Frank and Cesira Micalizzi and
 W E Grant.....
 Aug. 4, 1915—W JONES 43 N O'Far-
 rell N 27-6 W 80 S 5-6 E 5 S 22 E
 75. Pacific Hardware & Steel Co to
 S A Haas, J Steur, W L Bury and
 L Heipner.....
 Aug. 3, 1915—SE CHESTNUT AND
 Scott S 25xE 110. Universal Lighting
 Fixture Co and Gus J Peters to
 Frank and Cecelia Micalizzi.....
 Aug. 3, 1915—S CHESTNUT 65 E
 Scott E 43xS 25. Henry Ernst &
 Sons to W E Grant and Frank and
 Cecelia Micalizzi.....
 Aug. 3, 1915—S CHESTNUT 70 E
 Scott E 38xS 25. J H Kruse to
 Frank and Cecelia Micalizzi and
 W E Grant.....

OAKLAND AND ALAMEDA COUNTY

RESIDENCES—2, 1 story and base,
 frame, \$2,500 each. Oakland, Cal. Ar-
 chitects, Universal Drafting Bureau,
 1814 5th avenue, Oakland. Owner, M.
 H. Temple. These two houses will
 be erected in Elmhurst and each will
 contain six rooms and bath. Interior
 will be finished in pine with some white
 enamel. Hardwood floors will be used
 in the living and dining rooms. There
 will be an open fire place in each living
 room. Mantel will be of tile or brick.
 Tile wainscot will be used in the bath
 rooms. Automatic water heaters will
 be installed. Exterior of the houses
 will be covered with cement plaster
 on metal lath. Plans are complete and
 in the hands of the owner who will do
 the work by Day Labor. Materials are
 now being purchased.

RESIDENCE — 1 story and base,
 frame, \$3,500. Oakland, Cal. Archi-
 tect, none. Owners, Welch & Rogers,
 1731 Grove street, Oakland. The dwell-
 ing has been designed for a six-room
 house with bath and sleeping porch,
 and will be erected on East 33rd street
 east of Fourth avenue. Interior will
 be finished in pine with some white en-
 amel. Hardwood floors will be used in
 the living room, dining room and re-
 ception hall. There will be an open
 fire place and tile or brick mantel.
 Tile wainscot will be used in the bath
 room. An automatic water heater will
 be installed. Exterior of the dwelling
 will be covered with cement plaster on
 metal lath. Plans are complete and in
 the hands of the owners who will do
 the work by Day Labor.

RESIDENCE — 2 story and base,
 frame, \$1,500. Oakland, Cal. Archi-
 tect, none. Owner, C. M. MacGregor,
 470 13th street, Oakland. The dwell-
 ing will be erected on Mandana Boul-
 evard, and has been designed for an
 eight-room house with bath and sleep-
 ing porch. Interior will be finished in
 pine and hardwood veneer with white
 enamel in the bed rooms. Hardwood
 floors will be used in the living room,
 dining room and reception hall. Plans
 provide for furnace heat and open fire
 places. Mantels will be of brick. Tile
 wainscot will be used in the bath
 room. An automatic water heater will
 be installed. Exterior of the house
 will be covered with cement plaster

on metal lath. Plans are complete and
 the work will be done by Day Labor.
 Materials are now being purchased.

RESIDENCE — 1 story and base,
 frame, \$2,500. Oakland, Cal. Archi-
 tect, none. Owner, Joseph T. Ilineh,
 1718 Broadway, Oakland. The dwell-
 ing will be erected at the southeast
 corner of 56th and Adeline streets and
 has been designed for a six-room
 house with bath. Interior will be fin-
 ished in pine throughout. Hardwood
 floors will be used in the living and
 dining rooms. There will be an open
 fire place and tile or brick mantel.
 Bath room will have tile wainscot. An
 automatic water heater will be in-
 stalled. Exterior of the dwelling will
 be covered with rustic and cement
 plaster on metal lath. Plans are com-
 plete and in the hands of the owner
 who will do the work by Day Labor.

RESIDENCE — 1 story and base,
 frame, \$2,500. Oakland, Cal. Archi-
 tect, none. Owner, L. G. Pfirang, 3441
 Shafter avenue, Oakland. The dwell-
 ing will be erected on Glendale avenue
 west of Desmond, and has been de-
 signed for a six-room house with bath
 and sleeping porch. Interior will be
 finished in pine and white enamel.
 Hardwood floors will be used in the
 living and dining room. There will be
 an open fire place and tile or brick
 mantel in the living room. Bath room
 will have tile floor and wainscot. An
 automatic water heater will be in-
 stalled. Exterior of the dwelling will
 be covered with cement plaster on
 metal lath. Plans are complete and in
 the hands of the owner who will do
 the work by Day Labor. Materials are
 now being purchased.

RESIDENCE — 1 story and base,
 frame, \$2,500. Oakland, Cal. Archi-
 tect, none. Owner, J. Coward, 6081
 Claremont avenue, Oakland. The dwell-
 ing has been designed for a six-room
 house with bath and sleeping porch,
 and will be erected on the south side
 of Cabot street east of Pedestrian Way.
 Interior will be finished in pine
 throughout. Hardwood floors will be
 used in the living and dining rooms
 and reception hall. There will be a
 large open fire place in the living
 room. Mantel will be of brick. Bath
 room will have tile wainscot. An au-
 tomatic water heater will be installed.
 Exterior of the dwelling will be cov-
 ered with cement plaster on metal lath.
 Plans are complete and in the hands
 of the owner who will do the work by
 Day Labor. Materials are now being
 purchased.

RESIDENCE — 2 story and base,
 frame, \$5,000. Oakland, Cal. Archi-
 tect, none. Owner, A. B. Chase, 1521
 73rd avenue, Oakland. The dwelling
 will be erected on Montgomery street
 east of Peralta, and has been designed
 for a nine-room house with bath and
 sleeping porch. Interior will be fin-
 ished in pine, elm and white enamel.
 Hardwood floors will be used in the
 living and dining rooms and reception
 hall. There will be furnace heat and
 open fire places. Mantels will be of
 tile and brick. Bath room will have
 tile wainscot. An automatic water
 heater will be installed. Exterior of
 the dwelling will be covered with ce-
 ment plaster on metal lath. Plans are
 complete and in the hands of the owner
 who will do the work by Day Labor.
 Materials are now being purchased.

RESIDENCE — 2 story and base,
 frame, \$1,500. Oakland, Cal. Archi-
 tect, none. Owner, R. E. Stubbe, 1203
 East 19th street, Oakland. The dwell-
 ing has been designed for an eight-
 room house with bath and sleeping
 porch, and will be erected on Mira
 Vista avenue near Alta Vista. Interior
 will be finished in pine with some
 white enamel and elm panels. Hard-
 wood floors will be used in the living
 and dining rooms and reception hall.
 Plans provide for furnace heat and
 open fire places. Mantels will be of
 brick. Tile wainscot will be used in
 the bath room. An automatic water
 heater will be installed. Exterior of
 the dwelling will be covered with ce-
 ment plaster on metal lath. Plans are
 complete and in the hands of the owner
 who will do the work by Day Labor.

RESIDENCE — 1 story and base,
 frame, \$2,500. Oakland, Cal. Archi-
 tect, none. Owner, C. J. Pfirang, 548
 Claremont avenue, Oakland. The dwell-
 ing will be erected on the east side of
 Dover street south of 63rd, and has
 been designed for a five-room dwelling
 with bath and sleeping porch. Interi-
 or trim will be of pine and redwood.
 Hardwood floors will be used in the
 living and dining rooms. There will
 be a large open fire place in the living
 room. Mantel will be of brick. Plans
 provide for an automatic water heater.
 Tile wainscot will be used in the bath
 room. Exterior of the house will be
 covered with cement plaster on metal
 lath. Plans are complete and in the
 hands of the owner who will do the
 work by Day Labor.

GARAGE — 1 story, brick, \$5,000.
 Oakland, Cal. Architect, none. Own-
 ers, Harris & Hudson, 1957 East 35th
 street, Oakland. The building has been
 designed for a commercial garage and
 will be erected on the west side of
 Fruitvale avenue north of Hopkins
 street. There will be a concrete floor.
 Interior will be finished in pine. Special
 gasoline storage tanks are specified.
 Exterior of the building will be face
 with pressed brick. Plans are com-
 plete and in the hands of the owner
 who will do the work by Day Labor.
 Materials are now being purchased.

RESIDENCE — 2 story and base,
 frame, \$2,500. Oakland, Cal. Archi-
 tect, Paul F. De Martini, 2123 Powell
 street, S. F. Owner, Charles Isola. The
 dwelling will be erected on 12nd street
 east of Linden, and has been designed
 for a six-room house. Interior will be
 finished in pine throughout. There will
 be an open fire place in the living
 room with a tile mantel. Exterior will
 be covered with rustic. Plans are com-
 plete and in the hands of the owner
 who will do the work by Day Labor.

RESIDENCE — 2 story and base,
 frame, \$5,000. Oakland, Cal. Archi-
 tect, Albert Farr, Foxcroft Bldg., S. F.
 Owner, Robert Sharon. The dwelling
 will be erected in Piedmont, and has
 been designed for an eight-room house
 with bath and sleeping porch. Interior
 will be finished in pine, hardwood ve-
 neer and white enamel. Hardwood
 floors will be used in the principal
 rooms. Plans provide for furnace heat
 and open fire places. Mantels will be
 of tile or brick. An automatic water
 heater will be installed. Bath room
 will have tile floor and wainscot. Ex-
 terior will be covered with cement
 plaster on metal lath. Plans are com-
 plete and figures are being taken.

RESIDENCE—2 story and base, time, \$2,000 Oakland, Cal. Architect, none. Owner, Louis O. Hanson, 8 The Alameda. The dwelling will be erected on the south side of Keith street west of Broadway, and has been designed for a seven-room house with porch and sleeping porch. Interior will be finished in pine with some white enamel and elm panels. Hardwood floors will be used in the living and dining rooms and reception hall. There will be furnace heat and open fire places. Mantels will be of tile. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE—2 story and base, time, \$5,000. Oakland, Cal. Architect, Edward L. Cannon, Central Bank Bldg., Oakland. Owner, David Caig. The dwelling will be erected on Santa Rosa avenue south of Rosal, and has been designed for a ten-room house with bath. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms. There will be furnace heat and open fire places. Mantels will be of tile or brick. An automatic water heater will be installed. Bath room will have tile wainscot. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

APARTMENT HOUSE—4 story and time, brick, \$48,000 Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner, Frank E. Prigman. The building will be erected at the corner of 11th and Oak streets, and has been designed to contain a number of two, three and four room apartments. Interior will be finished in pine, elm and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. Plans provide for steam heat, an automatic elevator, hot water system and vacuum cleaning. All utilities will have wall beds and private bath rooms. Bath rooms will be finished in tile. Marble wainscot will be used in the entrance. Exterior of the building will be faced with pressed brick and cement plaster. Plans are complete and figures will be called for at once.

STORE AND THEATRE ALTERATION—3 story and base, brick, \$60,000. Oakland, Cal. Architect, Carl Werner, Shelan Bldg., S. E. Owner, Charles Fleesman. The building at the corner of 17th, San Pablo and Clay streets will undergo extensive alterations. There will be provision for a theatre besides the stores on the first floor, and upper floors will be arranged for a lodge hall. Included in the work will be interior trim, heating, plumbing, electric work, and painting. Exterior will be faced with pressed brick. Plans are now being prepared.

Contracts Awarded.

GARAGE—1 story, brick, \$5,000. Berkeley, Alameda Co., Cal. Architect, J. Henry Boehrer, Ledger Bldg., Oakland. Owner, J. H. Wright. Contractors, Boehrer & Legault, Delger Bldg., Oakland. Contract price, \$5,000.

Building Contracts Awarded

Oakland

No.	Owner	Contractor	Amt.
1478	Norris	Douglas	600
1479	Merriman	Owner	1500
1481	Ely	Isbell	2500
1482	Burger	Sommarstrom	2500
1483	Oakland	Faulkes	1200
1484	Oakland	Faulkes	600
1485	Oakland	Faulkes	600
1486	Wallace	Wallace	400
1487	Antenen	Owner	400
1488	Larsen	Larsen	1500
1490	Gonsalves	Hamilton	2250
1491	Hamilton	Hamilton	500
1492	Cochran	Cochran	2000
1493	Wood	Wood	600
1494	Wood	Wood	2000
1495	Arner	Pearson	1445
1496	Roark	Berwin	450
1497	Dodge	Dodge	1500
1499	Edwall	Winlund	2200
1505	Puts	Moribat	2200
1506	Peterson	Peterson	400
1507	Welch	Rogers	3035
1508	Chase	Chase	4400
1509	Jones	Hayes	3200
1510	Coward	Coward	2200
1511	Stover	Nunes	2500
1512	Stover	Nunes	2500
1513	O'Neil	Montgomery	2475
1514	Same	Same	2425
1515	Rousseau	Blake	2258
1516	Venham	Haley	1500
1517	Swaggert	White	1900
1518	Tully	Knight	300
1522	Pfrang	Pfrang	2500
1523	MacGregor	MacGregor	4200
1524	Harris	Hudson	2500
1525	Hinch	Hinch	2000
1526	Sadler	Ahlbach	2055
1527	Adams	Brown	1000
1528	Weber	Hambleton	2450
1529	Jerome	Hurlbut	1450
1530	Stubbe	Stubbe	4500
1531	Peterson	Cooper	1000
1532	Caig	Caig	5000
1533	Hunse	Hunse	800
1534	Pfrang	Pfrang	2500
1536	Prigman	Sommarstrom	44000
1537	Quinn	Lowe	500
1538	Johanson	Johanson	1500
1539	Taylor	Taylor	1600
1540	Graff	Graff	1800
1541	Swanson	Swanson	1900
1544	Glass	Woodard	2250
1545	Hanson	Hanson	3000
1545	Lucas	Rowe	3000

ADDITION

(1478) S CLEMENT 450 W 50th avenue, Oakland. Addition. Owner.....Jennie L. Norris, 4701 Clement, Oakland. Architect...None. Contractor...H. C. Douglas, 1238 50th avenue, Oakland. COST, \$600

DWELLING

(1479) W SIXTY-FIFTH AVE, 87½ N Flora, Oakland. One-story five-room dwelling. Owner.....J. Merriman, 2115 65th avenue, Oakland. Architect...None. Day's work. COST, \$1500

DWELLING

(1481) W DESMOND 100 N Coronado, Oakland. One-story six-room dwlg. Owner.....Frank Ely, 368 Clifton St, Oakland. Architect...None. Contractor...H. E. Isbell, 2815 Linden, Oakland. COST, \$2500

DWELLING

(1482) N CLIFTON 175 W College, Oakland. One-story 5-room dwlg. Owner.....P. W. Burger, 858 52nd St., Oakland. Architect...None. Contractor...A. Sommarstrom, 109 Sunnyside avenue, Oakland. COST, \$2500

SCHOOL

(1483) NINETY-EIGHTH AVE. and Plymouth, Oakland. Two, one-story one-room schools. Owner.....City of Oakland. Architect...None. Contractor...John R. Faulkes. COST, \$1200

SCHOOL

(1484) TWENTY-NINTH AVE. and Elmwood, Oakland. One-story one-room school. Owner.....City of Oakland. Architect...None. Contractor...John R. Faulkes. COST, \$600

DWELLING

(1485) EIGHTY-FIFTH AVE. and 9th St, Oakland. Owner.....City of Oakland. Architect...None. Contractor...John R. Faulkes. COST, \$600

ADDITION

(1486) NO. 1419 SEVENTY-SECOND avenue, Oakland. Alteration and addition. Owner.....S. A. Wallace. Architect...None. Day's work. COST, \$400

SHED

(1487) SE CORNER SEVENTH and Broadway, Oakland. Shed. Owner.....J. Antenen & Co. Prem. Architect...None. Day's work. COST, \$400

DWELLING

(1488) W STANNAGE 375 S Marlin, Albany. One-story five-room dwlg. Owner.....John Larsen. Architect...None. Day's work. COST, \$1500

DWELLING

(1490) E SIXTY-FIRST AVE 48 S Faursch Way, Oakland. One-story 6-room dwelling. Owner.....A. M. Gonsalves, 1211 Campbell, Oakland. Architect...None. Day's work. COST, \$2250

ADDITION

(1491) NO. 2005 E-TWENTY-FIRST, Oakland. Addition. Owner.....Jas. Hamilton, Premises. Architect...None. Day's work. COST, \$500

DWELLING


(1492) S SIXTY-THIRD 225 W Hille-gass, Oakland. One-story 5-room dwelling. Owner.....J. F. Cochran, 241 Alcatraz Ave., Oakland. Architect...None. Day's work. COST, \$2000

LUMBER RACKS

(1493) FREDERICK AND KING, Oakland. Lumber racks. Owner.....E. K. Wood Lumber Co., Premises. Architect...None. Day's work. COST, \$600

LUMBER SHED

(1494) FREDERICK AND KING, Oakland. Lumber shed.



Structural Steel Contractors

**Works at
HARRISON ST.,
bet. 8th & 9th
San Francisco**

Telephone Market 337

Owner... E. K. Wood Lumber Co.,
Premises.

Architect...None.

Day's work. COST, \$2000

FIRE REPAIRS

(1195) NO. 3221 E-SEVENTEENTH,
Oakland. Fire repairs.

Owner.....F. B. Warner, 2413 McKin-
ley Ave., Berkeley.

Architect...None.

Contractor...Ben Pearson, 2403 Grant,
Berkeley.

COST, \$1445

ALTERATIONS

(1196) NO. 820 PERALTA, Oakland.

Alterations.

Owner.....Mrs. Tillie Roark, Prem.

Architect...None.

Contractor...P. Brewin, 1473 7th, Okd.

COST, \$150

DWELLING

(1197) S NOBLE 121 W 61st Ave., Oak-
land. One-story 5-room dwelling.

Owner.....F. A. Dodge, 1911 69th
Ave., Oakland.

Architect...None.

Day's work. COST, \$1500

DWELLING

(1199) OAKLAND. All work for one-
story five-room dwelling.

Owner.....O. E. Edwall and G. B. Al-
forno, 5420 Boyd Ave., Okd.

Architect...None.

Contractor...Fletcher & Winlund, 1011
Franklin, Oakland.

Filed Aug. 2, '15. Dated July 27, '15.

Frame up\$475

Plastered475

Completed700

Usual 35 days.....550

TOTAL COST, \$2200

Bond, none. Limit, 60 days after July
30. Forfeit, none. Plans and specifica-
tions, none.

STORE AND DWELLING

(1505) S E-FOURTEENTH 90 E 20th
Ave., Oakland. Two-story 8-room
store and dwelling.

Owner.....J. Puts, 2336 E-14th, Okd.

Architect...None.

Contractor...Peter Morilhat, 1333 E-
18th, Oakland.

COST, \$2200

ADDITION

(1506) NO. 1354 E-THIRTY-SIXTH,
Oakland. Addition.

Owner.....B. E. Peterson, Premises.

Architect...None.

Day's work. COST, \$400

DWELLING

(1507) S E-THIRTY-THIRD 300 E 1th
Ave., Oakland. One-story 6-room
dwelling.

Owner.....Welch & Rogers, 1734
Grove, Oakland.

Architect...None.

Day's work. COST, \$3035

DWELLING

(1508) S MONTANA 260 E Peralta,
Oakland. Two-story 9-room dwlg.

Owner.....A. B. Chase, 1521 73rd Ave.,
Oakland.

Architect...None.

Day's work. COST, \$4400

STORES AND CLUB ROOMS

(1509) SW PACIFIC AND WILLOW,
Oakland. Two-story 16-room stores
and club rooms.

Owner.....H. Z. Jones, 488 9th, Okd.

Architect...None.

Contractor...E. W. Hayes, 524 3rd Ave.,
Oakland.

COST, \$5200

DWELLING

(1510) S CHABOT ROAD 55 E Pedes-
trian Way, Oakland. One-story six-
room dwelling.

Owner.....J. Coward, 6081 Claremont
Ave., Oakland.

Architect...None.

Day's work. COST, \$2500

DWELLING

(1511) NW SIXTIETH & HILLEGASS
Ave., Oakland. Two-story 6-room
dwelling.

Owner.....G. Stover, 5420 Dover, Okd.

Architect...None.

Contractor...Geo. W. Nunes, 5420 Dover,
Oakland.

COST, \$2500

DWELLING

(1512) N SIXTIETH 100 W Hillegass
Ave., Oakland. Two-story 6-room
dwelling.

Owner.....G. Stover, 5420 Dover, Okd.

Architect...None.

Contractor...Geo. W. Nunes, 5130 Dover,
Oakland.

COST, \$2500

DWELLING

(1513) S STANFORD AVE 394 E San
Pablo Ave., Oakland. One-story six-
room dwelling.

Owner.....Wm. O'Neil, 1082 57th, Okd.

Architect...None.

Contractor...W. S. Montgomery, 2321
Ward, Berkeley.

COST, \$2475

DWELLING

(1514) S STANFORD AVE 434 E San
Pablo Ave., Oakland. One-story six-
room dwelling.

Owner.....Wm. O'Neil, 1082 57th, Okd.

Architect...None.

Contractor...W. S. Montgomery, 2321
Ward, Berkeley.

COST, \$2425

FRAME APARTMENTS

(1515) E GRAND AVE AND W PARK
View Terrace N on curve to right
97.67 NE 98.55 SE 10.56 SW 100.33
Oakland. Plumbing and heating ex-
cept plumbing fixtures for three
story frame apartments.

Owner.....Chas. J. and Carrie E.
Rousseau, 46 Kearny, S. F.

Architect...Charles J. Rousseau,
Kearny, San Francisco.

Contractor...L. W. Blake, 2125 100
Ave., Oakland

Filed Aug. 3, '15. Dated Aug. 3, '15.

Roughed in\$110

Completed and accepted.....110

Usual 35 days.....73

TOTAL COST, \$293

Bond, none. Limit, as soon as possible

Forfeit, none. Plans and specification

filed.

DWELLING

(1516) NE 37.5 LOT 21st MAP FRUIT
vale Addition Tract, Oakland. All
work for one-story 5-room dwelling.

Owner.....William Wenham, 2625 Sa-
Jose Ave., Alameda.

Architect...None.

Contractor...A. L. Haley, Oakland.

Filed Aug. 3, '15. Dated Aug. 2, '15.

Frame up4

Brown coated4

Completed4

Usual 35 days.....4

TOTAL COST, \$150

Bond, \$750. Sureties, Howard Pau-

and John Thomas Pillsbury. Limit, 60

days. Forfeit, \$1. Plans and specifica-

tions filed.

DWELLING

(1517) N RUTH AVE 136 E Kingsland
Oakland. One-story 5-room dwelling

Owner.....B. C. Swaggert, 5722 E
15th, Oakland.

Architect...None.

Contractor...W. A. White, 139 Center
Santa Cruz.

COST, \$1900

ALTERATIONS

(1518) NO. 2203 EIGHTH AVE., Oak-
land. Alterations

Owner.....Mrs. S. E. Tully, Premise

Architect...None

Contractor...Harry C. Knight, 385
Market, Oakland.

COST, \$50

DWELLING

(1522) S GLENDALE 140 W Desmond
Oakland. One-story 5-room dwlg.

Owner.....L. G. Pfirang, 5441 Shaft-
Ave., Oakland

Architect...None.

Day's work. COST, \$2500

DWELLING

(1523) N MANDANA BLVD 347 I
Calmar, Oakland. Two-story 8-room
dwelling.

Owner.....C. M. MacGregor, 470 13th
Oakland.

Architect...None.

Day's work. COST, \$4300

BRICK GARAGE

(1524) W FRUITVALE AVE 150 N
Hopkins, Oakland. One-story brick
garage.

Owner.....Harris & Hudson, 1957 E-
38th, Oakland.

Architect...None.

Day's work. COST, \$2500

DWELLING
(1525) SE FIFTY-SIXTH & ADELINE
Oakland. One-story 5-room dwlg.
Owner.....Jos. T. Hinch, 1745 Broad-
way, Oakland.
Architect...None.
Day's work. COST, \$2000

DWELLING
(1526) S E-TWENTIETH 105 W 24th
Ave S 100xW 35, Okd. All work ex-
cept light fixtures and shades for
one and one-half-story dwelling.
Owner.....Mrs. Clara M. Sadler.
Architect...Henry Shermund, Mills
Bldg, San Francisco.
Contractor...A. Ahlbach, 107 Colling-
wood, San Francisco.
Filed Aug. 4, '15. Dated July 30, '15.
Frame up ¼
Brown coated ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$2058
Bond, \$1029. Surety, Hartford Accident
& Indemnity Co. Limit, 60 days. For-
feit, \$5. Plans and specifications filed.

ALTERATIONS
(1527) NO. 1660 EIGHTH, Oakland.
Alterations.
Owner.....Mrs. M. J. Adams, 801
Campbell, Oakland.
Architect...None.
Contractor...Albert Brown, 801 Camp-
bell, Oakland.
COST, \$1000

DWELLING
(1528) W EIGHTY-FOURTH AVE 300
N Blanch, Oakland. Two-story 7-
room dwelling.
Owner.....Mrs. M. F. Weber, 1200
39th Ave., Oakland.
Architect...None.
Contractor...Fred Hambleton, 575 43rd,
Oakland.
COST, \$2450

DWELLING
(1529) W MIRA VISTA 200 N Alta
Vista, Oakland. Two-story 8-room
dwelling.
Owner.....W. W. Jerome, 1216 96th
Ave., Oakland.
Architect...None.
Contractor...C. B. Hurlburt, 1475 90th
Ave., Oakland.
COST, \$1450

DWELLING
(1530) W MIRA VISTA 200 N Alta
Vista, Oakland. Two-story 8-room
dwelling.
Owner.....R. E. Stubbe, 1209 E-19th,
Oakland.
Architect...None.
Day's work. COST, \$4500

ALTERATIONS
(1531) NO. 217 MOSS AVE., Oakland.
Alterations.
Owner.....Emma J. Peterson, 3640
Piedmont Ave., Oakland.
Architect...None.
Contractor...W. M. Cooper, 415 Moss
Ave., Oakland.
COST, \$1000

DWELLING
(1532) W SANTA RAY AVE 92 S
Rosal Ave, Oakland. Two-story 10-
room dwelling.
Owner.....David Craig, 1913 Myrtle,
Oakland.

Architect...Ed. L. Cannon, 661 Polrier,
Oakland.
Day's work. COST, \$5000

DWELLING
(1533) N FLEMING AVE 265 E Court-
land Ave., Oakland. One-story 4-
room dwelling.
Owner.....A. Hunse, 4400 Fleming
Ave., Oakland.
Architect...None.
Day's work. COST, \$800

DWELLING
(1534) E DOVER 40 S 63rd, Oakland.
One-story 5-room dwelling.
Owner.....C. J. Pfirang, 5487 Clare-
mont Ave., Oakland.
Architect...None.
Day's work. COST, \$2500

BRICK APARTMENTS
(1536) SW ELEVENTH AND OAK W
150xS 100, Oakland. All work for
four-story brick (24) apartments.
Owner.....Frank E. Brigham, 1514
Alice, Oakland.
Architect...Richardson & Burrell, Al-
bany Block, Oakland.
Contractor...Sommarstrom Bros., 202 E-
12th, Oakland.
Filed Aug. 5, '15. Dated Aug. 3, '15.
Brick work completed up to first
floor joists \$ 5000
Brown coated 14000
Completed 9500
Usual 35 days..... 15500
TOTAL COST, \$44,000
Bond, none. Limit, 135 days after Aug.
5. Forfeit, \$10. Plans and specifica-
tions filed.

REPAIRS
(1537) NO. 1045 KAINS AVE, Albany
Repairs.
Owner.....Mrs. Quinn, Premises.
Architect...None.
Contractor...Mr. Lowe, 1196 Curtis,
Berkeley
COST, \$500

DWELLING
(1538) E EVELYN 525 N Marin, Al-
bany. One-story 5-room dwelling.
Owner.....Gustaf Johanson, 1811
Rose, Berkeley.
Architect...None.
Day's work. COST, \$1500

DWELLING
(1539) E PERALTA 200 S Solano,
Albany. One-story 5-room dwelling.
Owner.....W. N. Taylor.
Architect...None.
Day's work. COST, \$1600

DWELLING
(1540) E KAINS 250 S Washington,
Albany. One-story 3-room dwlg.
Owner.....G. Glaff.
Architect...None.
Day's work. COST, \$1500

DWELLING
(1541) E NEILSON 150 S Marin, Al-
bany. One-story 5-room dwelling.
Owner.....Oscar Swanson, 4066 18th,
San Francisco.
Architect...None.
Day's work. COST, \$1900

DWELLING
(1543) E EVERETT 120 S Vista, Oak-
land. Two-story 6-room dwelling.
Owner.....M. Glass, Oakland
Architect...None.

Contractor...E. W. Woodard, 4031
Brighton Ave., Oakland.
COST, \$2250

DWELLING
(1544) S KEITH AVE 350 W Broad-
way, Oakland. Two-story 7-room
dwelling.
Owner.....Louis O. Hanson, 1128 The
Alameda, Berkeley.
Architect...None.
Day's work. COST, \$3000

DWELLING
(1545) S FIFTY-FIRST 175 E Lawton
Ave., Oakland. One-story 6-room
dwelling.
Owner.....F. B. Lucas, McGill, Nev.
Architect...None.
Contractor...A. M. Rowe, 5109 Manila
Ave., Oakland.
COST, \$3000

Building Contracts Awarded Berkeley.

No.	Owner	Contractor	Amt.
1480	Breck	Smith	2000
1489	Hansen	Ahnfeld	2325
1498	Flanders	Haws	600
1500	Garretson	Garretson	2375
1501	Same	Same	2200
1502	Same	Same	2425
1503	Same	Same	2250
1504	Same	Same	2425
1519	Hebbard	Spitler	5000
1535	Wright	Legault	4350
1542	Jone	Brown	400

DWELLING
(1480) 1531 ARCH ST, Berkeley. Two-
story six-room dwelling.
Owner.....Charles F. Breck, Prem.
Architect...None.
Contractor...Harry C. Smith, 2011 Fran-
cisco St., Berkeley.
COST, \$2000

DWELLING
(1489) E TENTH ST, 100 N Addison,
N 50 E 135 S 50 W 50, Berkeley.
All work for one-story frame dwlg.
Owner.....Edward and Elsie Hansen.
Architect...A. W. Smith, 1010 Broad-
way, Oakland.
Contractor...H. Ahnfeld, 1907 Univer-
sity avenue, Berkeley.
Filed, July 31, '15. Dated July 31, '15.
Frame up ¼
Brown coated ¼
Completed and accepted ¼
Usual 35 days ¼
TOTAL COST, \$2338
Bond, \$1170. Sureties, U. S. Fidelity
and Guaranty Co. Forfeit, none. Limit,
November 16. Plans and specifications
filed.

ADDITION
(1198) NO. 2227 McGEE, Berkeley.
Addition.
Owner.....Mrs. A. P. Flanders, Prem.
Architect...None.
Contractor...Chas. Haws, 1709 Bancroft
Way, Berkeley.
COST, \$600

DWELLING
(1500) N JULIA 208 W California, Ber-
keley. One-story 6-room dwelling.
Owner.....John D. Garretson, 4119
Manila Ave., Oakland.
Architect...Hutchinson & McLean, 470
13th, Oakland.
Day's work. COST, \$2375

DWELLING
(1501) N JULIA 211.3 W California,
Berkeley. One-story 6 room dwlg.

Owner.....John D. Garretson, 4119
Manila Ave., Oakland.
Architect...Hutchinson & McLean, 470
13th, Oakland.
Day's work. COST, \$2200

DWELLING
(1502) N JULIA 274.6 W California,
Berkeley. One-story 6-room dwlg.
Owner.....John D. Garretson, 4119
Manila Ave., Oakland.
Architect...Hutchinson & McLean, 470
13th, Oakland.
Day's work. COST, \$2425

DWELLING
(1503) N JULIA 307.9 W California,
Berkeley. One-story 6-room dwlg.
Owner.....John D. Garretson, 4119
Manila Ave., Oakland.
Architect...Hutchinson & McLean, 470
13th, Oakland.
Day's work. COST, \$2250

DWELLING
(1504) N JULIA 341.2 W California,
Berkeley. One-story 6-room dwlg.
Owner.....John D. Garretson, 4119
Manila Ave., Oakland.
Architect...Hutchinson & McLean, 470
13th, Oakland.
Day's work. COST, \$2425

DWELLING
(1519) W MENDOCINO 150 S Indian
Rock Path, Berkeley. Two-story 9-
room dwelling.
Owner.....Mrs. M. Hebbard, 2636 Ben-
venue Ave., Berkeley.
Architect...None.
Contractor...E. B. Spittler, 815 Oxford,
Berkeley.
COST, \$5000

BRICK GARAGE
(1535) W TELEGRAPH AVE 125 S
Ashby Ave 50x135, Berkeley. All
work for one-story brick garage.
Owner.....J. H. Wright, 3020 Tele-
graph Ave., Berkeley.
Architect...J. Henry Bocher, Delger
Bldg., Oakland.
Superintendent...Alfred Legault, 3929
West, Oakland.
Filed Aug. 5, '15. Dated Aug. 5, '15.
Brick work completed to under-
side of roof trusses.....\$1137.50
Roof on1137.50
Completed1137.50
Usual 35 days.....1137.50
TOTAL COST, \$4550.00
Bond, \$2775. Surety, Southwestern
Surety Ins. Co. Limit, 60 days. For-
feit, none. Plans and specifications
filed.

NEW ROOF
(1542) NO. 2227 DWIGHT WAY, Ber-
keley. New roof.
Owner.....Dr. Jone, Premises.
Architect...None.
Contractor...H. C. Brown Roofing Co.,
990 36th, Oakland.
COST, \$300

Building Contracts Awarded

Alameda.

No.	Owner.	Contractor	Am't.
1520	Noble	Noble	1800
1521	Same	Same	1800

DWELLING
(1520) NO. 2522 NOBLE AVE., Ala-
meda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central

Ave., Alameda.
Architect...None.
Day's work. COST, \$1800
DWEELLING
(1521) NO. 2507 NOBLE AVE., Ala-
meda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central
Ave., Alameda.
Architect...None.
Day's work. COST, \$1800

NOTICE OF NON-RESPONSIBILITY.

ALAMEDA COUNTY.

Aug. 2, 1915—LOT 45 BLK 2 Map Ber-
keley Heights, Bkly. Berkeley De-
velopment Co as to improvements
on leased property.....

COMPLETION NOTICES.

ALAMEDA COUNTY

July 30, 1915—LOT "E" BLK 1 Clare-
mont Park, Bkly. Luella Eitel to
whom it may concern...July 26, 1915
July 30, 1915—W SANTA CLARA AVE
237.95 S Chetwood W 238.10 S 35 E
to Santa Clara Ave th N 35, Okd.
H W Jewett to Albert Hammarberg
.....July 30, 1915
Aug. 2, 1915—SW VIONA AVE 125
S Santa Ray Ave SW 115 1-10 NW
33.36 NE 56.88 NW 6.67 NE 10.44
SE 2.5 NE 47.3 SE 40, Okd. James
and Amelia Garvin to A R Dexter
.....August 2, 1915
Aug. 2, 1915—LOTS 41 AND 42 BLK
4 Berkeley Square, Bkly. Mrs J O
Davis to De Kay & Co...July 31, 1915
Aug. 3, 1915—E EUCLID AVE bet.
Le Conte and Virginia, Berkeley.
Beverly L and Nellie E Hodghead
to Walter Sorensen....July 16, 1915
Aug. 3, 1915—LOT 77 Map 4th Ave
Terrace Ext, Okd. F W Larrabee
to whom it may concern...Aug. 3, 1915
Aug. 3, 1915—LOT 7 BLK "U" Moss
Tract, Okd. Tim and Josephine
Garcia to Frank Negley...July 17, 1915
Aug. 3, 1915—LOT 40 Map Idora Park
Tract, Okd. Maude M Beekley to
H M Beekley.....July 29, 1915
Aug. 4, 1915—LOT 23 BLK 2 Thous-
and Oaks Tract, Oakland Tp. A F
Stiegeler to H H Schussler.....
.....Aug. 4, 1915
Aug. 5, 1915—E GRAND AVE 100 S
Weldon S 50xE120, Okd. Frank S
Donant to Banning & Stewart....
.....Aug. 4, 1915

LIENS FILED

ALAMEDA COUNTY.

July 31, 1915—S CLEVELAND ST, be-
ing portion lot 3, Map Subdivision
Plot No. 12 Watson Tract, Oakland.
Sunset Lumber Co. vs. Martha E.
and C. F. Lodge.....\$369.42
Aug. 2, 1915—PTN LOT 3 Map Sbdvn
Plot 12 Watson Tract, Okd. Strable
Mfg Co, \$35.03; Pacific Mfg Co,
\$108.90 vs Martha E and C F Lodge
Aug. 2, 1915—E INYO 100 N Marin
Bkly. Western Roofing Co, Inc vs
J G and W N Taylor.....\$69.50

RELEASE OF LIENS

ALAMEDA COUNTY.

Aug. 7, 1915—S BONITA AVE 100 E
Blair E 100XS 140, Piedmont. K
Patterson to Geo Lovell and Jesse

Robertson\$6.80
Aug. 5, 1915—PTN LOT 3 Map Sbdvn
Plot 12, Watson Tract, Oakland.
Pacific Mfg Co, \$275; Strable Mfg
Co, \$35.03; Sunset Lumber Co,
\$369.42 to C F Lodge.....
Aug. 2, 1915—LOT 118 Map Fremont
Tract, Oakland. John R Hodge and
E S Collins (Hodge & Collins Lum-
ber Co) to F P Holmes et al...\$145.49
Aug. 2, 1915—LOT 118 Map Fremont
Tract, Okd. Walter F Lloyd to
F P Holmes et al.....\$31.65

SAN JOSE AND THE SANTA CLARA VALLEY

STREET PAVING—Cost not stated.
South San Francisco, San Mateo Co.,
Cal. Engineer, Town Engineer, South
San Francisco. Owners, Town of South
San Francisco. Resolutions providing
for plans and specifications for the
paving of Magnolia and Orange ave-
nues, between Miller and Baden, were
adopted at the last meeting of the City
Board of Trustees. Bids for this work
will probably be called at the next
meeting.

FURNISHING ROCK AND SAND—
Cost not stated. San Jose, Santa Clara
Co., Cal. Engineer, County Surveyor,
San Jose. Owners, Santa Clara County.
At the last meeting of the Supervisors,
upon motion it was ordered that the
Clerk advertise for bids for the fol-
lowing rock for road purposes: 3,500
cubic yards or more Saratoga rock
crusher run, Leona Heights rock
crusher run, first class creek gravel, to
be delivered on the Alviso and Santa
Clara road between Agnew road and
the town of Alviso, and on the Mt.
View and Alviso road to the westerly
line of Supervisor's District No. 4. Bids
to be opened Monday, August 23rd. On
motion it is ordered that the Clerk ad-
vertise for bids for 1,830 cubic yards
of Saratoga rock crusher run rock to
be delivered at the following named
roads: Pennsylvania avenue, Palm
avenue, Walnut avenue, Wissackcker
avenue, Live Oak avenue, Chestnut
avenue, Hernandez avenue, Ellsworth
avenue, Belmont avenue, Backman
avenue, in Road District No. 5. Also
1,400 cubic yards or more of crusher
run Saratoga crushed rock to be de-
livered on the Los Gatos and Almaden
road between Union avenue and Hard-
wood road in Road District No. 5.

ROAD IMPROVEMENT — Cost not
state. San Jose, Santa Clara Co., Cal.
Engineer, County Surveyor, San Jose.
Owners, Santa Clara County. Plans
have been completed and approved for
the improvement of the Oakland road
through the town of Milpitas. Bids for
this work will be opened on Aug-
ust 23rd. Plans and specifications
can be secured from the office of the
County Clerk at San Jose.

ROAD IMPROVEMENT — Cost not
stated. Redwood City, San Mateo Co.,
Cal. Engineer, County Surveyor, Red-
wood City. Owners, San Mateo Coun-
ty. The County Supervisors have in-
structed the County Engineer to pre-
pare an estimate of the cost of putting
on 4 inches of macadam with two
coats of screening and two coats of
oil surfacing on the road from San
Gregorio to Pescadero and from Tun-
nitas to San Gregorio.

STREET PAVING, CURBS, ETC.—
Cost not stated. Monterey, Monterey
Co., Cal. Engineer, City Engineer,

Monterey. Owners, City of Monterey. Plans and specifications have been approved by the City Council for the improvement of Pacific street from the north line of Madison street to the south line of Jefferson street, by grading and paving with macadam from gutter line to gutter line, and the construction of gutters, sidewalks and curbs. Bids on this work will soon be called for.

ROAD CONSTRUCTION—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. At the last meeting of the County Supervisors the County Surveyor presented plans and specifications for the building of two roads in the Fourth Road District, one from Sunshine Valley to Montara, and the other from Montara to Martini. Bids will soon be called for.

ROAD CONSTRUCTION—\$29,233.56. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Contractor, L. G. Hare, Salinas. Contract price, \$29,233.56. The contract covers 14.825 miles of road to be constructed in District No. 5.

BRIDGES—4, timber construction. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans have been completed and have received official approval for the construction of four timber bridges with approaches. Bids are now being taken and are out for figures. Bids will be opened on August 23rd. Plans can be secured from the office of the County Clerk at San Jose.

BRIDGE—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans are complete and bids will be opened on August 23rd for the construction of a reinforced concrete bridge on the Malone road over Guadalupe Creek. Plans can be secured from the County Clerk at San Jose.

BRIDGE REPAIRS—Steel and concrete. Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. The plans and specifications for repairs to the Chualar bridge have been approved by the County Supervisors, and the Clerk has been instructed to advertise for bids on the work. Bids close August 20th, the next meeting of the Board. Plans and specifications together with full information may be had from the County Surveyor at Salinas.

MOTION PICTURE STUDIO—5, 1 and 2 story, frame, \$40,000. Santa Clara, Santa Clara Co., Cal. Architects, Ellis & Skilling, Garden City Bank Bldg., San Jose. Owners, San Jose Film Company. This group of buildings will consist of a large studio, scenery lofts, living quarters and stables. Interior finish will be of pine and redwood. Special laboratory facilities are provided. Exterior will be covered with rustic and cement plaster on metal lath. Plans are now being prepared.

COTTAGE—1 story, frame. Cost not stated. San Jose, Santa Clara Co., Cal. Architect, none. Owners, Santa Clara County. Plans have been completed and are now out for figures for the construction of a frame cottage to be

erected on the County Hospital grounds. Bids will be opened on August 22nd. Plans and specifications can be secured from the County Clerk at San Jose.

Contracts Awarded.

ROAD IMPROVEMENT—\$10,300. San Jose, Santa Clara Co., Cal. Engineer, County Engineer, San Jose. Owners, Santa Clara County. Contractor, John F. Adams, San Jose. Contract price, \$10,300.

BRIDGE—Reinforced concrete, \$1,350. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, R. H. Jamison, San Jose. Contract price, \$1,350.

BRIDGE CONSTRUCTION—Costs as follow. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, Bradley Bridge to W. L. Gilman & Son, 113 West Santa Clara street, San Jose, at \$14,400; repairs to San Lucas bridge to McLaren & Peterson, Williams Bldg., S. F., at \$18,000; jetties at Hill-town awarded to Lou G. Hare, Salinas at \$5,447.

BRIDGES—3, timber, \$3,189.93. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Contractor, Henry Layez, Redwood City. Contract price, \$3,189.93.

SEWER CONSTRUCTION—\$9,842. Santa Cruz, Santa Cruz Co., Cal. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. Contractor, W. J. Tobin, Santa Cruz. Contract price, \$9,842.

BUILDING CONTRACTS

SANTA CLARA COUNTY.

COTTAGE
NO 629 N-SECOND ST., San Jose. Six-room cottage.
Owner.....L. P. Cianciarula, Prem.
Architect...None.
Contractor..V. Maggi, 431 Bird, S. J.
COST, \$2600

COTTAGE
TWELFTH AND WILLIAM STS., San Jose. Six-room cottage.
Owner.....Ed. Paterson, 1135 Bird, San Jose.
Architect...None.
Contractor..F. C. Nelson, 173 S-First St, San Jose.
COST, \$2500

COTTAGE
THIRTEENTH AND SAN SALVADOR STS., San Jose. Five-room cottage.
Owner.....San Jose Home Bldrs., Elks Bldg., San Jose.
Architect...None.
Contractor..C. Rasmussen, 58 W-Santa Clara, San Jose.
COST, \$2000

BAKE OVEN
RIVER AND SANTA CLARA STS., San Jose. Bake oven.
Owner.....Alameda French Bakery; Premises.
Architect...None.
Contractor..Joe Gressla, San Francisco
COST, \$1100

COTTAGE
NO. 51 S-RIVER ST., San Jose. Three-room cottage.

Owner.....Mrs. Tomalni, Premises.
Architect...None.
Contractor..DePonce Bros., 9th and Martha, San Jose.
COST, \$800

BARN
THIRTEENTH AND MARGARET STS., San Jose. Barn.
Owner.....A. Plecetti, Premises.
Architect...None.
Contractor..F. Savio, 44 N-River, S. J.
COST, \$500

BUILDING CONTRACTS,

SAN MATEO COUNTY.

FRAME BUNGALOW
LOT 16 BLK 5, Dingle Park, Redwood City. All work for one-story frame bungalow.
Owner.....Oscar A. Sahlberg, Redwood City.
Architect...None.
Contractor..Gustave Waller, Redwood City.

Filed July 28, '15. Dated July 2, '15.
Frame up\$608.75
When plastered 608.75
Completed and accepted..... 608.75
Usual 35 days..... 608.75
TOTAL COST, \$2435.00
Bond, \$1217.50. Surety, American Surety Co. of New York. Limit, 90 working days. Forfeit, none. Plans and specifications filed.

HARDWARE FOR RESIDENCE
"CAROLANDS," Hillsboro. French hardware for residence.
Owner.....Harriet Pullman Carolan, Hillsboro, Cal.
Architect...Willis Polk & Co., Hobart Bldg., San Francisco.
Contractor..Yale & Towne Manufacturing Co., Rialto Bldg., S. F.
Filed July 28, '15. Dated July 19, '15.
As work progresses..... 75%
Usual 35 days..... 25%
TOTAL COST, \$9878.60
Bond, \$5000. Surety, Aetna Accident & Liability Co. Limit, Dec. 15, 1915. Forfeit, \$15 per day. Plans and specifications filed.

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED **ACCEPTED**
July 23, 1915—HOLY CROSS CEMETERY, Sec. E Dormitory 5, San Mateo. Aneglo Ferroggiaro to D Tosi and E Berneri.....July 16, 1915
July 24, 1915—LOT 14 BLK 13, Crocker Estate Tract Sub 1, Daly City. William F Dreyer to whom it may concern.....July 22, 1915
July 27, 1915—PTN LOTS 12 AND 13 Blk 4, Burlingame. Samuel McClure, Alexander McDowell Jackson and Rachel Alexander McClure Jackson to whom it may concern.....July 26, 1915
July 27, 1915—LOTS 11 AND 12 BLK "F" Sub 1 Hayward Park, Redwood City. Bertha A Smoot to Charles Hutchings.....July 8, 1915
July 27, 1915—LOT 9 BLK 30 Redwood Highlands, Redwood City. Redwood Highlands Co to whom it may concern.....July 26, 1915
July 27, 1915—LOT 6 BLK 17, Redwood Highlands, Redwood City. Redwood Highlands Co to whom it

may concern.....July 21, 1915
 July 28, 1915—CAROLANDS, Hills-
 boro. Harriett Pullman Carolan
 to Floodberg & McCaffery.....
July 24, 1915
 July 31, 1915—ATHERTON, CAL
 Jacob Stern to James F Smith...
July 28, 1915
 July 31, 1915—LOT 12 BLK 24, Red-
 wood Highlands, Redwood City.
 Redwood Highlands Co to whom it
 may concern.....July 30, 1915

LIENS FILED.

SANTA CLARA COUNTY.

RECORDED	AMOUNT
July 12, 1915—LOT 13 BLK 1 Barrett and Mack Sub, San Jose. S H Chase Lumber Co vs P N and Mamie Dalis.....	\$54.25
July 12, 1915—LOT 13 BLK 1 Barrett and Mack Sub, San Jose. Glenwood Lumber Co vs P N and Mamie Dalis.....	\$326.21
July 19, 1915—LOTS 7 AND 8 BLK 1 Chris Anderson Sub, San Jose. S H Chase Lumber Co vs J Severo....	\$218.66

LIENS FILED.

SAN MATEO COUNTY.

RECORDED	AMOUNT
July 22, 1915—SUB NO. 3 San Mateo Park, Edgewood Road. Itenhart Lumber & Planing Mill Co vs Chas A. James, R H Fulton, Theodore F Moeller and Carson M Ellis....	\$636.14

MARIN, CONTRA COSTA AND SONOMA COUNTIES

CAFE—1 story, brick, \$5,000. Val-
 lejo, Solano Co., Cal. Architects, Rous-
 seau & Rousseau, 110 Sutter street, S.
 F. Owner, Frank Powers. The build-
 ing will be erected at 412 Georgia
 street, covering an area of 25 by 130
 feet. Interior will be finished in pine
 and hardwood with some ornamental
 plaster. Patent store fronts are spec-
 ified. Exterior will be faced with
 pressed brick. Plans are complete and
 figures are being taken.

OFFICE BUILDING—1 story, brick,
 \$3,500. Martinez, Contra Costa Co., Cal.
 Architect, James T. Narbett, 704 Mac-
 donald street, Richmond. Owners, Pa-
 cific Gas and Electric Co. The building
 will contain the general office of the
 company. Interior will be finished in
 hardwood. A tile and marble floor will
 be used. Patent store fronts are spec-
 ified. Exterior will be faced with
 pressed brick. Plans are now being
 prepared.

RESIDENCE — 1 story and base,
 frame, \$3,750. Richmond, Contra Costa
 Co., Cal. Architect, James T. Narbett,
 704 Macdonald avenue, Richmond.
 Owner, Walter La Selle. The dwelling
 has been designed for a seven-room
 house with bath and sleeping porch.
 Interior will be finished in pine, elm
 panels and white enamel. Hardwood
 floors will be used in the living and
 dining rooms and reception hall. There

will be a large open fire place and tile
 or brick mantel in the living room.
 An automatic water heater will be in-
 stalled. Bath room will have tile floor
 and wainscot and will be equipped
 with high class plumbing fixtures. Ex-
 terior of the house will be covered
 with cement plaster on metal lath.
 Plans are complete and figures are be-
 ing taken

RESIDENCE — 2 story and base,
 frame, \$4,500. Richmond, Contra Costa
 Co., Cal. Architect, James T. Narbett,
 704 Macdonald avenue, Richmond.
 Owner, Charles Pulse. The dwelling
 will contain eight rooms, bath and
 sleeping porch, and will be erected in
 one of the most attractive of the city's
 residence sections. Interior will be
 finished in pine with elm panels and
 white enamel. Hardwood floors will
 be used in the principal rooms. Plans
 provide for furnace heat and open fire
 places. Mantels will be of tile or
 brick. An automatic water heater will
 be installed. Bath room will have tile
 floor and wainscot. Exterior of the
 dwelling will be covered with cement
 plaster on metal lath. Plans are com-
 plete and figures are being taken by
 the architect.

RESIDENCE — 1 story and base,
 frame, \$4,000. Richmond, Contra Costa
 Co., Cal. Architect, James T. Narbett,
 704 Macdonald avenue, Richmond.
 Owner, John Marchi. The dwelling
 has been designed to contain seven
 rooms, bath and sleeping porch. In-
 terior will be finished in pine, hardwood
 and white enamel. Hardwood floors
 will be used in the living room, dining
 room and reception hall. There will
 be furnace heat and open fire places.
 Mantels will be of tile and brick. An
 automatic water heater will be in-
 stalled. Bath room will have tile
 floor and wainscot. Exterior of the
 dwelling will be covered with cement
 plaster on metal lath. Plans are com-
 plete and figures are now being taken.

RESIDENCE — 1 story and base,
 frame, \$2,000. Richmond, Contra Costa
 Co., Cal. Architect, James T. Narbett,
 704 Macdonald avenue, Richmond.
 Owner, Walter Giarrella. The dwelling
 has been designed for a five-room
 house with bath. Interior will be fin-
 ished in pine and redwood. Some hard-
 wood floors will be used. Bath room
 will have tile wainscot. An automatic
 water heater will be installed. There
 will be a large open fire place in the
 living room. Mantel will be of tile or
 brick. Exterior of the house will be
 covered with rustic. Plans are now
 being prepared.

RESIDENCE — 2 story and base,
 frame, \$1,000. Richmond, Contra Costa
 Co., Cal. Architect, James T. Narbett,
 704 Macdonald avenue, Richmond.
 Owner, J Vander Zwilep. The dwell-
 ing will contain eight rooms, bath and
 sleeping porch. Interior will be fin-
 ished in pine with some white enamel
 and elm panels. Hardwood floors will
 be used in the living room, dining
 room and reception hall. Plans pro-
 vide for furnace heat and open fire
 places. Mantels will be of tile or
 brick. Tile wainscot will be used in
 the bath room. An automatic water
 heater will be installed. Exterior of
 the house will be covered with cement

plaster on metal lath. Plans are now
 being prepared and figures will be
 called for shortly.

STREET PAVING, ETC.—Cost not
 stated. Richmond, Contra Costa Co.,
 Cal. Engineer, City Engineer, Chap-
 man, Richmond. Owners, City of Rich-
 mond. City Engineer Chapman has
 recommended to the Council that Bay
 avenue be improved with a concrete
 base and bitulithic surface. Plans for
 this improvement will probably be or-
 dered at the next meeting. Plans and
 specifications for the improvement of
 Twenty-first street and Anita street
 have been approved by the Council and
 bids will be ordered shortly.

STREET IMPROVEMENT, GRADING
 PAVING AND CURBS.—Cost not stat-
 ed. Petaluma, Sonoma Co., Cal. Engi-
 neer, City Engineer, Petaluma. Own-
 ers, City of Petaluma. The City Coun-
 cil has passed resolutions of intention
 to improve Sheldon street from the
 south line of Bassett street to the
 north line of lot 177, between its prop-
 erty lines be graded to the subgrade
 for its entire width, and between its
 curb lines macadamized with crushed
 rock, curbed with basalt blocks and
 guttered with concrete, except 200 feet
 on east side of Sheldon street, 100 feet
 south of south line of Bassett street.
 Bids will soon be called for.

ROAD CONSTRUCTION—Cost not
 stated. Martinez, Contra Costa Co.,
 Cal. Engineer, County Surveyor, Mar-
 tinez. Owners, Contra Costa County.
 Plans have been completed and figures
 are now being taken for constructing
 a road with a gravel base on Division
 No. 2 of the Tunnel road, a distance of
 seven miles and 300 feet. Bids will
 be opened on August 16th. Plans and
 specifications can be secured from the
 County Clerk.

STREET PAVING—Cost not stated.
 Sausalito, Marin Co., Cal. Engineer,
 City Engineer, Sausalito Owners, City
 of Sausalito. The Town Engineer has
 been instructed to prepare plans and
 specifications for the paving of El
 Portal and Park avenues. The work
 will be under the 1911 act. On com-
 pletion of the plans bids will be called
 for.

ROAD CONSTRUCTION — \$49,246.23.
 Martinez, Contra Costa Co., Cal. En-
 gineer, County Surveyor Arnold, Mar-
 tinez. Owners, Contra Costa County.
 Plans and specifications for seven more
 miles of permanent highway running
 from the Bryant bridge to Walnut
 Creek have been completed and pre-
 sented to the Supervisors by County
 Surveyor Arnold. The new stretch is
 estimated to cost \$49,246.23, or at an
 average of \$7,035 per mile. There are
 to be three concrete and steel bridges
 to be erected. The road is to be 18
 feet wide and will have a concrete
 base with asphaltum crown. There
 will be a two-inch wing.

ROAD REPAIR—\$8,000. San Rafael,
 Marin Co., Cal. Engineer, County Sur-
 veyor, San Rafael. Owners, Marin
 County. The bid of S. B. McNear of
 \$8,600 to repair the road leading from
 Chicken Point to a point near the Mc-
 Near Brick Yard, was rejected at the
 last meeting of the Supervisors. Su-
 pervisor Hansen was empowered to do
 the work.

STREET PAVING—Cost not stated. Santa Rosa, Sonoma Co., Cal. Engineer, City Engineer, Santa Rosa. Owners, City of Santa Rosa. The City Engineer has been instructed by the city to prepare a plan showing the work not signed up for the paving of Santa Rosa avenue, and submit the same at the next meeting so that on the work may be called.

HOTEL—3 story and base, frame, not stated. Mt. Diablo, Contra Costa Co., Cal. Architect, G. A. Applebush, Spreckels Bldg., S. F. Owners, Diablo Hotel Co. The building has been designed for a hotel and observatory. Interior will be finished in oak and redwood. A central heating system will be installed. Exterior will be covered with rustic and shingles. Plans are complete and figures will be given at once.

BRIDGES—3 reinforced concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Engineers, Leonard & Hialto Bldg., S. F. Owners, Contra Costa County. At the last meeting of the Board of Supervisors of Contra Costa County plans submitted by Engineers Leonard & Day were accepted for three reinforced concrete bridges to be erected in that county. Bids were called for at the same meeting and the closing date was set for August 23rd. Plans can be secured from either the city or the engineers or from the City Clerk at Martinez.

BRIDGES—3, reinforced concrete. Cost not stated. Fairfield, Solano Co., Cal. Engineer, County Surveyor, Fairfield. Owners, Solano County. Bids are now being received by the County Surveyors for the construction of three bridges to be constructed on the highway. The first will be over Santa Valley Creek at the Finch and in Vacaville Township. The second will be over Green Valley Creek at Nightingale ranch. The third crosses Green Valley Creek near Elia. Plans together with full information may be had from the County Engineer at Fairfield.

APARTMENT HOUSE AND STORES—2 story and base, brick and concrete. Cost, \$20,000. Martinez, Contra Costa Co., Cal. Architect, James T. Narbett, 704 Donald avenue, Richmond. Owner, Frank Frosser. The building has been designed to contain three stores on the first floor besides the entrance. Upper floor will be arranged for seven suites of rooms and bath. Interior will be finished in pine. Wall beds are included. Patent store fronts will be used. Bath rooms will have tile wainscoting. Exterior of the building will be of pressed brick. Plans are being prepared.

Contracts Awarded

STREET PAVING—\$6,209.63. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Contractors, Galbreath & Janes, 156 14th street, Richmond. Contract price, \$6,209.63.

SEWER CONSTRUCTION—Cost as per estimate. Petaluma, Sonoma Co., Cal. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. Contractor, Silva, Petaluma. Contract price, \$10,400. 433 each, 6-inch iron stone pipe, including Y branches, 55c per foot.

BUILDING CONTRACTS.

MARIN COUNTY.

FRAME RESIDENCE

SAN RAFAEL. Excavating, lumber, mill work, etc., for two-story frame residence.

Owner.....Dr. C. E. Marston, San Rafael.

Architect...F. D. Wolfe, 1st National Bank Bldg., San Jose.

Contractor...J. A. Kappennann, San Rafael.

Filed Aug. 2, '15. Dated July 26, '15.

Frame up\$1727.50

When plastered 1727.50

When completed 1727.50

Usual 35 days..... 1727.50

TOTAL COST, \$6910.00

Bond, \$3455. Sureties, J. Albert and Frank Tiede. Limit, 95 working days. Forfeit, none. Plans and specifications filed.

FRAME BUNGALOW

LOT 16 Yolanda Court, San Anselmo. All work for frame bungalow.

Owner.....L. P. Glandon.

Architect...Chas. Fantoni, 916 Kearny, San Francisco.

Contractor...L. E. Warden.

Filed July 31, '15. Dated July 30, '15.

Building inclosed\$475

Brown coated 475

Completed and accepted..... 475

Usual 35 days..... 475

TOTAL COST, \$1900

Bond, \$950. Sureties, Wm. P. Murray and W. H. Warden. Limit, 75 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

MARIN COUNTY.

RECORDED ACCEPTED

Aug. 2, 1915—THIBURON. Mrs. Maud

Parish to L A Kern....July 31, 1915

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

RESIDENCE—1 story, frame, \$1,500.

Fresno, Fresno Co., Cal. Architect, none. Owner, J. H. Church, Fresno. The dwelling will be erected in the Riverdale Addition, and has been designed for a five-room house. Interior will be finished in pine and redwood. There will be an open fire place in the living room. Mantel will be of tile or brick. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCES—3, 1 story and base, frame, \$2,500 each. Fresno, Fresno Co., Cal. Architect, none. Owner, H. W. Ackerman, 1221 U street, Fresno. These dwellings will each contain six rooms and bath, and will be erected in the Alta Vista Tract. Interiors will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be open fire places and brick mantels. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior will be covered with cement plaster and rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

STREET PAVING—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, City Engineer, Modesto. Owners, City of Modesto. Resolutions providing for the paving of L street between Seventh and Ninth streets have been adopted by the City Council and bids on the work will be called for as soon as all necessary advertising requirements have been complied with.

SEWER CONSTRUCTION—Cost not stated. Turlock, Stanislaus Co., Cal. Engineer, City Engineer, Turlock. Owners, City of Turlock. Plans and specifications for sewer work to be done in Minaret avenue and Rose street have been completed by the City Engineer and approved by the City Council and bids on the work are now being taken. Plans and further information may be had from City Engineer Layster.

STREET PAVING, ETC.—Cost not stated. Lindsay, Tulare Co., Cal. Engineer, City Engineer, Lindsay. Owners, City of Lindsay. The Board of Trustees are making preparations for the improvement of Hermosa street from Mt. Vernon avenue to the westerly limits of the city, and Main street east to the city limits. A 16-foot pavement with a two-foot gravel and oil shoulder on each side will probably be laid on Hermosa street, while Honolulu street will be paved from curb to curb as far as the Santa Fe depot on Harvard avenue.

BRIDGES—Reinforced concrete. Cost not stated. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. Plans and specifications prepared by County Surveyor Byron O. Lovelace, having been approved by the Highway Commission for the construction of two bridges in Tulare County, the Supervisors have issued a call for bids on the work. The work will include the construction of one 400-foot span of the Kings River bridge on the line of the state highway, and one bridge of 40 feet across the Alta District or old "76" canal at Traver. Plans and specifications may be had from the County Surveyor at Visalia.

CHURCH—2 story and base, brick and steel, \$75,000. Fresno, Fresno Co., Cal. Architect, R. F. Hotchkiss, Fresno. Owners, First Church of Christ, Scientist, Fresno. An announcement has just been made of the selection of an architect to design the structure, and no details of the building have been given out. It is understood that the architect and Building Committee will shortly make a tour of the principal cities of the state with the intention of securing ideas for the building. Further mention will be made of the work.

JAIL—1 story, reinforced concrete. Cost not stated. Patterson, Stanislaus Co., Cal. Engineer, County Surveyor A. L. Clary, Modesto. Owners, Town of Patterson. The building will be of fireproof construction. No details of construction have been given out. Plans are being prepared and figures will be called for shortly. Further mention of the work will be made.

SCHOOL—1 story and base, brick and tile, \$12,000. Fresno, Fresno Co., Cal. Architect, Ernest J. Kump, Howell Bldg., Fresno. Owners, West Park School District. The building will be erected about 2½ miles out of Fresno, and has been designed for a four-room school. Interior will be finished in pine.

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San Francisco, California

E. R. Hoerchner

Attorney-at-Law

Phone Garfield 2856

Phelan Bldg. San Francisco

ished in pine. Maple floors will be used in the class rooms. There will be a central heating system, probably steam heat with an oil burning furnace. Modern school plumbing and electric work is specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures will be called for at once.

OIL DISTRIBUTING PLANT—Concrete and steel. Cost not stated. Patterson, Stanislaus Co., Cal. Engineer, Engineering Department Standard Oil Co., S. P. Owners, Standard Oil Co. C. G. Flint, assistant superintendent of construction of the Standard Oil Company, has secured a site on Fifth street upon which the Standard will erect a distributing plant. Three steel storage tanks 10½ feet in diameter and 30 feet long, each having a capacity of 288 barrels, will be installed—one for distillate, one for gasoline and one for coal oil. In addition to this there will be erected a warehouse and office building 32x40, a pump house 10x20, a stable 22x32, and a wagon shed 22x30.

Contracts Awarded.

WAREHOUSE—1 story, frame and corrugated iron, \$12,000. Fresno, Fresno Co., Cal. Architect, none. Owners, Associated Warehouse Co. Contractors, Hansen Construction Co., Fresno. Contract price, \$12,000.

SCHOOL—1 story and base, frame, \$11,250. Maricopa, Kern Co., Cal. Architect, Thomas B. Wiseman, Producers' National Bank Bldg., Bakersfield. Owners, Maricopa School District. Con-

tractor, Fred Gribble, Maricopa. Contract price, \$11,250.

BUILDING CONTRACTS.

FRESNO COUNTY.

FRAME DWELLING

LOTS 34 AND 35 BLK 1, Fortcamp Addition No. 2, Fresno. All work for two-story frame dwelling.

Owner.....Mrs. M. J. Caldwell.

Architect...None.

Contractor...Theo Schmidt, 468 Poplar St., Fresno.

Filed July 30, '15. Dated July 29, '15.

Roof boards on.....\$950

Plastered 950

Completed 950

Usual 35 days..... 950

TOTAL COST, \$3800

Bond, \$1900. Surety, American Surety Co. Limit, 70 days. Forfeit, none.

Plans and specifications filed.

WAREHOUSE

LOT 7 BLK 180, Fresno. Warehouse.

Owner.....Associated Warehouse Co.

Architect...None.

Contractor...Hansen Constr. Co.

COST, \$12,000

DWELLING

LOTS 9 AND 10 BLK 161, Fresno. All work for dwelling.

Owner.....T. J. West, 817 S St., Fresno.

Architect...None.

Contractor...Andes Smith.

COST, \$2200

DWELLINGS

LOTS 6, 7 AND 10 BLK 3 Alta Vista

Tract, Fresno. Three dwellings.

Owner.....H. W. Ackerman.

Architect...None.

Day's work.

COST, \$2350

DWELLING

LOTS 1 TO 4 BLK 4 Riverdale Add'n

Fresno. Dwelling.

Owner.....J. R. Church, 1221 U St.

Architect...None.

Day's work.

COST, \$1100

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED

July 29, 1915—LOTS 14 AND 15 BLK

1, Claremont Park, Fresno. James

Anderson to Gede & Gede. July 2, 1915

Anderson to Gede & Gede. July 2, 1915

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work by Day Labor. Materials are now being purchased.

ROAD CONSTRUCTION—Cost not stated. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt County. All bids received by the Supervisors for the construction of the three roads—Eltersburg, Honeydew and Bair's Hoopa roads—were rejected and readvertisement was directed for alternate bids on 10-foot and 12-foot roads.

STREET PAVING, CURBS AND GUTTERS—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. At the last meeting of the City Council resolutions of intention were adopted for the improvement of Scotts avenue from Lincoln to Monroe street; Van Buren from Taylor to Hazelton; Monroe from Taylor to Scotts avenue, and the west half of Monroe street from Scotts to Hazelton avenue. The improvements are to consist of concrete curbs and gutters and asphaltic bound macadam street pavement.

STREET PAVING—Cost not stated. Chico, Butte Co., Cal. Engineer, County Surveyor Artin C. Polk, Oroville. Owners, City of Chico. The street bordering the children's playground and connecting Broadway with the Esplanade bridge over Big Chico Creek, will be paved with what is known as Richmond Specification, with a mixture of oil and crushed rock, according to a statement of Supervisor R. P. Holmes. County Engineer Martin C. Polk has been directed to prepare plans and specifications for the work. The work will cost several thousand dollars.

BRIDGE—Reinforced concrete. Cost not stated. Patterson, Stanislaus Co., Cal. Engineer, A. L. Clary, Modesto. Owners, Stanislaus County. According to word received from this city, County Surveyor A. L. Clary has prepared plans and specifications for the construction of a cement bridge over the Salida Creek where it crosses the county road immediately north of the town. Bids will be invited at an early date.

BRIDGES—Steel and concrete. Cost as follows. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractors, F. L. Smith, Eureka, suspension bridge over Trinity River, \$3,750; Farnell & Robinson, Eureka, repairs to North Fork bridge, \$1,692; F. L. Smith, Eureka, suspension bridge over Salt River, \$16,190.

STREET PAVING—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The contract for the paving of M street from the east line of Second to the west line of Third street has been awarded to the McGilivray Construction Co., 1907 7th street, Sacramento, by the City Commission. The Clark & Henry Construction Co., Oldsmar Bldg., Sacramento, were awarded the contract for the improvement of Third avenue in Oak Grove, from the east line of Lower Stockton road to the west line of East avenue.

SCHOOL—1 story, frame. Cost not stated. Brown School District, Tehama Co., Cal. Architect, none. Owners, Brown School District. The building will contain two class rooms. In

terior will be finished in pine. Stoves will be used for heating. Exterior will be covered with rustic and shingles. Plans are complete and out for figures. Bids will be opened on August 16th. Plans and specifications can be secured from the County Superintendent of schools, Odd Fellows Bldg., Red Bluff.

Contracts Awarded

STREET PAVING—\$3,556.50. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, Eaton & Smith, 107 11th street, S. F. Contract price, \$3,556.50.

SEWER CONSTRUCTION—\$3,711.82. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, Leach & De Camp, 11 Montgomery street, S. F. Contract price, \$3,711.82.

BRIDGES—2, reinforced concrete, arched girder type, \$109,000. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors, Ross Construction Co., Forum Bldg., Sacramento. Contract price, \$109,000.

BRIDGES—2, reinforced concrete, \$14,000 and \$17,000. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors, McLaren & Peterson, Sharon Bldg., S. F. Contract price, \$14,000 and \$17,000.

BRIDGE REPAIRS—\$14,500. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor Lunning, Red Bluff. Owners, Tehama County. Contractors, Ross Construction Co., Forum Bldg., Sacramento. Contract price, \$14,500.

FIRE HOUSES—2, 1 and 1½ story, frame and brick, \$6,996.50 and \$5,696.50. Stockton, San Joaquin Co., Cal. Architects, Ralph P. Morrell, Odd Fellows Bldg., and W. B. Thomas, Yosemite Bldg., Stockton. Owners, City of Stockton. Contractors, A. J. McPhee & Sons, 316 North California street, Stockton. Contract price, Rose street house, \$5,696.50 and South California street house, \$6,996.50.

BUILDING CONTRACTS.

SACRAMENTO COUNTY.

FRAME DWELLING

NO. 209 S ST. (rear), on W ½ Lot 7, R. S. 2nd and 3rd Sts., Sacramento. One-story three-room and bath frame dwelling.

Owner, Mrs. W. J. Welsh.
Architect, None.

Contractor, Sacramento Home Builders, Forum Bldg., Sacramento. COST, \$600

ALTERATIONS

NO. 709 L ST., on W ½ Lot 7, K. L. 7th and 8th Sts., Sacramento. Tear down wall and remodel garage.

Owner, James L. Gilles, Care Carmichael Co., 809 J St., Sacramento.

Architect, None.
Contractor, A. Simmons, 2315 G St., Sacramento.

COST, \$500

FRAME RESIDENCE

NO. 2508 E ST., in W ½ of Lot 2 Bk E. E. 25th and 26th Sts., Sacramento. One-story frame residence.

Owner, Sabra Spurgeon, 618 7th St., Sacramento.

Architect, None

will be installed. Bath room will have tile floor and wainscot. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are being revised and new figures will be called for shortly.

RESIDENCE—1 story and base, frame, \$2,750. Sacramento, Cal. Architect, none. Owner, W. D. McKay, 3029 E street, Sacramento. The dwelling will be erected in Casa Loma Terrace, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine with some elm panels and white enamel. Hardwood floors will be used in the principal rooms. There will be an open fire place and furnace heat. Mantel will be of tile or brick. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the

Contractor...Samuel Mackey, 1048
Crandall Ave., Sacramento.
COST, \$1500

REPAIR RESIDENCE

ON W 1/2 LOT 6 BLK L, M, 8th and
9th Sts., Sacramento. General re-
pairs to residence.
Owner.....R. D. Finney, 819 M St.,
Sacramento.
Architect...None.
Contractor...M. F. McKenzie, 1126 T St.,
Sacramento.
COST, \$200

ALTERATIONS

NO. 1409 J ST., on W 1/2 Lot 7, I, J,
14th and 15th Sts., Sacramento. General
alterations to offices in front
part of building, etc.
Owner.....Pacific Telephone & Tele-
graph Co., Premises.
Architect...None.
Contractor...Murrell & Haley, Ochsner
Bldg., Sacramento.
COST, \$1258

DWELLING

NO. 3215 C ST., on Lot 43 Casa Loma
Terrace, Sacramento. One-story 5-
room dwelling.
Owner.....W. D. McKoy, 3029 E St.,
Sacramento.
Architect...None.
Day's work. COST, \$2750

BUILDING CONTRACTS.

SAN JOAQUIN COUNTY.

HEATING AND VENTILATING

COR. CENTER AND WASHINGTON,
Stockton. All work for installation
of heating and ventilating plant in
Franklin School.

Owner.....Board of Education of
Stockton High School Bldg., Stockton.

Architect...Stone & Wright, San Joa-
quin Valley Bank Bldg.,
Stockton.

Contractor...Edward L. Gnekow, 647 E-
Main St., Stockton.

Filed Aug. 4, '15. Dated Aug. 3, '15.
Work above basement ceiling
and new smoke stack completed 75%
When completed 75%
Usual 35 days..... 25%

TOTAL COST, \$2383

Bond, \$1196.50. Surety, Hartford Acci-
dent & Indemnity Co. Limit, Sept. 1.
Forfeit, \$5 per day. Plans and speci-
fications filed.

FIRE HOUSE

CALIFORNIA ST., near Lot 16 Blk 87,
S of Mormon Channel, Stockton. All
work for one and one-half-story
brick, timber and plaster fire house.

Owner.....City of Stockton.

Architect...Ralph P. Morrell, 12-15 I.
O. F. Bldg., Stockton.

Contractor...A. J. McPhee, 316 N-Calif-
ornia St., Stockton.

Filed Aug. 5, '15. Dated Aug. 5, '15.
2nd story joists in place.....\$1000.00
Exterior mill work & roofing 1500.00
All concrete work and plaster-
ing done 1233.55
Inside finish and hardware on 1500.00
Usual 35 days..... 1744.55

TOTAL COST, \$6978.00

Bond, \$3489. Sureties, W. H. Post and
A. A. Smallfield. Limit, 80 working
days. Forfeit, none. Plans and speci-
fications filed.

FIRE HOUSE

LOT 8 BLK 142 E of Center St., Stock-
ton. All work for one and one-half-
story fire house.

Owner.....City of Stockton.

Architect...W. Thomas, Yosemite Eldg
Stockton.

Contractor...A. J. McPhee, 316 N-Calif-
ornia St., Stockton.

Filed Aug. 5, '15. Dated Aug. 5, '15.
Brick work up.....\$1000
Roof on 1100
Concrete and plastering done..... 1200
Inside finish completed..... 1223
Usual 35 days..... 1508

TOTAL COST, \$6031

Bond, \$3016. Sureties, J. H. Miller and
W. H. Post. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

REMODEL RESIDENCE

NO. 507 P ST., on E 1/2 of S 1/2 Lot 8
Blk O, P, 5th and 6th Sts., Sacra-
mento. Remodel two-story frame
residence.

Owner.....J. Virone.

Architect...None.

Contractor...Peter Leoni, 1330 V St.,
Sacramento.

COST, \$700

LIENS FILED

SACRAMENTO COUNTY.

RECORDED

Aug. 4, 1915—W 1/2 LOT 6, W X, 23rd
and 24th Sts., Sacramento. William
Kinsey, \$48.75; Fred W. Prasse,
\$15.75 vs William Morris.....

AMOUNT

COMPLETION NOTICES

SAN JOAQUIN COUNTY.

RECORDED

July 29, 1915—VARIOUS PARTS OF
City of Stockton. Stockton Board
of Education to Phal-Harry Co.....

ACCEPTED

.....July 28, 1915

LOS ANGELES AND SOUTHERN CALIFORNIA.

RAILROAD CONSTRUCTION

Cost not stated. San Diego, Cal. Engineer,
Chief Engineer James R. Parish, Los
Angeles. Owners, Santa Fe Railroad.
The Temecula branch of the Santa Fe
may be rebuilt, according to word re-
ceived in San Diego. Commissioner
Frank R. Devlin, before whom the
hearing was held, has taken the matter
under advisement. It is the intention
to get a new railroad through San Luis
Rey Valley. The proposed railroad
would replace the section through the
Temecula Canyon, washed out by
heavy rains many years ago. Chief
Engineer Richard E. Sachs of the Rail-
road Commission has estimated the
cost of the proposed road to be \$823,-
000. The replacement of the washed
out gap through the canyon would
cost \$650,000, according to an estimate
of chief Engineer James R. Parish of
the Santa Fe Company. The proposed
new road would be slightly longer and
would avoid the Temecula Canyon, go-
ing instead via the San Luis Rey Val-
ley, Bonsall and Fallbrook.

STREET IMPROVEMENT—Cost not
stated. Calexico, Imperial Co., Cal.
Engineer, City Engineer, Calexico.
Owners, City of Calexico. Plans and
specifications have been completed by

the City Engineer for the improvement
of Second street and bids on the work
will be called in about two weeks.

ROAD CONSTRUCTION—Cost not
stated. Riverside, Riverside Co., Cal.
Engineer, County Surveyor, Riverside.
Owners, Riverside County. Plans and
specifications for route 16, 2 1/2 miles,
between Winchester and Coyote Pass
of the country highway have been ap-
proved by the County Supervisors and
bids have been ordered advertised to
be received on August 18th at 10 a. m.

BRIDGE—Reinforced concrete. \$18,-
199. San Luis Obispo, San Luis Obispo
Co., Cal. Engineers, Leonard & Day,
Rialto Bldg., S. F. Owners, San Luis
Obispo County. Engineers, Leonard &
Day, Rialto Bldg. have received word
from the Board of Supervisors at San
Luis Obispo to the effect that Allison
& Cole, San Luis Obispo, were the low
bidders for the reinforced concrete
bridge to be erected over the San Luis
Obispo Creek about two miles out of
San Luis Obispo. Their bid was \$8,199
and an official award of contract will
be made at once.

BRIDGES—12, reinforced concrete
and steel. Cost not stated. Santa
Paula, Ventura Co., Cal. Engineer,
County Surveyor Petit, Santa Paula.
wners, Ventura County. Plans and
specifications for twelve bridges and
culverts to be constructed throughout
Ventura County are being prepared in
the office of County Surveyor Petit.
The plans include the construction of
the Saticoy bridge, which will cost ap-
proximately \$45,000. On completion of
the drawings bids on the work will be
called for.

JAIL—1 story, reinforced concrete.
Cost not stated. San Luis Obispo, San
Luis Obispo Co., Cal. Architect, none.
Owners, City of San Luis Obispo.
Plans and specifications prepared by
Street Superintendent Burch for the
new jail building have received the
approval of the City Council. The
structure will contain five cells, each
8x8 feet in size, and one dark cell. Bids
will soon be called for.

TANK AND TOWER—Steel and con-
crete. Cost not stated. Hemet, River-
side Co., Cal. Engineer, Town Engi-
neer, Hemet. Owners, Town of Hemet.
The City Council is having plans pre-
pared for a new steel water tower and
tank to be erected at the municipal
water plant. It is to have a capacity
of 155,000 gallons.

ROAD CONSTRUCTION—\$21,498.
Santa Ana Orange Co., Cal. Engineer,
County Surveyor, Santa Ana. Owners,
Orange County. Contractor, Fred Hoff-
man, Long Beach. Contract price, \$21,-
498. At the same meeting the contract
for furnishing and delivering 50,000
barrels of cement at \$1.31 per barrel
with 2 per cent discount for cash, was
awarded to the Riverside Portland Ce-
ment Co. An option was given on 30,-
000 barrels additional at the same
price.

Contracts Awarded.

BRIDGE—Reinforced concrete, \$2,-
328. Riverside, Riverside Co., Cal.
Engineer, County Surveyor, Riverside.
Owners, Riverside County. Contrac-
tors, Munoz & Munoz, Central Bldg., L.
A. Contract price, \$2,928.

PLEASURE PIER—lumber and con-
crete, \$108,800. Redondo Beach, Los
Angeles Co., Cal. Engineer's name not
given. Owners, City of Redondo Beach.
Contractors, Leyden-Orfseiten Co., Re-

dondo Beach. Contract price, \$108,800.
HIGHWAY CONSTRUCTION — \$28,010.30. Riverside, Riverside Co., Cal. Engineer, County Surveyor, Riverside. Owners, Riverside County Contractors, Connors Construction Co., Higgins Bldg., L. A. Contract price, \$28,010.30.

PORTLAND AND OREGON

THEATRE—1 story and base, brick, \$18,000. Oregon City, Ore. Architect, Aaron H. Gould, Henry Bldg., Portland. Owner, Charles Schram. The building will cover an area of 44 by 110 feet and will be fireproof throughout. The theatre will seat 650 people. Interior will be finished in pine and ornamental plaster. Special electric work is specified. Exterior of the building will be faced with pressed brick. Plans are now being prepared.

Contracts Awarded.

ROUNDHOUSE AND SHOPS—Reinforced concrete. Cost as follows. The Dalles and Pilot Rock, Ore. Engineer's name not given. Owners, Oregon-Washington Railroad and Navigation Co. Word received from this city states that the contract for constructing round houses, machine shops, etc., at The Dalles and Pilot Rock, Ore., for the Oregon-Washington Railroad and Navigation Co., has been let to Nettleton, Bruce & Eachbach, American Bank Bldg., Seattle, for about \$95,000. The work at The Dalles calls for a 12-stall brick and concrete roundhouse, 50x60 feet machine shop, turntable pit and foundations 30x54 feet, concrete and brick power house and stack, 40x60 feet, brick storehouse and platform. Cost, \$50,000. The work at Pilot Rock calls for a 10-stall roundhouse, turntable pit and foundations, 30x60 feet, power house and stack and a one-story 10x65 feet storehouse. All buildings to be of concrete and brick and cost about \$15,000.

CITY HALL—2 story and base, brick, \$19,388. Tillamook, Ore. Architect, Charles H. Burgraff, Albany, Ore. Owners, City of Tillamook. Contractor, F. Hyde, Tillamook. Contract price, \$19,388.

SEATTLE AND WASHINGTON

HOTEL—6 story and base, brick and steel, \$150,000. Walla Walla, Wash. Architect, George B. Purvis, Northern Bank Bldg., Seattle. Owners, New Grand Hotel Co. The building will cover an area of 70 by 120 feet and will provide for stores and the hotel lobby on the first floor. Upper floors will be arranged for a large number of modern hotel rooms, a large percentage of which will have private baths. Interior will be finished in pine with some hardwood. There will be steam heat, elevator service, hot water system and vacuum cleaning. Bath rooms will have tile floors and wainscot. Marble and tile and ornamental plaster will be used. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are nearly complete and figures will be called for by September 1st.

PUBLISHING HOUSE AND OFFICES—5 story and base, reinforced concrete, \$500,000. Seattle, Wash. Architects, Charles H. Bobb and Carl Gould, Denny Bldg., Seattle. Owners, Times Pub-

lishing Co. The building will be erected at the corner of Westlake and 1th, and will cover a large ground area. Foundations have been designed to carry three additional stories. There will be a number of stores on the first floor besides the general office. Upper floors will be arranged for offices and the editorial and city rooms. Interior will be finished in pine and hardwood. There will be steam heat, elevator service and vacuum cleaning. Metal window sash and frames are specified. Exterior of the building will be faced with cement plaster. Plans are being prepared and will be ready for figures about September 1st.

CONSTRUCTION WORK ABROAD.

AUSTRALIA.

[Sydney Herald, July 1.]
New Railway Lines Will Open Up Crown Lands.

The Premier has received from the Director General of Public Works a memorandum respecting the areas of Crown land which the Government will be in a position to throw open upon the construction of the Mirrool-Hillston and Barmedman-Hillston lines of railway.

The Director General states: "The two railway proposals are closely related regarding the country to be served. For the expenditure of \$2,570,000 in the construction of 155 miles of railway (both proposals being 72½ miles in length) there would be available for closer settlement an area of 2,275,000 acres of Crown land. If, by the construction of these two lines, the Crown land is increased in value by \$1.20 per acre, the amount would aggregate \$2,750,000, a sum sufficient to pay for the cost of construction."

[Consul General J. I. Brittain, Sydney, June 9.]

Warragamba Water Supply and Irrigation Scheme.

In response to an inquiry to this consulate general for particulars of the Warragamba irrigation scheme in the State of New South Wales, the following facts have been supplied by the Department of Public Works, Sydney:

The Warragamba scheme for the supply of water for the city of Sydney and for irrigation and manufacturing purposes in the county of Cumberland consists of the construction of an impounding dam upon the Warragamba River about 12 miles from Penrith, in the county of Cumberland, New South Wales, Penrith being distant from Sydney 21 miles, and the construction from the reservoir of channels for the distribution of the impounded water.

The reservoir will be formed by the construction of a concrete dam approximately 756 feet long on the crest and 275 or 300 feet (height not yet determined) from the foundations. The volume of water impounded will be approximately 25,000,000,000 cubic feet. The canals will be excavated and lined with concrete.

So far as the material employed in the construction of these works is concerned, and stone and sand required for concrete is obtainable in the vicinity of the works, the cement will be manufactured by the State. The quantity of iron required in outlet works, valves, syphons, etc., is very small,

and this also, together with any iron or steel reinforcement rods or bars used in the concrete of the channels, will probably be rolled and manufactured in New South Wales.

From the above brief description of the works it will be seen that they are of such a nature as to make the importation of any quantity of material required in their construction extremely unlikely. By much the most important item in respect of quantity and cost is the cement employed in the manufacture of the concrete dam, for which approximately 500,000 casks of 1 cubic feet each will be required, but there seems no reason to anticipate that it will be necessary to import this cement; requirements with regard to similar work, for instance, the Barron Jack Reservoir, having been satisfactorily met in the State.

[Sydney Daily Herald, June 1.]

Canal Proposed to Connect Newcastle and Port Stephens.

The assistant treasurer of the Government is in the Newcastle district investigating an important scheme in connection with the port of Newcastle and Port Stephens. Under a new harbor trust a coastal canal could be dredged, through which vessels could enter or leave Newcastle in all kinds of weather. Port Stephens is the haven for coastal craft in rough weather, and is to be made a naval base. Motor boats at present ply to Tilligerry Creek, which forms part of the route of the proposed canal. [The Herald's map of the proposed canal route will be loaned on application to the Bureau of Foreign and Domestic Commerce, Washington, D. C.]

CHINA.

[Consul General George E. Anderson, Hongkong, June 10.]

American Prospects for Supplying Railway Equipment.

Considerable light upon the general railway situation in China, reviewed from a construction standpoint, is contained in a letter from an engineer employed in survey of the American section of the Hankow-Canton system written several weeks ago. This letter says:

It is now quite sure that our section (the American section) will surely stop work in the near future, perhaps in a month at most. The British section (Kwantung border to Hankow) and the German section (Hankow to Ichang) will both do some construction. The British will build from Hankow to Changsha (capital of Hunan Province), while the Germans will only build a feeder line (of about 75 miles) to the Peking-Hankow Railway. This is the final agreement between the Chinese Government and the bankers. The Hankow-Canton line must be built. Germans agree to give up their section if they could use the money now in the Hankow German bank to build this feeder line to the Peking-Hankow Railway, while the American section will be abandoned of course due to lack of funds. Now all the loan will be concentrated on the British section and the Germans will get a part of it to build a small line. So you see we will have to quit here very soon. Just before the war we thought we were the luckiest one among the engineers, for

if this line is ever built it would mean a chance of a lifetime.

Business in some lines of railway material will have to be done on a considerable scale in the near future to maintain lines now in operation. The indications are that American manufacturers will have an especially favorable opportunity to secure much if not most of this business. Little may be expected in the way of new work.

[London and China Telegraph, July 12.]

Progress of the Peking City Electric Line.

The scheme for the construction of the Peking tramways for which numerous contracts have been signed and over which there has been much discussion is still engaging the attention of the authorities. It is stated that the Minister of the Interior has now taken the matter up, and that it is intended to secure the capital by subscriptions from the wealthy Chinese merchants, and in the event of insufficient money being raised in this manner that the Government will provide part of the funds and make the company a semi-Government concern.

Proposed construction of Colliery.

A Chinese hardware merchant of Tientsin, Mr. Lo-yushen by name, has formed a company under the style of the Tungyu Enterprise Co., with a capital of 3,000,000 yen (\$1,500,000). The new company has for its object the exploiting of a colliery at Tayaokou near Chinchow. It is understood that when up-to-date machinery is installed this colliery will become capable of yielding 2,000 tons a day, and that the Peking-Mukden Line of the Chinese Government Railways has already contracted for the purchase of 500 tons a day.

SIAM.

[Vice Consul Carl C. Hansen, Bangkok, June 3.]

Shipbuilding in Bangkok.

The Bangkok Dock Co. has recently received an order for building a twin screw motor yacht 75 feet long and a 55-foot motor launch for the King of Siam. Both of these vessels will be fitted with Aster marine motor and will be very highly finished and furnished, and it appears that most of the construction material will have to be imported from abroad.

THE YEAR'S FOREIGN TRADE.

In exports of domestic products, in aggregate value of foreign trade, and in favorable balance of trade the United States made a new high record in the fiscal year ended June 30, 1915. Imports and exports combined totaled \$4,442,864,272, an increase of \$184,000,000 over 1914 and of \$164,000,000 over 1913, the prior high-record year in total trade.

Exports in 1915 totaled \$2,768,643,532, an increase of \$404,000,000 over 1914 and of \$303,000,000 over 1913. Imports aggregated \$1,674,220,740, a decrease of \$219,700,000 from last year's total and of \$138,800,000 from that for 1913.

The excess of exports over imports for the year 1915 was \$1,094,422,792, which sum exceeded by \$428,000,000, the former high record made in 1908 and by \$623,800,000 the export balance for 1914.

June, 1915, exports were \$268,601,599 and exceeded by \$111,530,000 the total for June last year. June imports were \$157,716,140, or less by \$216,690 than those for June, 1914, but \$26,500,000 more than those for June, 1913.

Of the June, 1915, imports 62.94 per cent entered free of duty, compared with 59.32 per cent for June, 1914, and 50.88 per cent for June, 1913. Of the year's imports 61.73 per cent were duty free; in 1914, 59.43 per cent.

The year's gold movements included imports, \$171,568,755; exports, \$146,224,148. In 1914 the figures were—imports, \$66,538,659; exports, \$112,038,529. The month of June, 1915, reversed the conditions shown in June last year, June gold imports having been \$52,341,740 this year and \$3,817,112 last year, while gold exports last month were only \$2,821,988, against \$48,107,064 in June, 1914.

NEW ZEALAND IMPROVING PATEA.

The Marine Department of New Zealand has approved plans for the improvement of the port of Patea, for which a loan of £86,000, secured by the Patea Harbor Board, has been issued. Tenders are now being invited for the extensions of the existing breakwater in concrete, on the "pierre perdue" system. The contract time to complete the works is four and a half years, and it is estimated that the extension will result in an increase of 50 per cent in the trade of the port.—Far Eastern Review.

REPORT ON FULLER'S EARTH.

The annual statement on the production of fuller's earth has just been published by the United States Geological Survey and is now available for distribution. This industry showed considerable progress in 1914, the marketed production amounting to 40,981 short tons, valued at \$403,646.

REPORT ON PHOSPHATE ROCK.

The annual statement on the production of phosphate rock has just been published by the United States Geological Survey and is now available for distribution. In 1914 the marketed production of phosphate rock in the United States was 2,734,043 tons, valued at \$9,608,041.

NEW STEAMSHIP LINE TO ALASKA.

[Commercial Agent W. B. Henderson, Seattle, Wash. July 10.]

A new semimonthly steamship line was established this week by the Independent Steamship Co. between Puget Sound and south eastern and southwestern ports of Alaska. It has Pier A in Seattle as headquarters, and handles both freight and passengers.

The total attendance at the Exposition up to this date has been over 9 millions. Inasmuch as only a little over half the Exposition is over and the best of the season is yet to come, it is natural to suppose that the attendance will be over double that number before the close of the fair. This is not a bad showing considering conditions. For the local territory where people can come from is small as compared to the cities in the East in the centers of population. This is a

country of magnificent distances and the distances impede frequent visits to an exposition. On account of the war and the consequent unsettled business of the country the vacation trips of everybody have been cut down. Under the circumstances the attendance of the Exposition has shown a splendid average.

The South American countries are not perhaps as well represented at the Exposition as they ought to be. At that there are exhibits enough to give an idea of the productions of the southern continent, and at least an indication of the comparative undeveloped resources. Brazil, an unknown land, with an area as large as the United States; Argentine with its wonderful agricultural resources; the Andes countries with their lordly mountains, their mines and varied climates all present opportunities for the emigrant to get from the land wealth and happiness.

If the people of Europe would emigrate to these undeveloped countries, become a part and parcel of the land in which they live, then there would be stable governments and virile republics in which political and industrial freedom would bloom and bear fruit. If instead of the seeking of one government to overthrow another and impose its language and government and customs on a people who do not want them, they allowed free emigration and cultivated trade relations with these people they would in the end reap a greater benefit.

South America is today a land of promise. If Europe is not depopulated by the present war there should be opportunity there for the victims of this horror to find a living in a new country. And it should be away from the ambitions of emperors and kings and under the protection of free republics.

CONSTRUCTION WORK ABROAD.

SIAM.

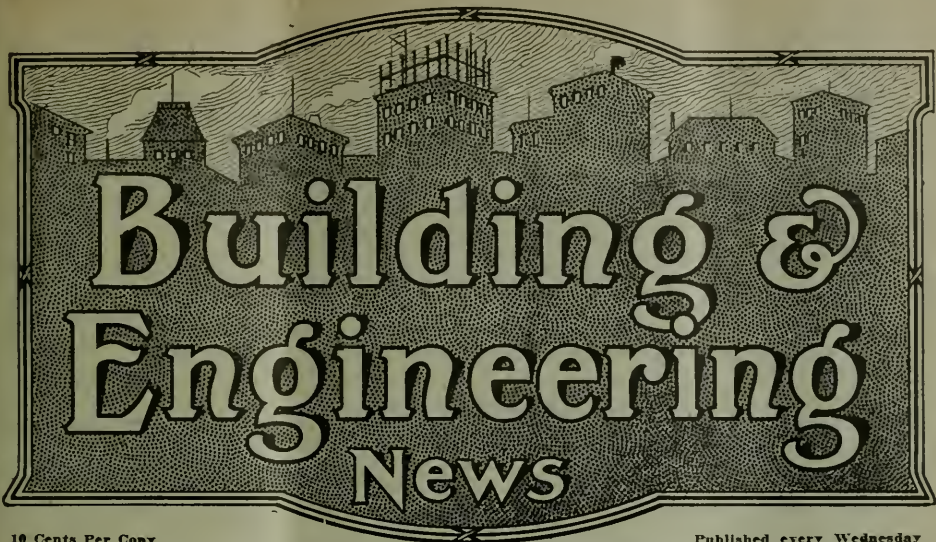
[Vice Consul Carl C. Hansen, Bangkok, May 13.]

Siamese Northern Railway.

On May 1, 1915, an 11-inch section on the Siamese Northern Railway extension was opened to traffic. It extends from Ban Pin to Ban Pakoh. There remains to be completed 107½ miles from Ban Pakoh to Chiangmai, the northern capital, which will be the northern terminus of the line. It is expected that the entire line will be ready for traffic in about two years.

The workmen's compensation act has been held valid by the Supreme Court. This is a long step in the way of remedial legislation and in the change of the attitude of the courts. It is doubtful if such a decision would have been rendered ten years ago in any court of justice. For precedent is the thing that binds the courts. And what was decided a hundred years ago in most cases binds the courts today.

In saying that the public interest demanded the protection of the worker the court aligns itself with the new order of things. The traditions of the law are with property. Injunctions are invoked to prevent injury to property. But it has taken a long time to enact laws for the protection of life, so that accidents in dangerous occupations do not leave the victims absolutely without means of support.



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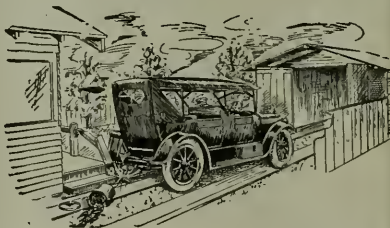
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Benj. G. McDougall, Architect.
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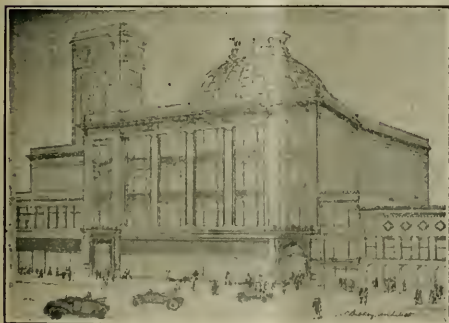
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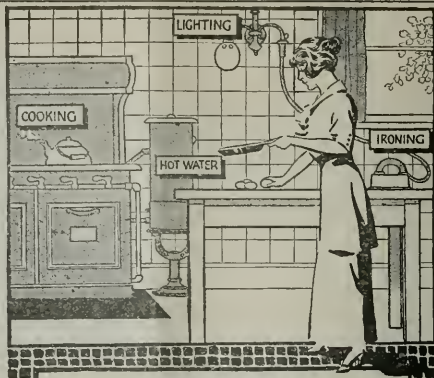
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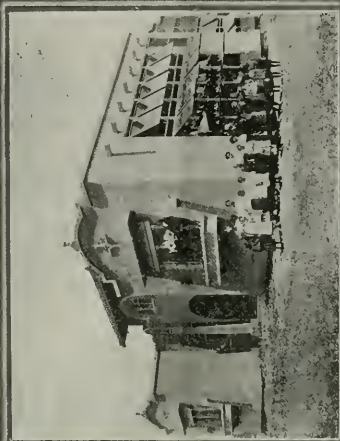
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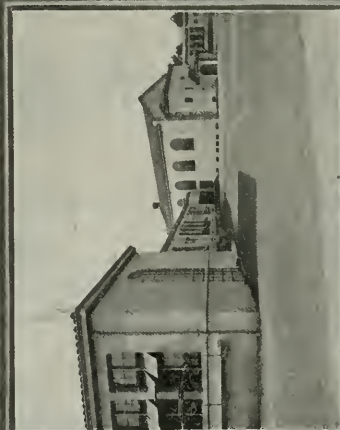
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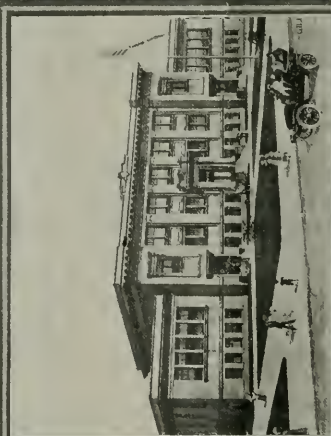
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Building and Engineering News

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San Francisco, August 18, 1915

Fifteenth Year, No. 33

The Los Angeles County Flood Control Report has been filed and the discussion of its contents is still going on and making the meetings of the Board of Supervisors rather lively at times, but out in the canyons important experiments are going on that will have important bearing on many of the problems presented in controlling the flood waters.

Floods made to order, big or little! They started to making them at an experimental station rigged up in the big Tejuanga by the Board of Engineers, Flood Control. It was the initiation of work that has a most important bearing on the whole project of flood control.

A rock dam with an adjustable sluiceway, supplies the apparatus, and five men do the work. The experiments are to determine the mean velocity of varying heads of water moving through channels of certain gradients and the impinging force at relative distances.

By determining all these, engineers will be able to figure out the precise strength of a dam necessary to catch and restrain one or more acre-feet of water moving at a certain velocity. As the plans of the board contemplate many of these impeding dams, costing a total of \$1,410,400 the experiments are important. The idea is to develop a type of dam that may be economically constructed in this country.

In the experiments a head of twelve and one-half feet of water was used. A shot was fired when the water was released, and men stationed a half-mile apart checked the arriving time of the water.

The dam itself is of concrete, seventy-five feet across and twenty-four feet high. It has an adjustable gate 5x7 feet.

Last month the county of Los Angeles, through the Board of Supervisors, made a contract with the city, whereby the city leased to the county the Portland cement works at Monolith. The lease was to run one year with the privilege of another term of four years at an annual rental of \$27,500, payable in monthly installments. Last week R. E. Patterson, as a tax payer, brought an action in the Federal Court against the Board of Supervisors, Treasurer J. H. Hunt and Auditor W. A. Lewis to tie up the matter in an injunction.

The prayer of the petition is that the defendants be restrained from carrying out the lease or contract, and from operating the plant, from paying out any money or incurring any indebtedness or liabilities in connection therewith, or selling or attempting to sell any of the cement. The attorneys for Patterson are Fredericks & Hanna and O'Melveny, Stevens & Millikin.

It is set out in the complaint that the capacity of the cement works is about 1200 barrels a day, and that the annual requirements of the county in the cement line are not to exceed 15,000 barrels. Also, that the Board of Supervisors intends to turn the plant to its full capacity of 1200 barrels a day, and sell the cement not

needed by the county in public work to the public, unless restrained by the court. It also asserted that the county has already entered upon a campaign of selling the surplus output, one offer being made to dispose of 90,000 barrels to the authorities of Kern county at \$1.35 a barrel.

It is further set out that it will be necessary for the county to incur a large indebtedness—estimated at \$50,000—that it may turn out an amount in excess of what is required by the county. Also, that the sale of cement to outside parties is not a governmental or public purpose and that power so to do cannot lawfully be conferred upon the county or any of its officers.

It will be interesting to watch the outcome of this fight, as it hits one of California's largest industries.

A formal request that provision be made for a survey of Los Angeles harbor with a view to further improvement by the Federal Government has been filed with the members of the Rivers and Harbors Committee of the House of Representatives by the local Harbor Commission.

The Government is urged by local authorities to widen the entrance channel of the harbor to a minimum of 1000 feet; to deepen the entrance channel and turning basin to 35 feet; to widen the East Basin channel and to dredge the triangular area south of Reservation Point.

In the formal report made to the Congressional Committee, the Harbor Commission calls attention to the fact that the United States has expended in 44 years since 1871 something less than \$6,000,000 in improving Los Angeles Harbor and that in the six years since the harbor came under the jurisdiction of the city this municipality has voted bonds aggregating \$5,500,000 for harbor improvements of which amount about \$800,000 remains. Attention is also called to the fact that the city also stands pledged to vote \$4,500,000 more or a total of ten million dollars by 1919.

"The City of Los Angeles," says the Harbor Commission, "therefore is co-operating with the United States in developing a water terminal for the use of commerce passing through the Panama Canal, and not for the benefit of this city alone, but for the benefit of all the people of the Southwestern part of the United States."

Figures are presented showing the growth of harbor business during the past fifteen years, namely that the number of vessels entering the port in the year just closed was more than five times as great as fifteen years ago, yet the net tonnage was more than twenty times as great as it was fifteen years ago.

The Congressional Committee is informed that additional steamship lines are seeking entrance to municipal wharves in the inner harbor and that the port tonnage is growing rapidly.

Office Building Power Plants.

By Chester B. Loomis, M. E., Consulting Engineer

The power plant problem for office buildings is one that has seldom been given sufficient attention on the Pacific Coast. It is not only necessary to make a proper selection and arrangement of the apparatus, but also to foresee the conditions under which the plant is likely to operate. For this reason the plans should be examined and approved by an experienced designing engineer in case expert service is not employed, as it should be, at the outset.

It is not sufficient to have a mechanically perfect plant although this is, of course, of prime importance. The design of boilers, the selection of prime movers, size of the units, provision for future expansion and similar factors bear much weight upon the economy of operation. Each installation is a problem by itself and though similar plants should be studied and each case should be worked out in its own merits.

The most important factor in any power station design is the load curve, referring not only to the yearly average but also to the daily maximum and minimum. Steam requirements for heating and other purposes must be considered together with the power requirements, since these factors all effect the choice of the prime mover.

The variation of the load curve during the various months may be shown by the following figures giving the electric output of the power plant in a Chicago office building as given by Professor G. F. Gebhardt:

A. M.	January	July	P. M.	January	July
1	800 amps	600 amps	1	5800 amps	2800 amps
2	1000 "	800 "	2	6500 "	2700 "
3	1600 "	1200 "	3	6200 "	2600 "
4	1500 "	1000 "	4	5700 "	2650 "
5	1000 "	300 "	5	4000 "	2100 "
6	1200 "	700 "	6	3200 "	1500 "
7	1400 "	850 "	7	2000 "	1250 "
8	2000 "	850 "	8	1500 "	1150 "
9	4400 "	2000 "	9	1450 "	1200 "
10	5900 "	2000 "	10	1400 "	1300 "
11	6200 "	2400 "	11	1200 "	1000 "
12	6000 "	2600 "	12	1000 "	550 "

While the load variation between January and July will not be as marked on the Pacific Coast, due to the milder winters, the variation is still great and the most careful attention must be given to the selection of the prime movers on account of this variation.

In the design of the office building plant, the factor of limited space enters very prominently. As the plant must be installed either in the basement or sub-basement, compactness is an essential feature. By properly equating the cost of the plant per cubic foot against the cost per cubic foot of the basement it is possible to estimate how far the designer can go with regard to special machinery. In all cases the yearly value of a cubic foot of basement space can be determined. It sometimes is found that the saving in space more than compensates for the installation of a comparatively uneconomical prime mover. Then, again, the engine room is usually cut up with the building columns which complicates the design, particularly in regard to the piping and the accessibility of the various units.

Boilers.

The almost universal practice is the installation of some modern type of water tube boilers. These boilers have many advantages. They are easily cleaned, are quick steamers and are the safest type to operate with oil fires. Owing to the fact that all building plants operate non-condensing, ease of cleaning is an important feature, as practically all the feed water used contains a certain amount of scale-forming matter which it is impossible to precipitate in the feed water heater and which forms a non-conducting scale in the boiler. White boiler compounds are used with good effect, still a certain amount of scale is formed which is not possible to remove by washing. In plans which purchase treated water or that are of sufficient size to permit the installation of the so-called water softeners, the scale question is not so serious, but it is seldom the case that water can be obtained which does not carry scale-forming material.

Super-heaters should be installed whenever possible as an increased economy can be obtained by their use. The steam should be super-heated as highly as possible without effecting the lubrication. With machinery such is commonly used, the total heat of the steam allowable is about 450 deg. F. With certain prime movers such as engines specially designed for the use of super-heated steam much higher temperatures may be safely carried.

There is one type of the fire tube boiler which is coming into favor in the east for building work, that being the Scotch Marine boiler. While it has some disadvantages, it has many advantages to compensate—such as no setting required, all surface water cooled except the combustion chamber, no leakage of cold air through cracks in the brick work and large steam capacity for the space occupied. Where the feed water is reasonably free from scale-forming materials it is a very satisfactory type if properly installed with circulators.

Generating Sets.

The type of generating unit usually installed is the high speed automatic compound engine, either tandem or cross compound, direct connected to a direct current generator. The engine may be of the single or of the multiple valve type as desired. While the four-valve type shows a slighter economy than the single valve, it has the disadvantage of a higher first cost, increased complexity and increased repair bills. Tests show a steam consumption as follows on an automatic single valve high-speed engine, and a medium speed four-valve or non-releasing Corliss valve non-condensing engine. Both engines were of the highest class. Steam pressure for automatic engine 140 pounds, non-releasing Corliss 150 pounds at the throttle. Cut off in both cases 25 per cent per the stroke.

Pounds Steam per 1 H. P.

Engine	1 H. P. Full Load	3-4 Load	1-2 Load	1-4 Load
Automatic	250	21.98	22.75	26.65
Four-valve	300	19.71	21.74	22.82

These figures are for test conditions only and are probably from 10 to 15 per cent better than will be obtained in actual practice. The four-valve engine is usually more economical under operating conditions owing to the wide fluctuations in load in the building plant, particularly when the elevators are electrically operated.

With the single valve engine any change of the position of the valve due to the operation of the governor, not only alters the inlet conditions but also those of the exhaust. This, of course, effects the economy as the point of opening of the exhaust valve should be fixed. With the single valve engine, the inlet and exhaust steam both come in contact with the valve, thus lowering the temperature of the inlet steam and heating unnecessarily the exhaust steam. These conditions do not hold for the four-valve engine.

The una-flow engine is gradually becoming recognized as a factor for building work, and while designed for condensing operation, gives an economy non-condensing comparably with the compound automatic engine. It requires large space, is exceedingly heavy, and it is a question whether it is satisfactory for a building plant as the compound type. It can be operated like all other poppet valve engines on steam with almost any degree of super-heat, and with a high degree of super-heat its economy becomes more marked.

When floor space is at a premium, the vertical engine should always be considered. While the initial cost is higher, the saving in floor space is very great. In comparing two small engines of standard make, the following floor space for the engine alone is required: Horizontal tandem compound, 72 square feet; vertical cross compound, 20 square feet, both engines to be connected to 75 K. W. generators.

Pumping Engines.

When the elevators of a building are of the hydraulic type, pumps of some type must be considered. The pumps may be divided into three classes, i. e.: Corliss pumping engines, direct acting pumps and power pumps.

Where the load is fairly uniform and space is not at a premium the compound Corliss pumping engine is usually used. They have the advantage of good economy and comparative ease of operation. They are usually used in the cross compound type with outside center packed water ends. Great care should be used in proportioning the steam cylinders. Many such pumps as installed are simply the standard waterworks type operating non-condensing. In this case the low pressure cylinder is too large, and in some cases, tested by the writer, it has been found that the economy is not as great as the direct acting compound pump. This was due to the high back pressure in the heating system and light loads. In nearly all cases the elevator pumps operate too slowly for the maximum efficiency.

Where there is a large market for exhaust steam, the direct acting compound pump may be used with satisfaction and economy. They are simple to operate and when large powers are not required, are often used. They occupy small space per cubic foot of water pumped and very little head room.

Power pumps direct connected to electric motors and equipped with automatic control are satisfactory units. The efficiency of both motor and pump is high and repair bills low. The greatest trouble with this type of pump has been the vibration and noise of the gearing, but this can be taken care of with silent chain drives or herring bone cut gears. They are seldom used except for small installations.

The multistage turbine pump is sometimes used. Direct connected to a suitable motor they form exceedingly satisfactory units, requiring less space than any other type of pump and having no vibration. They are capable of handling large amounts of water against high pressure, and the maintenance and repair bill is negligible. The

efficiency of a set of this type is as high as the average power pump under operating conditions, and it has none of its disadvantages. They require less space than any other type of elevator pump.

The greatest care must be exercised in properly proportioning the pumps and motor to the load and in obtaining the proper sizes, and in obtaining a pump having the proper characteristic curve.

An installation of this type requires no more foundation than a motor, and the installation cost of the best types is exceedingly low.

Auxiliaries.

The auxiliaries in most power plants, excepting the largest ones, seldom receive sufficient attention. Feed pumps are usually picked at random. Any pump which will force water into the boiler being considered sufficient. When one remembers that the auxiliaries of a non-condensing plant consume from 7 to 16 per cent of the total steam generated, they are looked at in a different light.

A series of tests was run by the writer on several different small feed pumps and the actual duty per 1,000 pounds of dry saturated steam was found to be from 778,100-foot pounds to 11,234,000-foot pounds. Where the exhaust steam can be used for heating the feed water or for exhaust steam heating, the economy of the steam-driven auxiliaries is not essential, but usually there is an excess of exhaust steam, in which case economical auxiliaries quickly pay for themselves. On the Pacific Coast with the mild winters and long summers, a great deal of the exhaust must be wasted.

The feed water heater usually operates under several pounds back pressure as the exhaust is used for heating. A proper heater should have an ample water storage for the hot water, should be of a type easily cleaned and should have a filter to prevent the oil carried over by the exhaust from entering the boilers. The feed water should be heated to the highest degree possible in order to precipitate as much scale forming matter as may be, and to save fuel under the boilers. The fuel saving under the boilers is approximately 1 per cent from every 9 deg. F. rise of the temperature of the feed water.

Greatest care should be used in designing the piping of a steam plant. Usually the lines are short and contain many fittings, but with careful designing and the use of long sweep fittings saving can be made. The majority of building steam pipe lines are too large and are not well designed.

Measuring Instruments and Testing.

All plants should be equipped with recording instruments, such as oil meters, water meters, electric meters, etc. Without proper records it is impossible to tell where the plant leaks are. Many building plants have been abandoned and power purchased, through the inability of the plant engineers to definitely show the cost of power production. The power salesman for the public utility company has all his actual costs, while with the isolated plant, in many cases, the actual power cost is merely a guess.

The plant records should be kept under two headings:

1. Fixed charges—Investment costs.
Administration costs.

2. Operating costs.

A complete yet simple system should be devised to cover each plant, as it is seldom the records of one plant will be similar to another. In general, the following items are required:

Fuel.	Station repairs.
Oil, waste and supplies.	Steam equipment repairs.
Water.	Electrical equipment repairs.
Wages.	Miscellaneous.

There will be several sub-headings required under these items. Against these should be credited the station output, so that the actual cost of operation may be obtained. If the items are properly classified, curves may be plotted which readily show any variations so that corrections in operation may be made where necessary.

All records should be studied both by the operator and by the executive head, and expert advice obtained from time to time. Tests also should be made at least once a year and preferably oftener. These tests should be made under the regular operating conditions, and any changes or alterations necessary then made. It is only by careful design by expert engineers and operation under suitable supervision, continued economy may be obtained.

Concrete Electroliers.

By Gus. H. Atchley, City Engineer Hermosa Beach.

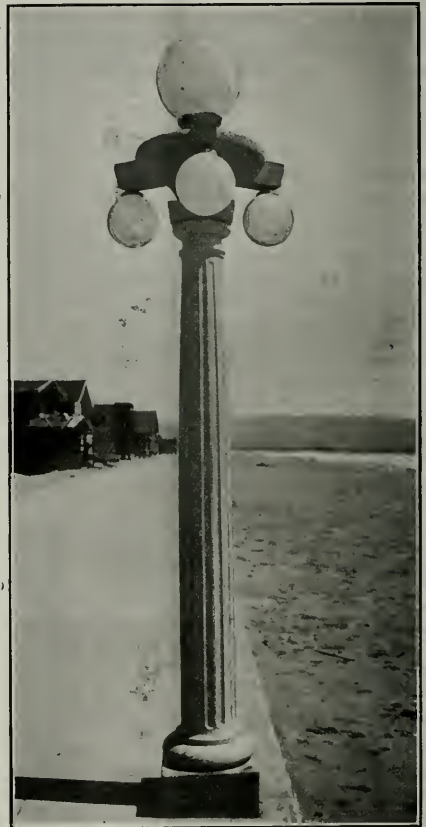
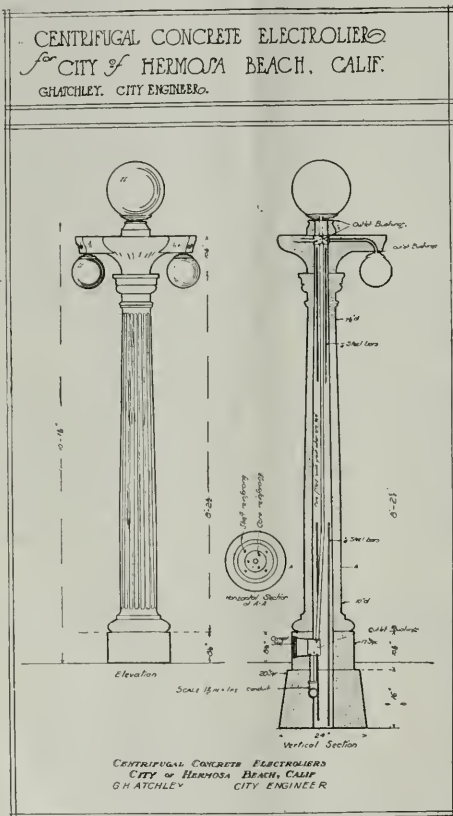
The city of Hermosa Beach in Los Angeles County was one of the first to install ornamental street lamp posts made of concrete by the centrifugal process. The first set of posts were installed with the building of the Ocean Front cement concrete walk, and a few excerpts from the specifications under which they were built and erected will give a very good idea of the work.

Ornamental Lighting Posts.

1. The Standards (shaft, arms, cap and base complete) shall be composed of the following materials:
2. CONCRETE—1 part Portland Cement and 21-2

Rods to be wired with No. 14 wire hoops at intervals of not more than 18 inches. Arms to be reinforced with square twisted steel rods of the size and in the position as shown on the cross-section. Note reinforcing specified under erection.

4. CASTING—The concrete as above specified shall be mixed with sufficient water to make it possible to pour same into forms. When forms are filled they shall be securely placed in machine that will mechanically compact the concrete within a period of one hour and fifteen minutes. At end of such period the concrete shall be dense and capable of sustaining its own weight when



parts clean washed sand and gravel that will pass through 1-4 inch mesh screen, and be retained on 60 mesh screen when screened dry.

3. REINFORCING—The shaft of each Standard shall be reinforced with four 1-4 inch square twisted steel rods, spaced equally around center of shaft and within 3-4 inches of surface.

shaft is set on end and form removed.

When finished the shaft shall have hollow core not less than 2 inches in diameter and extending from end to end. No metal cores permitted.

All concrete shall be kept thoroughly wet for at least ten days after moulding or casting and thirty days shall elapse between time of moulding or casting and time of erection upon foundation.

CUT OUT BOX—Cast in base a 4x5x6 inches cast iron cut out box as shown and make and deliver cast concrete cover for each box. See detail of cover.

CONDUIT—Cast in the arms as shown 1-2 inch conduit cut, bent and threaded and fastened in junction box centered over shaft with lock nut and bushing. Junction box and conduit to be galvanized and conduit to be enameled inside. No L's will be permitted and bends must be so made that wire can be easily threaded.

ARMS AND BASE—The arms and base shall be moulded separate in accordance with specifications and plans.

STEEL RODS—The rods must have a clean, smooth finish and be free from seams, or cracks, also from oil, grease, paint, and rust scale, or any adhering substance, but a thin film of red rust will not be considered objectionable.

The tensile strength shall not be less than 55,000 pounds per square inch and the elastic limit shall be not less than 40,000 pounds per square inch.

All steel shall stand bending cold 180 degrees around a bar of its own diameter without showing signs of fracture.

All twisted bars shall have an even number of twists per lineal foot throughout the entire length of the bar.

Free access at all times must be permitted for the Engineer or his Inspectors at any mills or shops where rods proposed to be used are manufactured or stored.

CEMENT—All cement used shall be Portland Cement and must conform to the following requirements and be subject to the following tests, which will be open to the Contractor and will be made by the methods and under the conditions prescribed by the Committee on Cement Tests of the American Society of Civil Engineers.

Here follows the customary tests prescribed by the American Society of Civil Engineers.

Samples of the cement proposed to be used upon any piece of work shall upon request, be furnished to the City Engineer, for test and any cement, the samples of which do not come up to the required standard or which may have become damaged by exposure to moisture, shall be immediately and permanently removed from the work.

Cement shall be so piled as to permit of access for tally, inspection and identification of each shipment. It shall be delivered in the original package with the brand and name of the manufacturer plainly marked thereon.

Mixing and Placing Concrete.

MIXING—All proportions shall be obtained by actual measurement in boxes or wheelbarrows if approved by the Engineer, and no material shall be used which has not been thus measured.

All mixing shall be done in suitable boxes or upon tight platforms or in mixers. Not more than one cubic yard of concrete shall be mixed or wet at a time.

ERECTION—The standards shall be located as shown on plans and profiles. At these respective locations shall be cast a concrete foundation of dimensions shown and provided with hollow core.

Concrete for foundations to be composed of 1 part Portland Cement and 2 parts sand, 4 parts rock or gravel, free from organic matter or other foreign matter. Sand and gravel must meet with approval of the Engineer. Keep concrete wet for at least seven days after casting.

Conduit and wiring shall be brought into each side of foundation and enter cut out box in base of standard. Set base in cement mortar on foundation with conduit entering bottom of cut out box. Four 3-8 inch, square twisted steel rods 5 feet 6 inches long shall then be placed on end in hollow core of foundation as directed and this hollow core and base of standard shall be filled to within 1-2 inch of top of cut out box with concrete grout of the following mixture:

- 1 part Portland Cement.
- 3 parts sand and gravel.

Gravel not to be larger than will pass 1-4 inch mesh screen.

Great care must be exercised in pouring this grout in order that same does not run into bottom of cut out box.

When base has been set and the mortar and grout allowed at least 96 hours to harden, the shafts shall be placed. A derrick or tripod shall be used for this work to insure erection without damage to any portion of the work. Place in hollow core of shaft a 3-4 inch black conduit and fasten in top of cut out box with lock nut and bushing. This section of conduit to be of sufficient length to enter junction box in "Arms" when the latter are set. The core in the shaft shall then be filled with grout above specified and shall have three 1-4 inch square twisted steel rods extending from shaft as shown on cross-sections. Arms shall then be set and conduit extending from shaft be fastened into junction box with bushing.

Fill core in arms below junction box with concrete grout.

SHADE HOLDERS—Spun brass shade holders of the type and size shown in detail, shall be installed.

GLOBES—Center globe to be 16 inches in diameter, globes on arms 8 inches in diameter. All globes to be Alba Glass or equal. Wire Type Mazda or Tungsten Lamps are to be provided, one 60 Watt and three 40 Watt lamps for each standard.

FINAL—When completed the standards shall stand plumb and shall be free from all flaws or defects and show no lines or seams left by forms. Any standards showing pits caused by air bubbles or containing shrinkage cracks or other fractures will be rejected.

Wiring.

Standard receptacles for Lamps are to be provided and arranged as shown on plans.

Connections to the lamp socket are to be made by No. 14 B. & S. Gauge Double Braid Rubber covered wire, this wire to be extended down to the base and there solidly soldered to the feed wires.

The feed wires shall be two No. 3 and one No. 6 B. & S. Gauge New Code Double Braid Rubber covered wire and shall lead to the nearest electric service pole through conduit as shown on plans.

The system shall be three wire, the top single lights to be controlled separate from the arm lights.

All splices shall be made in junction boxes and soldered. A magneto, and Voltmeter test shall be made for shorts, grounds and loss.

CONDUIT—Conduit to be used shall be what is known as fibre conduit, shall be waterproof and shall have an internal diameter of 2 inches.

The bore shall be straight, and the cross-section shall not vary at any point more than one-eighth (1-8) of an inch from a true circle, and the interior surface shall be free from dents or other obstruction so that a mandrel twenty-four (24) inches in length and one-fourth (1-4) of an inch less diameter than a nominal sized tube can be passed through it. The insulating properties of the material shall enable the fibre tube to withstand a puncture test of 20,000 volts, A. C.

The conduit shall stand the following mechanical test: A section of the tube shall be heated to a temperature of 150 degrees Fahr., and remain at a temperature of 150 degrees Fahr. for one hour. It shall then be immediately placed on two (2) inch saddle blocks on fifty (50) inch centers, and shall withstand a load of three hundred fifty (350) pounds applied at the center without breaking or changing the cross-section of the bore more than one-eighth (1-8) of an inch from a true circle.

The elbows required shall be eighteen (18) inch radius. All dead ends of fibre tubes shall be plugged and made watertight with a wooden plug which has been dipped in asphalt and which shall fit snugly in the end of the tube.

The joints of all fibre tubes before being placed together shall be dipped in a hot compound suitable for sealing the joints and shall be used in sufficient quantities to prevent any leakage of water into the interior of the tube. All tubes shall be finished clean and free from all obstructions before the acceptance of the work.

The conduit is to be laid underground to nearest electric service pole and extend 18 inches above pavement at pole.

ADVANCE NEWS

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APARTMENT HOUSES

LOS ANGELES, CAL. — Apartment house, 7 story and base, Class A construction \$150,000. Architect, John Parkinson, Security Bldg., L. A. Owner, Dr. James H. Edmonds. The building will be erected on the west side of 6th street near Westlake Park, and will cover an area of 100 by 100 feet. There will be a reinforced concrete frame, floors and hollow tile interior partitions. The building is designed to contain a total of 150 rooms, which will be arranged in suites of two and three rooms. Interior will be finished in hardwood and white enamel. Hardwood floors will be used in the principal rooms. There will be steam heat, elevator service, a hot water system, vacuum cleaning and dumb waiters. All suites will have wall beds and private baths. Bath rooms will be finished in tile and equipped with high class fixtures. Marble and tile wainscot will be used in the lobby. Exterior of the building will be faced with cement plaster. Plans are being prepared.

LOS ANGELES, CAL. — Apartment house, 3 story and base, Class C construction, \$25,000. Architect, L. L. Jones, I. W. Hellman Bldg., L. A. Owner, W. W. Padden. The building will be erected on Fremont avenue near 4th and will cover an area of 45 by 105 feet. There will be a total of 50 rooms arranged in two and three room suites with wall beds and private baths. Interior will be finished in pine and hardwood. Some hardwood floors will be used. There will be steam heat and a hot water system. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance. Exterior of the building will be faced with pressed brick. Plans are complete and the work will be done by Day Labor under the direction of the architect.

SAN FRANCISCO—Apartment house and stores, 3 story and base, Class C construction. Cost not stated. Architect, Charles E. J. Rogers, Kohl Bldg., S. F. Owner, Frank M. Seconover. The building will be erected on the west side of Mission street near 17th, and will have a frontage of 25 feet and a depth of 85 feet. There will be a store on the first floor besides the entrance. Upper floors will be arranged for a number of two and three room apartments with bath and wall bed. Interior will be finished in pine and elm. There will be steam heat and a hot water system. Bath rooms will have tile floors and imitation tile wainscot. Patent store fronts are specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures will be taken at once.

SAN FRANCISCO—Apartment house, 4 story and base, Class C construction, \$35,000. Architects, Smith & Stewart, 244 Kearny street. Owners, Smith & Stewart. The building will

be erected on the south side of O'Farrell street east of Van Ness avenue and will cover a considerable ground area. There will be a number of two and three room apartments, all of which will have wall beds and private bath rooms. Interior will be finished in mahogany and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for steam heat, an automatic elevator and hot water system. Bath rooms will be finished in tile and equipped with high class fixtures. Marble and tile wainscot will be used in the entrance. Exterior of the building will be faced with cement plaster in imitation of cut stone. Plans are complete and figures are in and under advisement.

SAN FRANCISCO—Apartment house, 3 story and base, reinforced concrete and frame, \$35,000. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner, Mrs. I. Paisley. The building will be erected on the west side of Taylor street near Washington, having a frontage of 42 feet and a depth of 137½ feet. There will be a total of thirteen suites of four rooms each. All apartments will have wall beds and private baths. Plans provide for a large amusement room and lobby besides a roof garden. Interior will be finished in mahogany and white enamel. There will be steam heat, an automatic elevator and hot water system. Hardwood floors will be used in the principal rooms. Marble and tile wainscot will be used in the lobby. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$10,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, Mr. Junck. The building will be erected at the corner of 17th and Church streets and will replace a structure recently destroyed by fire. The first floor will be arranged for a saloon and one store. Upper floors will contain four modern apartments of four rooms and bath. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. Patent store fronts and marble bases are specified. Bath rooms will be finished in imitation tile. Exterior will be covered with cement plaster on metal lath. Plans are now being prepared.

SAN FRANCISCO—Apartment house, 5 story and base, reinforced concrete, \$10,000. Engineer, Pierre Zucco, 166 Geary street, S. F. Owner, J. Dempniak. The building will be erected on the east side of Hyde street between Sutter and Bush streets, and has been designed to contain a total of thirty suites of two and three rooms. All apartments will have wall beds and private bath rooms. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the principal rooms. There will be steam heat, an oil burning furnace, auto-

matic elevator and a hot water system. Bath rooms will be finished in tile. Marble and tile will be used in the entrance vestibule. Exterior of the building will be faced with cement plaster. Plans are being prepared.

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$10,000. Architect, John J. Foley. 46 Kearny street, S. F. Owner, Mrs. Schultz. The building will be erected on Mission street between 24th and 25th streets, and has been designed to contain stores on the first floor and a number of small apartments on the upper two floors. Interior will be finished in pine and elm panels. There will be 60-gallon boilers. Each apartment will have a wall bed and private bath room. Tile wainscot will be used in the baths. Patent store fronts are specified. Exterior will be covered with rustic and shiplap. Plans are complete and figures will be called for at once.

OAKLAND, CAL.—Apartment house, 2 story and base, frame. Cost not stated. Architects, Oliver & Thomas, Pantages Theatre Bldg., Oakland. Owner's name withheld. The building will be erected at the corner of Harrison and Grand avenue, and has been designed to contain a number of two and three room apartments. Interior finish will be of pine and hardwood. Hardwood floors will be used in the principal rooms and in the entry halls. There will be steam heat, an oil burning furnace and hot water system. Bath rooms will be finished in tile. Wall beds will be used in each apartment. Exterior of the building will be covered with brick veneer and cement plaster on metal lath. Plans are complete and segregated figures will be called for in a week.

OAKLAND, CAL.—Apartment house, 2 story and base, frame, \$5,000. Architect, J. Henry Boehrer, Delger Bldg., Oakland. Owner, Lillian B. Emery. The building will be erected on the south side of 41st street between Telegraph and Grove streets, and has been designed to contain four small apartments with wall beds and private baths. Interior finish will be of pine and elm. Some hardwood floors will be used. There will be a hot water system. Bath rooms will have tile floors and wainscot. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and segregated figures are now being taken.

MARTINEZ, CONTRA COSTA CO., CAL.—Apartments and offices, 2 story and base, frame. Cost not stated. Architect, James T. Nabrett, 704 Macdonald avenue, Richmond. Owner, J. J. McNamara. The building will contain offices on the first floor and a number of modern apartments on the upper floor. Interior will be finished in pine. There will be wall beds and private bath rooms. Kawnner store fronts are specified. Exterior of the building will be faced with cement plaster on metal lath. Plans are nearly complete and figures will be called for shortly.

LOS ANGELES, CAL.—Apartment house, 4 story and base. Class C construction, \$70,000. Architect, California Architectural and Construction Co., California Bldg., L. A. Owner's name withheld. The building will be erected at the southwest corner of Mary-

land and Bixel streets, covering an area of 100 by 88 feet, and has been designed to contain a total of 100 rooms, which will be arranged in suites of four and five rooms. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the living and dining rooms. There will be steam heat, elevator service, a hot water system and vacuum cleaning. All suites will have wall beds. Bath rooms will be finished in tile. Marble wainscot will be used in the entrance vestibule. Exterior of the building will be faced with pressed brick. Plans are now being prepared.

BONDS

MODESTO, STANISLAUS CO., CAL.—The last installment of the state highway bonds purchased by Stanislaus County to finance the construction of the Salida-Oakdale lateral of the state highway amounting to \$35,000 have been sold by the Supervisors. Work has already been started. The road will be 16 miles in length and will have a 12-foot cement base with 3-foot oil macadam.

PITTSBURG, CONTRA COSTA CO., CAL.—The election held to vote bonds of \$10,000 with which to complete the erection of the new Pittsburg Grammar school, carried and work will be started immediately. The structure complete will cost in the neighborhood of \$84,000.

FILLMORE, Ventura Co., Cal.—All doubt as to whether the county would build roads through the incorporated cities of the county to complete the system of good roads that is to be constructed if the bond election carries, was removed when the Board of Supervisors passed a resolution pledging the county to build these stretches of road through the cities. The proposed election will call for the voting of \$1,000,000 in bonds.

SANTA MARGARITA SCHOOL DISTRICT, SAN LUIS OBISPO CO., CAL.—An election will be held on August 30th to vote on the question of issuing and selling bonds of \$20,000 to provide for the erection of a new school building for the Santa Margarita School District.

CHICO, BUTTE CO., CAL.—The proposition of issuing bonds for the purchase of additional fire equipment for this city is now under consideration by the officials.

AUBURN, PLACER CO., CAL.—An ordinance calling for a bond election to vote \$22,000 for the purchase of fire apparatus, extension of the present sewer system and the erection of a septic tank has been passed to second reading by the City Trustees. The election will be held on September 14th. The bonds will be divided as follows: \$15,000 for the sewer extension, \$5,000 for the purchase of fire trucks and \$2,000 for the installation of a fire alarm system.

SONORA, TULUMUNE CO., CAL.—The Supervisors have decided to purchase \$15,000 of state highway bonds for the continuation of the highway lateral in Tuolumne County.

MILLIKEN SCHOOL DISTRICT, SANTA CLARA CO., CAL.—Bond of \$3,000 will be sold by the County Supervisors on August 23rd. The pro-

ceeds of the sale will be used in the construction of a new school for the Milliken District.

STOCKTON, SAN JOAQUIN CO., CAL.—The Anglo-London & Paris National Bank of San Francisco was the successful bidder for the issue of \$230,000 worth of bonds recently voted by Stockton for sanitary and storm sewers.

LOS ANGELES COUNTY, CAL.—The Los Angeles County Supervisors will receive bids until August 23rd for the purchase of \$2,000 bonds of the Jefferson School District.

Bids will be opened on the same day for the purchase of the \$25,000 bonds of the Burbank School District, the proceeds of the sale to finance the construction of a school building.

The San Fernando School District, Los Angeles County, by a vote of 169 to 12, endorsed a proposal to issue \$25,000 bonds for a new grammar school.

The State Board of Control has purchased the bonds of the Lowell High School District of Los Angeles County.

The San Fernando Chamber of Commerce directorate has endorsed the proposition to bond Los Angeles County for \$2,000,000 for additional roads.

SAN DIEGO, SAN DIEGO CO., CAL.—The San Diego County Supervisors have called a mass meeting to discuss a proposed \$1,000,000 bond issue for road and bridge construction throughout the county.

TUCSON, ARIZ.—The Chamber of Commerce has petitioned the Board of Supervisors of the County of Pima to take such action as is necessary to submit to the voters of Pima County the question of issuing, for the purpose of securing funds with which to construct and maintain roads in said County of Pima, bonds in the amount of \$400,000, and recommends that \$100,000 of the amount so secured be set aside for the construction of the road in the Catalina Mountains leading to Mount Lemmon.

PASO ROBLES SCHOOL DISTRICT, SAN LUIS OBISPO CO., CAL.—The question of issuing bonds of \$40,000 to provide for the erection of a grammar school building will be voted here on August 27th.

SANTA MONICA, LOS ANGELES CO., CAL.—The City Council is taking up the question of calling a special election to vote bond of \$250,000 for the construction of a complete storm sewer system. The first step will be to employ an expert sanitary engineer to pass on the plans already prepared.

MODESTO, STANISLAUS CO., CAL.—A petition has been filed with the Board of Supervisors calling for the appointment of a highway commission and the calling of a bond election to vote bonds for the improvement of the county highway system.

BRIDGES AND DAMS

RED BLUFF, TERRAMA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Plans and specifications for a steel bridge across Mill Creek on the Sherwood Boulevard in the Los Molinos Col-

only were adopted and bids were ordered to be advertised for. The bids will be opened on September 9th.

RED BLUFF, TEHAMA CO., CAL.—Bridges, steel and timber. Cost not stated. Engineer, County Surveyor, Red Bluff, Owners, Tehama County. The Tehama County Board of Supervisors has ordered the County Surveyor to prepare plans and specifications for wooden bridges and steel bridges across New Creek and Antelope Creek and a wooden bridge across the slough near Cone's grove, all of said bridges being on the Sycamore road, in Road District No. 3, the motion was duly seconded by Supervisor Samson and carried.

GRASS VALLEY, NEVADA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Grass Valley. Owners, Nevada and Placer Counties. Work on the new Dog Bar bridge over Bear River, to be built jointly by Nevada and Placer counties, will start immediately under the direction of Henry Nolte of Colfax. The bridge will be 180 feet long of the Howe truss plan, and the one span will be 160 feet.

RAILROAD FLAT, CALAVERAS CO., CAL.—Bridge, steel. Cost not stated. Engineers, Jones, Reddick & Holly, Humboldt Bank Bldg., S. F. Owners, Calaveras County. Plans prepared by Engineers Jones, Reddick & Holly have been approved by the Calaveras County Board of Supervisors for a steel truss bridge to be erected over the Mokelumne River near Railroad Flat. The bridge will be 670 feet long of the riveted pony truss type, carried on concrete abutments. Bids will be called for shortly.

VENTURA, VENTURA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be opened on August 25th for the following work: Construction of the south abutment and approach to the Saticoy bridge, and for the construction of the Conejo Creek bridge on the state highway. The south abutment and approach to the Saticoy bridge is located about one-half mile southeast of the Southern Pacific station at Saticoy. Some approximate quantities in this work are: Embankment, 11,580 cubic yards; oil (70% asphaltum) 223 barrels; concrete in abutment, 500 cubic yards; reinforcing steel in abutment, 19,100 pounds; steel sheet piling, 752 square feet; concrete piles 35 feet long, 20; guard fence, 1238 lineal feet; 24-inch corrugated iron pipe, 10 feet. The Conejo Creek bridge on the state highway is about two miles east of the Southern Pacific station at Camarillo, Ventura County, California. The bridge consists of 3 spans, each 30 feet long. Some approximate quantities in this bridge are: Concrete, 456 cubic yards; reinforcing steel, 47,100 pounds; pipe railing 480 lineal feet. Plans can be secured from the office of the County Clerk.

VENTURA, VENTURA CO., CAL.—Culverts, reinforced concrete. Cost not stated. Engineer, County Surveyor, Ventura. Owners, Ventura County. Plans have been completed and figures will be opened on August 25th for the following work: Construction of the Williams Barranca

culvert, the Harkey culvert, the Proctor culvert, and the Sudden culvert, all in the Saticoy Road District. The culverts are all of reinforced concrete with corrugated iron pipe gutter drains. Some approximate quantities of the four culverts are: Concrete, 205 cubic yards; reinforcing steel, 13,850 pounds; earth fill, 2,100 cubic yards; 18-inch corrugated iron pipe, 126 feet; 24-inch corrugated iron pipe, 58 feet; 36-inch corrugated iron pipe, 44 feet; 38-inch corrugated iron pipe, 44 feet; standard guard fence, 1,110 feet. Plans can be secured from the office of the County Clerk.

Contracts Awarded.

SAN FRANCISCO—Pier, steel and reinforced concrete, \$48,877. Engineer, Assistant State Engineer Newman, Ferry Bldg., S. F. Owners, State of California. Contractor, Tibbitts Pacific Co., S. F. Contract price, \$48,877. A complete list of the bids received will be found under the heading of San Francisco.

BERKELEY, ALAMEDA CO., CAL.—Bridge, reinforced concrete, \$5,675. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractor, D. McDonald, Berkeley. Contract price, \$5,675.

OROVILLE, BUTTE CO., CAL.—Bridge, reinforced concrete, \$11,723. Engineer, County Surveyor, Oroville. Owners, Butte County. Contractor, E. D. Sharp, Chico. Contract price, \$11,723.

EUREKA, HUMBOLDT CO., CAL.—Bridges, reinforced concrete and suspension. Cost as follows. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractors, Moore & Lentell, Eureka. Contract price, \$3,475. Mercer-Fraser Co., Eureka. Contract price, \$365.

CAMPO, SAN DIEGO CO., CAL.—Railroad bridge, steel. Cost not stated. Engineer's name not given. Owners, San Diego & Arizona Railroad Co. Contractor, Charles W. Corbaley, L. A. Contract price not stated.

SEATTLE, WASH.—Bridges, steel and concrete. Cost as follows. Engineers, Seattle Bridge Commission. Owners, City of Seattle. The Board of Public Works has let the contract for the 15th avenue bridge to Hans Pederson, Madison Block, Seattle, at \$242,620.30, his alternative bid in which cofferdams will be used in the construction of the piers and pouring the concrete dry. The Pacific States Construction Co., Burke Bldg., at \$111,916, was awarded the contract for constructing the concrete piers for the Fremont avenue bridge, using cofferdams; and the Beers Building Co., Pittock Block, Portland, Ore., at \$154,601, secured the contract for the superstructure on the Fremont bridge.

ROBERTS FERRY, STANISLAUS CO., CAL.—Bridge, reinforced concrete, \$29,870. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Contractors, Ross Construction Co., Forum Bldg., Sacramento. Contract price, \$29,870.

FRESNO, FRESNO CO., CAL.—Bridge, reinforced concrete, \$11,974. Engineer, County Surveyor, Fresno. Owners, Fresno County. Contractor, J. E. Mitchell, Fresno. Contract price, \$11,974.

SANTA ROSA, SONOMA CO., CAL.—Bridge, reinforced concrete. Cost as

follows. Engineer, County Surveyor, Santa Rosa. Owners, Sonoma County. Contractor, Charles Gildersleeve, Napa. Contract price, \$5,600. Comstock Construction Co., Santa Rosa, bridge repairs, \$1,521.

COURT HOUSES.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—City hall, auditorium, etc. Class A construction, \$210,000. Architects, Elmore R. Jeffery and Frank R. Schaefer, Westley Roberts Bldg., L. A. Owners, City of San Bernardino. The City Council of San Bernardino has approved plans and specifications for a group of municipal buildings, which will be erected on property at the corner of Fourth and F streets. A bond issue of \$210,000 will be voted on October 20th, the funds to be divided as follows: \$70,000 for the city hall, \$50,000 for the auditorium, \$5,000 for the jail and garage, and \$20,000 for furniture and equipment. The preliminary plans which were accepted provide for buildings of Spanish Renaissance style. The site will probably be at the corner of Fourth and F streets. The city hall will be a two-story structure, 150 by 62 feet. The first story will provide for the police court, jury room, judges' quarters, water commission, police chief, fire commission, lavatories, city clerk and auditor. The second floor will contain the office of the mayor, council chamber, committee rooms, city attorney, health department, board of public works, and the building and engineering departments. The jail building will be two stories, 32 by 60 feet. It will contain the receiving hospital and steel cells in the first story and officers' quarters in the second. The garage will be 32 by 30 feet and will provide room for five machines. The auditorium will be 114 by 90 feet. It will have a seating capacity of 2,500 on the main floor and 500 in the balcony. There will also be a fully equipped stage with dressing rooms, smoking rooms, reception parlors, foyer, etc. It will be provided with a level floor so that it may be used for exhibition and other public purposes. The buildings will be of brick or reinforced concrete construction, with plastered exteriors, clay tile roofing, concrete foundations, hardwood interior trim, maple floors in offices and auditorium, reinforced concrete stairways and corridor floors, marble and tile entrances and hallways, steam heat, metal frames and sash and all modern equipment.

OROVILLE, BUTTE CO., CAL.—Hall of Records, 2 story and base, reinforced concrete, \$55,000. Architect, Charles S. Kaiser, Mechanics' Institute Bldg., S. F. Owners, Butte County. Plans have been completed and approved for the construction of the new Hall of Records. The building will contain the office of the recorder, of the building will be faced with cemetery and auditor besides a large auditorium and several smaller private offices. Interior will be finished in oak. Terrazzo and tile floors are specified. The Rector system of heating will be installed. There will be metal window sash and frames, special fireproof vaults and metal doors. Vacuum cleaning is also specified. Exterior of the

building will be faced with terra cotta. Plans are complete and figures are being taken. Bids will be opened on September 7th.

SUSANVILLE, LASSEN CO., CAL.—County Court house, 2 story and base, reinforced concrete, \$71,000. Architect, George C. Sellon, Sacramento. Owners, Lassen County. Bids opened for this work show James L. McLaughlin, 244 Kearny street, low at \$71,222, and Sellman Co., Reno, Nev., second low at \$74,400. All bids have been taken under advisement until the next meeting of the Board of Supervisors. A complete list of the bids received will be found under the heading of Sacramento and Northern California in this issue.

OAKLAND, CAL.—Court house addition, 2 story and base, brick, \$2,000. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, Alameda County. Plans for the small addition to the present building are now out for figures. Bids will be opened on September 7th. The new portion will contain one court room, judges' chambers and an office for the court reporter. Interior will be finished in pine and oak. The heating system in the old building will be extended. Exterior will be faced with pressed brick. Plans can be secured from the architect or the County Clerk.

FACTORIES AND WAREHOUSES.

SAN FRANCISCO—Winery, 2 story and base, reinforced concrete. Cost not stated. Architect, P. Righetti, Phelan Bldg., S. F. Owners, Promotion Wine and Liquor Co. The building will be erected at the corner of Lombard and Columbus, and will cover a large ground area. Construction will be fireproof with reinforced concrete floors and walls and metal window frames and sash. No interior finish will be used. There will be a number of large wooden tanks. Exterior of the building will be faced with cement plaster. Plans are complete and figures are now being taken.

LOS ANGELES, CAL.—Warehouse, 2 story and base, reinforced concrete. Cost not stated. Architect, Thomas Preston, Investment Bldg., L. A. Owners, National Transfer Co. The building will be erected on Ann street near Marguerite, covering an area of 50 by 110 feet. Construction will be fireproof with reinforced concrete floors, halls and roof slabs. Metal window frames and sash and fireproof doors will be installed. Modern electric work and plumbing are specified. Exterior of the building will be faced with cement plaster. Plans are now being prepared.

Contracts Awarded.

LOS ANGELES, CAL.—Warehouse, 2 and 3 story and base, reinforced concrete, \$23,541. Architect, E. L. Parcher, engineer, J. F. Blee, Union League Bldg., L. A. Owners, Hollywood Fireproof Storage Co. Contractor, F. O. Engstrom, 5th and Seaton streets, L. A. Contract price, \$33,541.

PORTLAND, ORE.—Warehouse, 2 story, mill construction, \$25,000. Architects, Sutton & Whitney, Lewis Bldg., Portland. Owner, Fanny W. Brown. Contractor, J. C. Kilgreen, Lewis Bldg., Portland. Contract price, \$25,000.

OAKLAND, CAL.—Factory, 4 story and base, reinforced concrete. Cost not stated. Architect, Louis P. Hohart, Crocker Bldg., S. F. Owners, Shredded Wheat Biscuit Co. Contractors, Clinton Fireproofing Co., Mutual Bank Bldg., S. F. Contract price not stated.

FIRE HOUSES AND JAILS.

Contracts Awarded.

FOLSOM, SACRAMENTO CO., CAL.—Special cell work. Cost not stated. Engineer, State Engineer, Sacramento. Owners, State of California. Contractors, C. A. Palm Bridge and Iron Works, Sacramento. Contract price not stated.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,800. Architect, none. Owner, Margaret A. Glunz, 527 Balboa street, S. F. The building will be erected on the west side of 6th avenue south of Balboa, and has been designed to contain two modern flats of five and six rooms. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile mantels. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and ship-lap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Flats, 2 story and base, frame, \$4,000. Architect, F. Holberg Riemers, 2125 Shattuck avenue, Berkeley. Owner, Francis L. O'Meara, 302 Mendocino avenue, Santa Rosa. The building will be erected on Rose street near Greenwood Terrace and will contain twelve rooms. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms and reception halls. There will be an open fire place in each living room. Mantels will be of tile. Tile wainscot will be used in the bath rooms. Automatic water heaters are specified. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and segregated figures are being taken.

GOVERNMENT WORK & SUPPLIES

Miles City, Mont., Post Office.

As previously reported, the contract for the construction, complete, of the U. S. post office at Miles City, Mont., was awarded to the Hiram Lloyd Building & Construction Co., St. Louis, Mo., at \$88,817. In the construction of the building fixtures and material manufactured by the following firms will be used: Plumbing fixtures, A. B. Sands & Sons Co.; cast iron column radiators, Kewanee Boiler Co.; wall radiators, American Radiator Co.; non-conducting covering, Keasbey & Mattison Co.; radiator valves, Crane Co.; damper regulator, Standard Regulator Co.; air valves for radiators, American Radiator Corporation; air valves for end of steam mains, Jenkins Bros.; cabinet and tablet, Frank Adam; electric conduit, Safety Armored Conduit Co.; rubber-covered wire, Habirshaw; flush switches, Perkins Electric Switch

Mfg. Co.; canopy switches, Cutler-Hammer Mfg. Co.; reflectors and glassware, Macbeth-Evans Co.; glassware type's, Holaphane.

Denver, Colo., Bronze and Iron Works.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for flag poles and miscellaneous bronze and iron work in the United States post office, Denver, Colo.:

Item 1, flag poles, etc., 2, do, alternate design; 3, 8 single desks; 4, 2 double desks; 5, Champa street electroliters; 6, 10 lamps.

Norman Ker Co., 1123 Broadway, New York City. Item 1, \$3,500; 2, \$4,500; 3, \$935; 4, \$1,570; 5, \$1,400; 6, \$1,900.

Tiffany Studios, New York City. Item 1, \$1,670; 2, \$5,470; 3, \$711; 4, \$990; 5, \$981; 6, \$792.

Bureau Brothers, Philadelphia, Pa. Item 1, \$3,135; 3, \$1,100; 4, \$1,525; 5, \$2,525; 6, \$1,500.

Pearl Harbor, H. T., Dredging.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for dredging 72,000 cu yds, more or less, at the naval station, Pearl Harbor, H. T.:

Hawaiian Dredging Co., Ltd., 116 Merchant street, Honolulu, H. T., 44c per cu yd.

Lord-Young Engineering Co., Ltd., 12 Campbell Block, Honolulu, H. T., 13.5c.

Hanford, Cal., Furniture.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for installing furniture in the U. S. post office at Hanford, Cal.:

Jacob Beitzel & Co., York, Pa., \$1,180; 90 days.

Furnas Office & Bank Furniture Co., Indianapolis, Ind., \$1,239.50.

Louck & Hill, Richmond, Ind., \$1,203.65.

Original Cabinet Co., Evanston, Ill., \$1,300.

Federal Equipment Co., Carlisle, Pa., \$1,075.

John E. Sjostrom, Philadelphia, Pa., \$1,183.

Richmond School Furniture Co., Muncie, Ind., \$1,104.65.

Maguire Cabinet Co., Los Angeles, Cal., \$955.50.

U. S. Marine Corps, Plumbing Fixtures.

The following bids were received at the office of the U. S. Marine Corps, Washington, D. C., for furnishing 30 water closets to be delivered f. o. b. San Francisco, Cal.:

John Douglas Co., Cincinnati, Ohio, \$932.10.

A. B. Sands & Sons Co., 22 Vesey street, New York City, \$932.50; alternate proposition for delivery f. o. b. vessel, New York Harbor, \$861.

Crane Co., Washington, D. C., \$1,071.60.

Charles Hess Co., New York City, \$853.20.

Portland, Ore., Pipe, Fixtures, Etc.

The following bids were opened by the lighthouse inspector, Portland, Ore., for furnishing pipe, fixtures, flanges, elbows, etc., for Cape Flattery light station:

Crane Co., Portland, Ore., \$658.88; accepted.

M. S. Kline, Portland, Ore., \$615.50.

Billings, Mont., Vault Shelving.

The contract for the installation of metal vault shelving in the U. S. post office at Billings, Mont., has been awarded to the American Bank Protection Co., Minneapolis, Minn., at \$223.

HOSPITALS

Contracts Awarded.

LOS ANGELES, CAL.—Hospital, 2 story and base, reinforced concrete, \$32,875. Architect, W. S. Garrett, Currier Bldg., L. A. Owners, French Hospital Association. Contractors, The Pozzo Construction Co., 421 Macy street, L. A. Contract price, \$32,875.

HOTELS

STOCKTON, SAN JOAQUIN CO., CAL.—Hotel alteration and addition, 3 story and base, brick. Cost not stated. Architect, Joseph Losekan, San Joaquin Bldg., Stockton. Owners, Yosemite Hotel Co. The present building at the corner of Main and Sutter streets will undergo extensive repairs. The two upper floors will be razed and new steel and brick work installed. Included in the work will be carpentry, plastering, electric work, plumbing, painting and heating. The work of razing the building has been let to Thomas Lewis and is now under way.

RAILROAD CONSTRUCTION AND EQUIPMENT.

FRESNO, FRESNO CO., CAL.—Freight house alteration, reinforced concrete, \$11,000. Engineer's name not given. Owners, Santa Fe Railroad Co. This work will include some exterior concrete walls, interior alteration, plastering, electric work and carpentry. Plans are complete and the work will be done by Day Labor under the direction of a superintendent.

RESIDENCES.

SAN FRANCISCO—Residences, 2, 1½ story and base, frame, \$2,000 each. Architect, none. Owner, N. J. Nelson, 4278 23rd street, S. F. These two houses will be erected on the east side of 18th avenue north of Cabrillo, and each has been designed to contain five rooms and bath. Interior will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile mantels. Bath rooms will be finished with imitation tile. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are being purchased.

SAN FRANCISCO—Residence, 1½ story and base, frame, \$2,000. Architect, none. Owner, P. W. Montroull, 270 Andover street, S. F. The dwelling will be erected on the west side of Bryant street north of Army. The dwelling will contain five rooms and bath. Interior will be finished in pine. Some hardwood floors will be used. There will be an open fire place in the

living room. Mantel will be of brick or tile. Exterior of the house will be covered with rustic and ship-lap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$4,000. Architect, G. Voddien, 760 Cole street, S. F. Owner, Thomas Voddien. The dwelling has been designed for a seven-room house and will be erected on the west side of 16th avenue north of Balboa. Interior will be finished in pine and hardwood veneer with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residences, 140, 2 story and base, frame, \$2,200 each. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, Joseph Risso. These dwellings will be erected on property at the corner of Mission and Marshall streets, and each will contain five rooms, bath and sleeping porch. Interiors will be finished in pine and redwood. Some hardwood floors will be used. There will be an open fire place in the living rooms. Mantels will be of tile and brick. Bath rooms will be finished in imitation tile. Exteriors will be covered with cement plaster on metal lath. Plans for the first group of four dwellings have been completed and figures are now being taken. As soon as contracts have been let for this group a second group of four houses will be figured.

SAN FRANCISCO—Residence, 2 story and base, frame, \$6,500. Architects, Smith & Stewart, 24 Kearny street, S. F. Owner, Mr. Brown. The dwelling will be erected in Forest Hill, and has been designed for an eight-room house with bath, sleeping porch and a separate garage. Interior will be finished in hardwood, pine and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures have been taken. A contract will be let at once.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,500. Architects, Smith & Stewart, 24 Kearny street, S. F. Owner, Mr. Brown. The dwelling will be erected on 45th avenue between Anza and Geary streets, and has been designed for a seven-room house with bath and basement garage. Interior will be finished in southern gum, pine and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of

the house will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

SAN FRANCISCO—Residences, 3, 2 story and base, frame, \$2,500 each. Architect, none. Owner, F. Nelson, 30 Presidio Terrace, S. F. These dwellings will be erected on the north side of Parnassus avenue east of Arguello Boulevard, and each will contain six rooms and bath. Interior finish will be of pine with some elm panels. Hardwood floors will be used in the living and dining rooms and reception halls. There will be large open fire places in each of the living rooms. Mantels will be of tile and brick. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exteriors will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residence, 2 story and base, frame, \$4,000. Architect, none. Owners, Johns Bros, 1903 Baker street, S. F. The dwelling has been designed for an eight-room house with bath and sleeping porch, and will be erected on the west side of 15th avenue between Anza and Balboa streets. Interior will be finished in pine, elm panels and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Tile floor and wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Joseph T. Hinch, 1748 Broadway, Oakland. The dwelling has been designed for a five-room house with bath and sleeping porch, and will be erected on the east side of Adeline street south of 56th. Interior finish will be entirely of pine. Some hardwood floors will be used. There will be an open fire place in the living room with tile or brick mantel. Imitation tile will be used in the bath room. Exterior of the house will be covered with cement plaster and shingles. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, E. A. Schkade, 240 20th avenue, S. F. The dwelling has been designed for a seven-room house with bath and sleeping porch, and will be erected on the east side of 19th avenue south of California. Interior will be finished in pine and hardwood with white enamel in the bed rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Hardwood floors will be used in the principal rooms. Plans provide for an automatic water heater. Bath room will have tile floor and wainscot. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will

do the work by Day Labor. Materials are now being purchased.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architect, A. W. Smith, 1010 Broadway, Oakland. Owner, O. R. Wood. The dwelling will contain five rooms and bath. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms and reception hall. There will be a large open fire place with tile or brick mantel. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architects, Yerrick & Smith, Blake Bldg., Oakland. Owner, John Michels. The dwelling will be erected on West street between 34th and 35th streets. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms. There will be an open fire place and tile or brick mantel. Imitation tile will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and figures are being taken.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owners, Fuller & Robbins, Athens Hotel, Oakland. The dwelling has been designed for a seven-room house with bath and sleeping porch and will be erected on the east side of Thomas street south of Prospect. Interior will be finished in pine with some elm panels and white enamel. Hardwood floors will be used in the living and dining rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners who will do the work by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$60,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, G. Erickson. The dwelling will contain eight rooms, two baths and sleeping porch. A separate garage will also be erected on the property. Interior finish will be of southern gum and white enamel. Hardwood floors will be used throughout the first floor. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are now being prepared.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, Hans P. Hansen, 164 Cook street, S. F. The dwelling has been designed for a six-room house, and will be erected on the west side of 10th avenue north of Carrington. Interior will be finished in pine throughout. There will be an open fire place and tile or brick mantel. Hardwood floors will be used in the living and dining rooms. An automatic water

heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, E. L. de Sarmo, 1853 38th avenue, Oakland. The dwelling has been designed for a six-room house and will be erected on the west side of 38th avenue south of Pothill Boulevard. Interior will be finished in pine with some white enamel. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place and tile or brick mantel. Bath room will be finished in imitation tile. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, J. E. Saylor, 2561 Emma street, Fresno. The dwelling has been designed for a five-room house with bath and sleeping porch and will be erected in Buena Vista Tract. Interior will be finished in pine throughout. Some oak floors will be used. There will be an open fire place and tile or brick mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SAN FERNANDO, LOS ANGELES CO., CAL.—Residence, 1 story and base, hollow tile. Cost not stated. Architect, Charles F. Heyer, 1901 West 41st street, L. A. Owner, General H. G. Otis. The dwelling will be erected on a large tract in the San Fernando Valley, and has been designed to contain 17 rooms, 5 baths and sleeping porches. Interior will be finished in hardwood and white enamel. Hardwood floors will be used throughout. Bath rooms will be finished in tile. Plans provide for a central heating system, hot water circulating system and vacuum cleaning. There will be open fire places and tile or brick mantels. Exterior of the house will be covered with cement plaster. Plans are complete and figures are now being taken.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,000. Architect, none. Owner, John V. Stiefel, 739 11th avenue, S. F. The dwelling will be erected on the east side of 23rd avenue north of California street, and has been designed for a five-room house with bath and sleeping porch. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be an open fire place in the living room with a tile or brick mantel. Imitation tile wainscot will be used in the bath. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO — Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, A. T. Morris, 501 11th avenue, S. F. The dwelling will

be erected on the west side of 11th avenue north of Balboa street, and has been designed to contain seven rooms, bath and sleeping porch. Interior will be finished in pine with some elm panels and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile or brick. Bath rooms will be finished in tile. An automatic water heater is specified. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

ALAMEDA, ALAMEDA CO., CAL.—Residence, 1 story and base frame, \$2,500. Architects Universal Drafting Bureau, 1841 5th avenue, Oakland. Owner, C. C. Adams. The dwelling will be erected in Waterside Terrace and has been designed for a six-room house with bath and sleeping porch. Interior finish will be of pine with some white enamel. Hardwood floors will be used in the living room with tile or brick mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are being prepared and when complete the work will be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, H. C. Pfarr, 320 Forest avenue, Oakland. The dwelling has been designed for a five-room house with bath and sleeping porch, and will be erected on the east side of Dover street south of 58th street. Interior finish will be of pine and hardwood veneer with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architects, Universal Drafting Bureau, 1841 5th avenue, Oakland. Owner, R. C. Hillen. The dwelling will be erected in East Piedmont Heights, and has been designed for a five-room house with bath and sleeping porch. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot and floor. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$1,500. Architect, Claude B. Barton, First Trust Bldg., Oakland. Owner, Mrs. Ella B. Edwards. The dwelling has been designed for an eight-room house with bath and sleeping porch, and will be erected on Arimo avenue. Interior will be finished in pine with some elm panel and white enamel. Hardwood floors will be

used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. Plans provide for an automatic water heater. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and segregate figures are now being taken by the architect.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, Leo L. Nichols, 1764 Broadway, Oakland. The dwelling will be erected on the east side of Grand avenue north of Weldon avenue, and has been designed for a seven-room house with bath and sleeping porch. Interior will be finished in pine with elm panels and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile. Bath room will have tile wainscot and floor. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

MARTINEZ, CONTRA COSTA CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, James T. Nabett, 764 Macdonald avenue, Richmond. Owner, John Marchi. The dwelling has been designed for a seven-room house with bath and sleeping porch. Interior finish will be of pine, elm panels and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire place. Mantel will be of tile. An automatic water heater will be installed. Bath room will be finished in tile. Exterior of the house will be covered with cement plaster on metal lath. Plans are now being prepared and figures will be called for shortly.

SAN JOSE, SANTA CLARA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, W. O. Miller, 471 Julian street, San Jose. The dwelling has been designed for a six-room house with bath and sleeping porch, and will be erected on Julian street between 13th and 14th streets. There will be a large open fire place in the living room with a tile or brick mantel. Imitation tile floor and wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

LOS ANGELES, CAL.—Residence, 2 story and base, brick and frame. Cost not stated. Architects, Eisen & Son, Wilcox Bldg., L. A. Owner, Dr. Ralph Williams. The dwelling will be erected on Winsor Boulevard between 3rd and 4th, and has been designed to contain seventeen rooms, three baths and sleeping porch. A large two-story garage will also be erected on the property. Interior of the dwelling will be finished in hardwoods and white enamel. Hardwood floors will be used throughout except in the baths which will be finished in tile. Plans provide for a central heating system, vacuum cleaning and hot water circulating system. There will be open

fire places and tile mantels. Exterior of both the house and garage will be covered with brick veneer and shingles. Plans are now being prepared.

Contracts Awarded

LOS ANGELES, CAL.—Residence, 2 story and base, frame, \$15,000. Architect, Milwaukee Building Co., Wright and Callender Bldg., L. A. Owner, P. H. Lyon, 1262 South Grand avenue, L. A. Contractors, Milwaukee Building Co., L. A. Contract price, \$15,000.

SAN FERNANDO, LOS ANGELES CO., CAL.—Residence, 1 story and base, hollow tile, \$30,000. Architect, C. F. Myers, 1901 West 41st street, L. A. Owner, General H. G. Otis. Contractors, Leonardt & Peck, H. W. Hellman Bldg., L. A. Contract price, \$30,000.

SCHOOLS.

BERKELEY, ALAMEDA CO., CAL.—College building, 4 story and base. Class A construction, \$800,000. Architect, John Galen Howard, 604 Mission street, S. F. Owners, University of California. Over fifty contractors submitted figures on the various parts of the work in connection with the construction of this building. Awards have not as yet been made. A complete list of the bids submitted will be found under the heading of Oakland and Alameda County in this issue.

YREKA, SISKIYOU CO., CAL.—School, 1 story and base, reinforced concrete. Cost not stated. Architect, W. H. Weeks, 75 Post street, S. F. Owners, Yreka School District. The building has been designed to contain a gymnasium and departments for manual training and domestic science. Interior will be finished in pine. Modern plumbing and a central heating system will be installed. Exterior will be faced with cement plaster. Plans are nearly complete and figures will shortly be called.

CALIPATRIA, IMPERIAL CO., CAL.—School, 1 story and base, brick or concrete, \$30,000. Architect, Norman F. Marsh, 214 Broadway, L. A. Owners, City of Calipatria. The building will contain six class rooms, principal's office and a large auditorium. Interior will be finished in pine with maple floors in the class rooms. A central heating system will be installed. Modern school plumbing, program clocks and vacuum cleaning are specified. Exterior will be faced with cement plaster. Plans are now being prepared.

LOS ANGELES, CAL.—College building, 3 story and base, reinforced concrete, \$60,000. Architect, Elmer Grey, Wright and Callender Bldg., L. A. Owners, Throop College of Technology. The building will be erected at the corner of California and Wilson streets and will cover a large ground area. Interior will be arranged for class rooms, study hall, library and laboratories. Plans provide for steam heat, vacuum cleaning and modern plumbing and electric work. Exterior will be faced with cement plaster. Plans are now being prepared.

Contracts Awarded

LOS ANGELES, CAL.—School, 1 story and base, brick, \$21,190. Architects, Edelman & Barnett, Black Bldg., L. A. Owners, City of Los Angeles. Contractor, Alex. Grant, 1201 West 37th street, L. A. Contract price, \$21,190.

SEWERS, STREET WORK & WATER SYSTEMS.

TURLOCK, STANISLAUS CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Turlock. Owners, City of Turlock. Plans have been completed and approved for furnishing materials and labor, together with all appliances and accessories for the construction of an extension to the present sewer system. Bids are now being taken and will be opened on September 7th. Plans can be secured from the City Clerk.

BAKERSFIELD, KERN CO., CAL.—Road construction, \$28,858.58. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids were opened for the construction of a concrete road from Bakersfield to Edison, a distance of 6 1/4 miles, and show Leigh G. Garney, 403 East 3rd street, Los Angeles, the lowest bidder at \$28,858.58. Bids were taken under advisement.

HANFORD, KINGS CO., CAL.—Furnishing crushed rock. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. The Board of Supervisors instructed the Clerk to advertise for 300,000 tons of crushed rock, which will enter into the construction of the highway system, bids to be received on August 21st. Bids received last week were all rejected because they were deemed excessive.

HANFORD, KINGS CO., CAL.—Highway construction. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. The Board of Supervisors adopted plans and specifications for the first unit of the Kings County highway system and instructed the Clerk to advertise for bids for the construction work. The bids will be opened on August 21st. The first unit of the 103-mile system of permanent highway will embrace the nine miles between Hanford and Lemoore.

BERKELEY, ALAMEDA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Plans are complete and bids will be opened on August 24th for furnishing the necessary materials, tools and labor for the construction of a combined sewer, manholes and appurtenances.

SAN MATEO, SAN MATEO CO., CAL.—Street paving. Cost as follows. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Eight sets of figures were opened in San Mateo for street paving, the two most important jobs being for San Mateo Park and for Fourth avenue. Ransome-Crummey Co., First National Bank Bldg., Oakland, were low for the San Mateo Park work at \$70,832.42; and the Federal Construction Co. low for Fourth avenue work at \$77,897. Following is a list of the bids received: For San Mateo Park—Ransome-Crummey Co., Oakland, \$70,832.42; Federal Construction Co., San Francisco, \$74,749.21; McGillivray Construction Co., Sacramento, \$75,097.61; F. R. Ritchie & Co., San Francisco, \$75,133.87. Fourth avenue, etc.—Federal Construction Co., San Francisco, \$77,897; City Improvement Co., San Francisco, \$80,872; F. R. Ritchie & Co., San Francisco, \$81,232; Clark & Henery Co., Sacramento, \$81,725; Raich Improvement Co., Sacramento, \$82,100; McGillivray Construction Co., Sacramento, \$83,087;

Ransome-Crummey Co., Oakland, \$85,-
\$40. Church & Clark, \$92,250.

YREKA, SISKIYOU CO., CAL.—Highway construction, \$60,000. Engineer, County Surveyor Yreka. Owners, Siskiyou County. The matter of constructing a hard-surfaced road over the Forest House Mountain to Port Jones and Scott Valley, at a grade not to exceed 6½ per cent, is now being considered by the County Supervisors. According to reports the work will be under way shortly, as it has been a long talked project and favored by all concerned. It is estimated it will ultimately cost \$60,000 to grade and hard surface this six or eight miles over the mountain.

REDWOOD CITY, SAN MATEO CO., CAL.—Hihway construction. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Plans are complete and bids will be opened on September 7th for the construction of two pieces of road in Road District No. 4. The work to be done is as follows: The paving with waterbound macadam of 2,079 miles of highway in the Fourth Road District of San Mateo County. 1. The Sunshine Valley road from Colma to Half Moon Bay highway through Sunshine Valley and through Montara to the intersection of George street and Cedar street, etc. 2. Road from Montara to Martin's, beginning at the point where Farrallone avenue, Farrallone City, intersects the Colma to Half Moon Bay highway, etc.

Contracts Awarded.

GRIDLEY, BUTTE CO., CAL. — Sprinkling system and tank, \$3,800. Engineer's name not given. Owners, East Gridley Sprinkling District. Contractor, J. L. Mery, Chico. Contract price tank, tower and 2¼ miles of pipe, \$3800.

STOCKTON, SAN JOAQUIN CO., CAL. —Curbs and gutters. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractor, W. C. Gaskell, 1743 South California street, Stockton. Contract price not stated.

EUREKA, HUMBOLDT CO., CAL.—Graveling roads. Cost as follows. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractor, Frank Bertsch, Eureka, Sections 1 and 2. Contract price, 78c and 74c per yard, respectively. George E. Hansen, Eureka, Section 3. Contract price, \$1.53 per yard.

SACRAMENTO, CAL.—State highway work. Cost as follows. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. The following contracts have just been awarded by the State Highway Commission: San Luis Obispo County, 10 miles between Atascadero and Paso Robles, to John D. Marsh, Box 211, Bakersfield, for \$17,-809.10. Monterey County, 11.7 miles between Greenfield and Camphora, to Highway Paving Co., room 201, 26 Montgomery street, San Francisco, for \$3,019.77. Santa Barbara County, 11.4 miles between Gavitoa and Zaca Station, to C. H. Hudson, Trust and Savings Bldg., Los Angeles, for \$51,586. Colusa County, 3 miles through town of Arhuckle, to Clark & Henry Construction Co., Ochsner Bldg., Sacramento, for \$5,778.75. Marin County, 1 miles between Burdell and St. Vincent,

to R. B. Markle, Jr., Hearst Bldg., San Francisco, for \$21,255.10

STORES AND OFFICES.

SAN FRANCISCO—Stores and offices, 5 story and base. Class A construction, \$200,000. Architects, O'Brien Bros., 210 Montgomery street, S. F. Owner's name withheld. The building will be erected at the southwest corner of Davis and California streets, and will cover a large ground area. The first floor will contain two large wholesale stores, which have already been leased. Upper floors will be arranged for modern offices. There will be a pile foundation, complete steel frame, concrete floors and roof slabs. Hollow tile interior partitions and metal window sash and frames will be specified. Interior will be finished in hardwood, metal and marble. Plans provide for steam heat, three elevators, vacuum cleaning and oil burning equipment. Exterior will be faced with pressed brick and terra cotta. Plans are being prepared.

PALO ALTO, SANTA CLARA CO., CAL.—Store fixtures. Cost not stated. Architect, Henry Shermund, Mills Bldg., S. F. Owner, James Frazer, Palo Alto. This work will include show cases, cabinets, shelves, counters, tables for clothing and interior trim. Bids are being taken on both sugar pine and birch.

SEATTLE, WASH.—Stores, 1 story and base, brick and steel, \$40,000. Architects, Bebb & Gould, Denny Bldg., Seattle. Owners, Tucker-Hartford Co. The building will be erected at the corner of Westlake and Roy streets, covering an irregular area of 120 by 120 by 179 by 133 feet. Interior will be finished in pine and hardwood with some ornamental plaster. Cement and tile floor will be used. There will be patent store fronts, marble wainscot and base. Plans provide for steam heat and a vacuum cleaning system. Exterior will be faced with terra cotta. Plans are complete and figures are being taken.

SALEM, ORE.—Stores and hall, 2 story and base, brick, \$20,000. Architect, Fred A. Legg, Ainsworth Bldg., Portland. Owners, Roth Grocery Co. The building will cover an area of 12½ by 166 feet. The first floor will be occupied by the owners and the second floor has been leased to the local Young Men's Christian Association. Interior will be finished in pine. There will be steam heat. Patent store fronts are specified. Exterior will be faced with pressed brick. Plans are complete and figures are being taken.

LOS ANGELES, CAL.—Office building, 5 story and base. Class A construction, \$200,000. Architect, W. J. Dodd, Marsh-Strong Bldg., 12. A. Owners, Pacific Mutual Life Insurance Co. The building will be in the nature of an addition to the present building at the corner of 6th and Olive streets, and will cover an area of 62 by 80 feet. The first floor will be arranged for offices and rooms for the directors, while upper floors will contain lofts with vaults and fireproof lockers. There will be a complete steel frame and concrete floors and roof slabs, hollow tile interior partitions, metal window sash and frames. Plans provide for elevator service, steam heat

and vacuum cleaning. Interior will be finished in hardwood and ornamental plaster. Marble and tile wainscot will be used. Exterior will be faced with glazed tile. Plans are now being prepared.

STATE BUILDINGS.

Appropriations amounting to approximately \$2,000,000, made by the last legislature for new buildings, additions and other improvements to be made at the various state institutions, became available last Monday and plans for the execution of the work were considered by the Advisory Board and State Architect at a meeting held last Tuesday.

Plans are practically completed for two cottages to be erected at the Southern California State Hospital at Patton at a cost of \$50,000, and also for an addition to the manual arts building of the Los Angeles State Normal School, to cost \$2,500.

Plans are also being prepared for additional cottages for the California School for Girls at Ventura, the cost to be about \$52,000. Plans will soon be completed for three additional buildings at the Norwalk State Hospital, the cost to be about \$195,000.

Plans for other work to be done under the appropriations are still in the preliminary stages. Among the appropriations made may be mentioned the following:

Installation of water system at Southern California State Hospital, \$10,000.

For permanent exposition building in Los Angeles agricultural park, \$50,000.

For improving grounds Los Angeles State Normal School, \$12,000.

Repairs and Improvements, Whittier Industrial School, \$25,000.

Erection and furnishing of cottages at Whittier State schools, \$60,000.

Construction of additional buildings at hospital site in Norwalk, Southern California, \$195,000.

Construction and furnishing of cottages, Southern California State Hospital, \$50,000.

Repairs and improvements, San Diego State Normal School, \$14,000.

Boatways, etc., for San Diego naval militia, \$25,000.

Drain and storm water sewers in Ventura school for girls, \$7,500.

Construction of fire trails in San Bernardino Mountains, \$5,000.

Machinery building of Santa Barbara Normal Grounds, \$15,000.

For repairs and development, Santa Barbara State Normal School, \$11,500.

Establishment of water supply in the Polytechnic school in San Luis Obispo, \$20,000.

Constructing and equipping new normal buildings at Fresno, \$20,000.

For improving grounds Fresno State Normal, \$9,000.

Construction of temporary buildings for the Humboldt State Normal School at Arcata, \$17,500.

For the perfection of an artesian water system at the Deaf and Dumb school in Berkeley, \$4,000.

New boilers and electrical wiring for the Stockton State Hospital, \$17,500.

Repairing the San Diego State Normal School, \$14,000.

Improving the grounds of the San Diego State Normal School, \$5,000.

Painting the State printing office, \$1,700.

Cottages for the Southern California Hospital at Patton, \$47,000.

Gymnasium and repairs in the Home for the Adult Blind at Oakland, \$2,750.

THEATRES.

RICHMOND, CONTRA COSTA CO., CAL.—Theatre alteration. Cost not stated. Architect, A. W. Cornelius, Merchants' National Bank Bldg., S. F. Owners, Richmond Theatre Co. Architect A. W. Cornelius is preparing plans for the installation of a new ventilating system and other extensive interior improvements to be made to the Richmond Theatre. Manager Hunter: will be in charge of the work.

SEALED PROPOSALS

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 959—Proposals for Engine Cylinders and Springs, Malleable Iron Castings, Steel Castings, Car Repair Parts, Manganese Steel Tumbler, Cold Shuts, Steel Boiler Tubes, Bolts, Rivets, Stovepipe, Cable Clips, Cable Thimbles, Twist Drills, Drill Sockets and Sleeves, Taps, Electrical Fixtures, Electric Switches, Copper Wire Cloth, Hooks and Eyes, Cabin Door Hooks, Locks, Foot Bolts, Valves, Cocks, Cock-Hole Covers, Pipe Fittings, Anchors, Band Saws, Scythe Blades, Butchers' Blocks, Water Coolers, Copper Funnels, Window Glass, Tarpaulins, Sandpaper, Emery Cloth, Bond Paper, Beeswax and Lamp Chalk.

Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. August 27, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 959) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash., Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR DREDGING.

DREDGING—U. S. Engineer Office, 401 Custom House, San Francisco, Cal. Sealed proposals will be received here until 11 a. m. August 21, 1915, and then opened. Information on application.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals inducted "Proposals for Magazine Building" will be received at the Bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 11, 1915, and then and there publicly opened, for constructing one steel frame shell house with plastered walls and two brick magazines with steel roof trusses at the naval magazine, Puget Sound, Wash. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard, Bremerton, Wash. W. M. L. SMITH, acting chief of bureau.

PROPOSALS FOR BUILDING.

OFFICE of the Clerk of the Board of Supervisors, Oakland, California. Bids will be received by the Board of Supervisors of Alameda County, California, at the office of the County Clerk and ex-officio Clerk of the Board of Supervisors in the Hall of Records, Oakland, California, until ten (10) o'clock a. m., on Tuesday, the 7th day of September, A. D. 1915, for the construction and completion of a two-story brick addition to the Alameda County Court House, located on Broad-

way between Fourth and Fifth streets, in the City of Oakland, County of Alameda, State of California.

Plans and specifications are on file in the office of the Clerk of the Board of Supervisors and copies may be obtained upon the deposit of Ten (10) Dollars, which said deposit will be returned upon the return of said plans and specifications. No contractor shall keep said plans and specifications for a period exceeding ten (10) days. If any contractor retains said plans and specifications for a period exceeding ten (10) days, then said deposit of Ten (10) Dollars shall be forfeited to the County of Alameda.

No bid will be considered unless accompanied by a certified check payable to the order of Geo. E. Gross, Clerk of the Board of Supervisors, certified to by some responsible bank for an amount not less than ten (10) per cent of the aggregate amount of the bid or proposal which it accompanies, said check to be forfeited to the County of Alameda, as agreed and liquidated damages should the party or parties to whom the contract should be awarded fail to enter into the contract within ten (10) days after the award or fail to give a bond or bonds for the faithful performance of the contract.

Bidders shall make their bids on the blank forms furnished with the plans and specifications. All blanks in the bid forms shall be completely filled in, giving all proposals asked.

All bids must be enclosed in sealed envelopes addressed to the Board of Supervisors, Alameda County, and be endorsed on the envelope, "Bid for the Construction and Completion of the Addition to the Alameda County Court House."

All bids that do not comply with the above provisions in this notice shall be thrown out as informal.

The Board of Supervisors reserves the right to reject any bid and all bids of proposals.

Dated August 9, 1915.

D. J. MURPHY,
Chairman of the Board of Supervisors of Alameda County.

GEORGE E. GROSS,
Clerk of the Board of Supervisors of Alameda County.

PROPOSALS FOR BRIDGE.

BRIDGE—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Washington, D. C., until 2 o'clock p. m. September 8, 1915, for furnishing and erecting a steel bridge of three 100-foot spans and a structural steel movable crest with operating machinery for the Vandalia dam of the Milk River project, Montana. For particulars address the United States Reclamation Service, Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR VESSEL.

VESSEL—Sealed proposals will be received at the Coast and Geodetic Survey, Washington, D. C., until August 25, 1915, and then opened, and also on the same date at the office of the inspector of the Coast and Geodetic Survey, room 310, Custom House, San Francisco, Cal., for construction and equipment of the Coast and Geodetic Survey steamer, Surveyor of about 1,000 tons displacement. Particulars may be had by addressing the superintendent, Coast and Geodetic Survey, Washington, D. C.

PROPOSALS FOR ELEVATORS.

ELEVATORS—Sealed proposals inducted "Proposals for Freight Elevators" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. August 28, 1915, and then and there publicly opened, for three hydro-pneumatic freight elevators, installed complete, at the naval station, Pearl Harbor, Hawaii. Plan and specification may be obtained on application to the commandant of the naval station named W. M. L. SMITH, acting chief of bureau.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 958—Proposals for Steel Reinforcing Bars, Bronze Wire Cloth, Screws, Cutters, Screw-eyes, Cup Hooks, Staples, Cable Clips, Tacks, Hasps, Hinges, Night Latches, Chain Blocks, Snatch Blocks, Tackle Blocks, Steel Cargo Trucks, Grindstones, Stable Brooms, Floor Brushes, Buckets, Oil Cans, Ladders, Life Preservers, Blow Torches, Anchor Lights, Window Glass, Pipe Cutter Wheels, Awning Pulleys, Steel Tapes, Rules, Lantern Globes, Oars, Tool Handles, Mop Hardies, Mop Heads, Packing, Oakum, Crayons, Twine, Wrapping Paper, Index Cards and Lumber. Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. August 20, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 958) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash., Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR BUILDING.

BUILDING—Fort Rosecrans, Cal.—Sealed proposals will be received here until 2 p. m. August 26, 1915, for constructing concrete storehouse. Further information on application to constructing quartermaster.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 956—Office of the General Purchasing Office, Panama Canal, Washington, D. C.—Sealed proposals will be received here until August 19, 1915, under circular 956 for furnishing the following: 50 brackets, brake shaft; 2,000 feet trolley wire, 20 reins manila paper, 40 cast iron posts, 12 feet vulcanized rubber strips, 800 spring plates, 12 machinists' vices, 50 lengths corrugated tender hose, 3 lengths steel rails, 103 hand saws, 2 water gauges, 500 handles, 72 hatchets, 24 vices, 288 wheels for Barnes pipe cutters, 12 air whistles, 24 axes, blacksmiths' anvils, 144 blacksmiths' chisels, 3,600 hacksaw blades, 24 breast drills, 12 saw frames, 12 buckets for lips, 300,000 feet ceiling, 275,000 feet flooring, 200 feet siding, 2,200,000 feet service and rough lumber; also a quantity of files, bits, augers, cape and machine chisels, monkey wrenches and Stilson wrenches, machinists' hand taps, pipe cutters, drills, dies, claw, machinists' and sledge hammers, stocks and dies and condulets. For further information address P. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR SUBMARINES.

SUBMARINES—The date for the opening of proposals for building submarine boats, No. 6377, as fixed by the department's advertisement of May 20, 1915, is hereby changed from August 2 to September 29, 1915. JOSEPHUS DANIELS, Secretary of the Navy.

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

Sealed proposals will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, California, until 2 o'clock p. m., on August 23, 1915, at which time they will be publicly opened and read, for construction in accordance with the specifications, therefore, to which special reference is made, portions of state highway as follows:

Siskiyou County across the Sacramento River near Dunsuiry (IT-Sis-3-A), a reinforced concrete bridge about 532 feet long with one arch of

180 feet clear span and two arches of about 14 feet clear span.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers' offices are located at Williams, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interest of the State.

CHARLES D. BLANEY,

NEWELL D. DARLINGTON,

CHARLES F. STERN,

California Highway Commission.

WILSON B. FLETCHER,

Highway Engineer.

ALVIN R. ELLIS, Secretary.

PROPOSALS FOR WHARF.

WHARF—Sealed proposals indorsed "Proposals for Extensions of Wharf" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. August 21, 1915, and then there publicly opened, for extension of wharf at the naval training station, San Francisco, Cal. Plan and specification may be obtained on application to the bureau or to the commandant of the naval training station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR CONCRETE PIERS.

CONCRETE PIERS—Sealed proposals indorsed "Proposals for Torpedo Boat Piers" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 15, 1915, and then there publicly opened, for constructing reinforced concrete torpedo boat piers at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR RAILROAD.

MARINE RAILWAY—Sealed proposals indorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 15, 1915, and then there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR BUILDING.

BUILDING, ETC.—Treasury Department, Supervising Architect's Office, Washington, D. C.—Sealed proposals will be opened in this office at 3 p. m. August 24, 1915, for the construction, complete (including mechanical equipment and approaches) of the United States post office at Grand Junction, Colo. Drawings and specifications may be obtained from the custodian of site at Grand Junction, Colo. or at this office, at the discretion of the supervising architect. JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR WHARF CONSTRUCTION.

WHARF—Sealed proposals indorsed "Proposals for Reinforced Concrete Wharf" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 18, 1915, and then there publicly opened, for constructing a reinforced concrete wharf at the United States naval station, Pearl Har-

bor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

BAKERY MACHINERY FOR PORTO RICO.

[Harwood Hill] correspondent, San Juan, July 28.]

Changes in the sanitary regulations for bakeries for the entire island provide that Porto Rican bakers must mix their dough by machinery and deliver their bread wrapped in paper. Ovens must be of an approved type and in some instances bakers will be compelled to install cutting machines. The regulations have been formulated to eliminate the handling of bread by workmen from the time the dough is mixed until the bread is delivered to the retail customer.

As these regulations practically revolutionize the baking conditions of the island there should be a market here for all sorts of bakers' mechanical supplies. When the new regulations were first issued it was found that it was impossible to obtain any adequate bakery machinery in the island and as there had never been any particular demand for such machinery local merchants in many instances were without even catalogues of manufacturers making such machinery.

Most of the island bakeries are small and the market demands small, inexpensive outfits.

Porto Rico imports annually over \$1,500,000 worth of flour—all from the United States.

FLOOD CONTROL ESTIMATES.

About \$16,000,000 is the amount eventually needed for flood control work in Los Angeles county, according to the final report of the board of flood-control engineers, filed with the Board of Supervisors recently. Of this, \$4,000,000 is figured as the cost of conservation work, and \$12,000,000 will be needed to construct channels through the county.

The sale of the ships of the Pacific Mail Steamship Company has brought public attention again to the La Follette Seaman's Bill. And the question of an American Merchant Marine will be before the public for some time to come.

The question of employment of American sailors will have to be settled along the broad lines of national policy. If the shipowners under

American registration can not compete with foreign shipping there must be either government subsidy or government ownership of ships. The question is one of political expediency.

NEW AUSTRALIAN STEEL PLANT.

[Commercial Attache William C. Downs, Melbourne, June 18; see also Commerce Reports for June 8 and July 1.]

The new iron and steel works of the Broken Hill Proprietary Co. (Ltd.), at Port Waratah, Newcastle, New South Wales, occupy a site of 264 acres in close proximity to the rich coal fields and limestone deposits, and have splendid harbor facilities. The entire plant, which has been installed at a cost of about \$7,000,000, consists of the most up-to-date and approved American machinery for steel making, and was erected under the management and supervision of Mr. David Baker, the well-known American steel expert, and the various processes of manufacture are in charge of American superintendents.

Although this new enterprise will seriously affect the sale of American steel rails in Australia, which in recent years has amounted to about \$5,000,000 per annum, it is gratifying that after a careful study of the largest steel plants in Europe and the United States American equipment was selected as the best and most efficient. It also insures American manufacturers of such equipment that further business will follow when the plant is enlarged.

[An elaborate souvenir booklet, issued by the steel company on the occasion of the formal opening of its plant, has been forwarded by Commercial Attache Downs. This booklet, which is illustrated with actual photographs, may be inspected at the Bureau of Foreign and Domestic Commerce or its branch offices.]

AMERICANS SHOULD FORM CHAMBER OF COMMERCE.

Consul General F. D. Cheshire reports from Canton, China, that at a meeting which was attended by representatives of British firms trading at Canton, it was unanimously resolved to form a British Chamber of Commerce in that city. It is stated that 30 firms joined as original members. The consul general recommends that American business men also become active in this field, as there is an opportunity for American goods.



Reg. U. S. Pat. Office

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White Brothers

5th and Brannan Streets

San Francisco

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

RESIDENCES—2, 1½ story and base, frame, \$2,000 each. San Francisco. Architect, none. Owner, N. J. Nelson, 1278 23rd street, S. F. These two houses will be erected on the east side of 18th avenue north of Cahrille and each has been designed to contain five rooms and bath. Interiors will be finished in pine and redwood. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile mantels. Bath rooms will be finished with imitation tile. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are being purchased.

RESIDENCE — 1½ story and base, frame, \$2,000. San Francisco. Architect, none. Owner, P. W. Montrouil, 270 Andover street, S. F. The dwelling will be erected on the west side of Bryant street north of Army. The dwelling will contain five rooms and bath. Interior will be finished in pine. Some hardwood floors will be used. There will be an open fire place in the living room. Mantel will be of tile or brick. Exterior of the house will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE — 2 story and base, frame, \$1,000. San Francisco. Architect, Walter G. Voddén, 760 Cole street, S. F. Owner, Thomas Voddén. The dwelling has been designed for a seven-room house, and will be erected on the west side of 16th avenue north of Balboa. Interior will be finished in pine and hardwood veneer with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile wainscot. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and the work will be done by Day Labor. Materials are now being purchased.

RESIDENCES—140, 2 story and base, frame, \$2,200 each. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, Joseph Rizzo. These dwellings will be erected on property at the corner of Mission and Marshall streets, and each will contain five rooms, bath and sleeping porch. Interiors will be finished in pine and redwood. Some hardwood floors will be used. There will be an open fire place in the living rooms. Mantels will be of tile and brick. Bath rooms will be finished in imitation tile. Exteriors will be covered with cement plaster on metal lath. Plans for the first group of four

dwellings have been completed and figures are now being taken. As soon as contracts have been let for this group a second group of four houses will be figured.

RESIDENCE — 2 story and base, frame, \$6,500. San Francisco. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner, Mr. Brown. The dwelling will be erected in Forest Hill, and has been designed for an eight-room house with bath, sleeping porch and a separate garage. Interior will be finished in hardwood, pine and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures have been taken. A contract will be let at once.

RESIDENCE — 2 story and base, frame, \$5,500. San Francisco. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner, Mr. Brown. The dwelling will be erected on 45th avenue between Anza and Geary streets, and has been designed for a seven-room house with bath and basement garage. Interior will be finished in southern gum, pine and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

RESIDENCES—3, 2 story and base, frame, \$2,500 each. San Francisco. Architect, none. Owner, F. Nelson, 30 l'residio Terrace, S. F. These dwellings will be erected on the north side of Parnassus avenue east of Arguello Boulevard, and each will contain six rooms and bath. Interior finish will be of pine with some elm panels. Hardwood floors will be used in the living and dining rooms and reception halls. There will be large open fire places in each living room. Mantels will be of tile and brick. Bath rooms will have tile wainscot. Automatic water heaters will be installed. Exteriors will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE — 2 story and base, frame, \$4,000. San Francisco. Architect, none. Owners, Johns Bros., 1903 Baker street, S. F. The dwelling has been designed for an eight-room house with bath and sleeping porch and will be erected on the west side of 18th avenue between Anza and Balboa

streets. Interior will be finished in pine, elm panels and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Tile floor and wainscot will be used in the living room, dining and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Tile floor and wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE — 2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, E. A. Schkade, 240 20th avenue, S. F. The dwelling has been designed for a seven-room house with bath and sleeping porch, and will be erected on the east side of 19th avenue south of California. Interior will be finished in pine and hardwood with white enamel in the bed rooms. There will be furnace heat and open fire places. Mantels will be of tile and brick. Hardwood floors will be used in the principal rooms. Plans provide for an automatic water heater. Bath room will have tile floor and wainscot. Exterior of the dwelling will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE — 2 story and base, frame, \$2,000. San Francisco. Architect, none. Owner John V. Stiefel, 739 11th avenue, S. F. The dwelling will be erected on the east side of 23rd avenue north of California street, and has been designed for a five-room house with bath and sleeping porch. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be an open fire place in the living room with a tile or brick mantel. Imitation tile wainscot will be used in the bath. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE — 2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, A. T. Morris, 501 11th avenue, S. F. The dwelling will be erected on the west side of 11th avenue north of Balboa street, and has been designed to contain seven rooms, bath and sleeping porch. Interior will be finished in pine with some elm panels and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire

aces. Mantels will be of tile and brick. Bath rooms will be finished in tile. An automatic water heater is specified. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

APARTMENT HOUSE—3 story and base, reinforced concrete and frame, \$35,000. San Francisco. Architects, Welch & Knoll, Hearst Bldg., S. F. Owner, Mrs. L. Paisley. The building will be erected on the west side of Taylor street near Washington, having a frontage of 42 feet and a depth of 7 1/2 feet. There will be a total of thirteen suites of four rooms each. All apartments will have wall beds and private baths. Plans provide for a large amusement room and lobby besides a roof garden. Interior will be finished in mahogany and white enamel. There will be steam heat, an automatic elevator and hot water system. Hardwood floors will be used in the principal rooms. Marble and tile wainscot will be used in the lobby. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

APARTMENT HOUSE—3 story and base, frame, \$10,000. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, Mr. Junk. The building will be erected at the corner of 17th and Church streets and will replace a structure recently destroyed by fire. The first floor will be arranged for a saloon and one store. Upper floors will contain four modern apartments of four rooms and bath. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. Patent store fronts and marble bases are specified. Bath rooms will be finished in imitation tile. Exterior will be covered with cement plaster on metal lath. Plans are now being prepared.

APARTMENT HOUSE AND STORES—3 story and base. Class C construction. Cost not stated. San Francisco. Architect, Charles E. J. Rogers, Kohl Bldg., S. F. Owner, Frank M. Scooner. The building will be erected on the west side of Mission street near 15th, and will have a frontage of 25 feet and a depth of 85 feet. There will be a store on the first floor besides the entrance. Upper floors will be arranged for a number of two and three room apartments with bath and wall bed. Interior will be finished in pine and elm. There will be steam heat and hot water system. Bath rooms will have tile floors and imitation tile wainscot. Patent store fronts are specified. Exterior of the building will be faced with pressed brick. Plans are complete and figures will be taken at once.

APARTMENT HOUSE—4 story and base. Class C construction, \$35,000. San Francisco. Architects, Smith & Stewart 241 Kearny street, S. F. Owners, Smith & Stewart. The building will be erected on the south side of Farrell street east of Van Ness avenue, and will cover a considerable ground area. There will be a number of two and three room apartments, all of which will have wall beds and private bath rooms. Interior will be finished in mahogany and white enamel. Hardwood floors will be used in the

principal rooms. Plans provide for steam heat, an automatic elevator and hot water system. Bath rooms will be finished in tile and equipped with high class fixtures. Marble and tile wainscot will be used in the entrance. Exterior of the building will be faced with cement plaster in imitation of cut stone. Plans are complete and figures are in and under advisement.

APARTMENT HOUSE—5 story and base, reinforced concrete, \$10,000. San Francisco. Engineer, Pierre Zucco, 166 Geary street, S. F. Owner, J. Dompniak. The building will be erected on the east side of Hyde street between Sutter and Bush streets, and has been designed to contain a total of thirty suites of two and three rooms. All apartments will have wall beds and private bath rooms. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the principal rooms. There will be steam heat, an oil burning furnace, automatic elevator and a hot water system. Bath rooms will be finished in tile. Marble and tile will be used in the entrance vestibule. Exterior of the building will be faced with cement plaster. Plans are being prepared.

APARTMENT HOUSE—3 story and base, frame, \$10,000. San Francisco. Architect, John J. Foley, 46 Kearny street, S. F. Owner, Mrs. Schultz. The building will be erected on Mission street between 24th and 25th streets, and has been designed to contain stores on the first floor and a number of small apartments on the upper two floors. Interior will be finished in pine and elm panels. There will be 30-gallon boilers. Each apartment will have a wall bed and private bath room. Tile wainscot will be used in the baths. Patent store fronts are specified. Exterior will be covered with rustic and shiplap. Plans are complete and figures will be called for at once.

WINEY—2 story and base, reinforced concrete. Cost not stated. San Francisco. Architect, P. Righetti, Phelan Bldg., S. F. Owners, Promotion Wine and Liquor Co. The building will be erected at the corner of Lombard and Columbus, and will cover a large ground area. Construction will be fireproof with reinforced concrete floors and walls and metal window frames and sash. No interior finish will be used. There will be a number of large wooden tanks. Exterior of the building will be faced with cement plaster. Plans are complete and figures are now being taken.

FLATS—2 story and base, frame, \$17,500. San Francisco. Architect, none. Owner, Margaret A. Glunz, 525 Balboa street, S. F. The building will be erected on the west side of 6th avenue south of Balboa, and has been designed to contain two modern flats of five and six rooms. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile mantels. Tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior of the building will be covered with rustic and shiplap. Plans are complete and in the hands of the owner who will do the work by Day Labor.

STORES AND OFFICES—3 story and base. Class A construction, \$200,000

San Francisco. Architects, O'Brien Bros., 210 Montgomery street, S. F. Owner's name withheld. The building will be erected at the southwest corner of Davis and California streets and will cover a large ground area. The first floor will contain two large wholesale stores, which have already been leased. Upper floors will be arranged for modern offices. There will be a pile foundation, complete steel frame, concrete floors and roof slabs. Hollow tile interior partitions and metal window sash and frames will be specified. Interior will be finished in hardwood, metal and marble. Plans provide for steam heat, three elevators, vacuum cleaning and oil burning equipment. Exterior will be faced with pressed brick and terra cotta. Plans are being prepared.

Contracts Awarded

PIER—Steel and reinforced concrete, \$18,877. San Francisco. Engineer, Assistant State Engineer Newman, Ferry Bldg., S. F. Owners, State of California. Contractor, Tibbitts Pacific Co., S. P. Contract price \$18,877. A complete list of the bids received will be found under the heading of San Francisco.

State Harbor Board Award Contract

Ten Bids Submitted for Pier No. 22 and Contract Awarded to Tibbitts Pacific Co. for \$48,877.

Bids were opened by the State Board of Harbor Commissioners at their Thursday meeting for the construction of Pier No. 22 on the San Francisco water front. The Tibbitts Pacific Co. presented the lowest figure at \$18,877 and was awarded the contract. Following is a complete list of the bids received:

Constructing Pier No. 22.

Thomson Bridge Co.	\$51,343
John Monk	53,862
Tibbitts Pacific Co.	48,877
J. D. Hannah	51,000
Lange & Bergstrom	55,000
Karl Ehrhart	57,931
C. Lambert	49,300
Constr. & Eng. Co.	19,629
San Francisco Bridge Co.	52,477
Healy-Tibbitts Constr. Co.	19,223

Building Contracts Awarded

San Francisco

No.	Owner.	Contractor	Am't.
2273	Rondelli	Johnson	1000
2280	Corbett	Helms	1725
2281	Grace	Grace	1500
2282	Keane	Rose	2225
2283	Nelson	Nelson	2500
2284	Likens	Commary	1000
2285	Stone	Forbes	1500
2286	Payne	Reedy	1000
2287	Sloss	Liebert	1800
2288	Kwong Lee	Shimo	400
2289	Mohler	Sharnan	1950
2290	Brush	Plant	2500
2291	Sirbu	Bagge	3800
2292	Menzel	Menzel	2450
2293	Mason	Thomas	2300
2294	Chelini	Smith	1050
2295	Kureka Teaming	Owner	400
2296	Bondet	Klahn	800
2297	Schukde	Schukde	2850
2298	Molnar	Ingrasim	1000
2299	Born	Born	5000
2300	Pearlstein	Pae Woodwick	800
2301	Carlson	Hannah	1000
2302	Johnston	Johnston	800
2303	Rooney	Mager	2750
2304	McInerney	Kundsen	2685

2305	Hyman	Elam	4898
2306	Grünenberg	Malloch	4165
2307	Woods	Browning	1200
2308	Union Oil	Union Iron	\$20000
2309	Academy Science	Fuller	2300
2310	Same	Georleke	2300
2311	S. F. Invest.	Monson	19500
2312	Same	Colusa	4550
2313	Bowler	Roberts	2100
2314	City Invest Co.	McGilvray	
2315	Nelson	Nelson	2500
2316	Same	Same	2500
2317	Same	Same	2500
2318	Montrouil	Montrouil	2000
2319	Nelson	Nelson	2000
2320	Same	Same	2000
2321	Vodden	Vodden	4000
2322	Morris	Morris	2800
2323	Rubino	Olsen	2000
2324	Bowen	Hughes	1200
2325	Same	Drake	3620
2326	Same	Malloch	2046
2327	Same	Drake	2675
2328	Same	Schrader	2090
2329	Steinhach	Brahm	800
2330	Same	Same	1700
2331	Same	Same	1700
2332	Prog Theatre	Kronnick	500
2333	Wolfiner	Wolfiner	1800
2334	Hamill	Hamill	400
2335	Godeau	Godeau	400
2336	Murisiale	Murisiale	400
2337	Hiller	Hiller	7700
2338	Yager	Yager	4000
2339	Bellegard	Olsen	700
2340	Morey	Sperisen	400
2341	Garofolo	Garofolo	1000
2342	Hong On Cong	Ponsero	1000
2343	Livermore	Marques	25823
2344	Ousset	McKay	1500
2345	O'Brien	Klimm	4875
2346	Same	Riddle	2881
2347	Same	Globe Elec.	1000
2348	Same	Seibert	1300
2349	Same	Marshall	1005
2350	Same	Spencer	1500
2351	Ryan	Thunberg	5865
2352	St. Francis Hspital ..	Vulcan	2000
2353	Vagner	Branch	1400
2354	Samuelson	Olsen	1500
2355	Koenig	Leonard	2840
2356	McCreery	Nielsen	5000
2357	Bellas	Lundy	1200
2358	Mission Hvy	Binet	15850
2359	Sheehy Estate	Fisher	1500
2360	Escalle	Elvin	4600
2361	Parsons	Nilson	5990
2362	Homestead	Graham	7600
2363	Perry	Holm	3250

ALTERATIONS

(2279) NOS. 3264-74 MISSION. Alter store fronts.

Owner.....Mrs. L. Bondeli, 145 Tiffany Ave., San Francisco.

Architect...None.

Contractor..Johnson & Hatland, 1513 Church, San Francisco.

COST, \$1000

FRAME DWELLING

(2280) S CLINTON PARK 260 W Guerrero. One-story and basement frame dwelling.

Owner.....L. Corbett.

Architect...Edw. F. Helms.

Contractor..Edw. F. Helms, California and 5th Ave, San Francisco.

COST, \$1725

FRAME DWELLING

(2281) W UTAH 125 N 24th. One and one-half-story and basement frame dwelling.

Owner.....John T. Grace, 1013 Rhode Island, San Francisco.

Architect...None.

Day's work. COST, \$1500

ALTERATIONS

(2282) NO. 924 GRANT AVE. Alter and make changes in rooming house.

Owner.....Geo. B. Keane.

Architect...H. Gold, Merchants' Bank Bldg., San Francisco

Contractor..L. A. Rose, Monadnock Bldg., San Francisco.

COST, \$2225

FRAME DWELLING

(2283) W TWENTY-EIGHTH AVE 408-4 S Lincoln Way. Two-story and basement frame dwelling.

Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.

Architect...None.

Day's work. COST, \$2500

ADDITION

(2284) NO. 2263 CALIFORNIA. Add 3 rooms to dwelling.

Owner.....Dr. J. W. Likens, Premises.

Architect...None.

Contractor..Commarty-Peterson Co., 742 Market, San Francisco.

COST, \$1000

REPAIRS

(2285) NO. 1074 DOLORES. General repairs to dwelling.

Owner.....Mrs. C. F. Stone, 2816 Prince, Berkeley.

Architect...None.

Contractor..E. C. Forbes, 2828 Prince, Berkeley.

COST, \$1500

FRAME DWELLING

(2286) SW GRAFTON AND PLUMAS. One-story and basement frame dwlg.

Owner.....Mrs. M. Payne, Premises.

Architect...None.

Contractor..Wm. M. Reedy, 157 Bronte, San Francisco

COST, \$1000

ALTERATIONS

(2287) E VAN NESS AVE 106 N Pine. Alter for dance hall and studio.

Owner.....Sloss & Lilienthal, Alaska Commercial Bldg., S. F.

Architect...M. J. Lyon Co., Nevada Bank Bldg., S. F.

Contractor..J. M. Liebert, 1104 Nevada Bank Bldg., S. F.

COST, \$1806

FRAME DWELLING

(2288) LOTS 110-111 SOUTH SAN Francisco. One story and basement frame dwelling.

Owner.....Kwong Lee, 766 Sacramento, San Francisco.

Architect...None.

Contractor..Geo. Nimmo, 634 Clay, San Francisco.

COST, \$400

FRAME DWELLING

(2289) S GALVEZ 150 W Mendel. One-story and basement frame dwelling.

Owner.....Louis Mohler, Fairfax near "M," San Francisco.

Architect...None.

Contractor..T. L. Sharman, 1440 Shafter Ave., San Francisco.

COST, \$1950

FRAME DWELLING

(2290) S TWENTY-SIXTH 80 W Sanchez. Two-story and basement frame dwelling.

Owner.....Mrs. Brush, 26th near Sanchez, San Francisco.

Architect...E. J. Plant, 4296 24th.

Contractor..Wm. Plant, 4296 24th, San Francisco.

COST, \$2500

FRAME STORES AND FLATS

(2291) S CALIFORNIA 33-4 W 17th Ave. Two-story and basement frame store and (2) flats.

Owner.....M. Sirbu, 149 12th Ave., San Francisco.

Architect...None.

Contractor..Spencer Bagge, 1531 Shrader, San Francisco.

COST, \$3800

FRAME DWELLING

(2292) E FORTY-FIFTH AVE 250 Fulton. Two-story and basement frame dwelling.

Owner.....Carl Menzel, 850 45th Ave San Francisco.

Architect...None.

Day's work. COST, \$245

FRAME DWELLING

(2293) N ELIZABETH 200 W Castro. Two-story and basement frame dwlg.

Owner.....Mrs. Chas. Mason and J. S. Greer, 4136 24th, S. F.

Architect...O. R. Ochs, 4136 24th, S. F.

Contractor..A. J. Thomas, 4136 24th S. F.

COST, \$230

ADDITION

(2294) NO. 450 PINE. Raise and add to dwelling.

Owner.....Mr. Chelini, Premises.

Architect...None.

Contractor..L. C. Smith, 832 Russia San Francisco.

COST, \$1000

ALTERATIONS

(2295) N GREENWICH 56 E Buchanan. Alter stable.

Owner.....Eureka Teaming Co., 1819 Green, San Francisco.

Architect...None.

Day's work. COST, \$400

ALTERATIONS

(2296) NOS. 12-16 STILLMAN. Alter flats.

Owner.....Roht. M. H. Berndt, 1350 6th Ave, San Francisco.

Architect...A. Klahn, 27 Chenery, S. F.

Contractor..A. Klahn & Son, 27 Chenery, San Francisco.

COST, \$800

FRAME DWELLING

(2297) E NINETEENTH AVE 75 S California. Two-story and basement frame dwelling.

Owner.....E. A. Schkade, 240 20th Ave, San Francisco.

Architect...None.

Day's work. COST, \$2350

BAKE OVEN

(2298) NO. 1700 STOCKTON. Install bake oven.

Owner.....G. Molinari and A. Soracco, Premises.

Architect...None.

Contractor..G. Ingrassia, 1622 Powell, San Francisco.

COST, \$1000

FRAME RESIDENCE

(2299) LOT 11 Ashbury Terrace. Two-story and basement frame residence.

Owner.....S. A. Born Bldg. Co., 660 Market, San Francisco.

Architect...E. G. Bolles, 660 Market, San Francisco.

Day's work. COST, \$5000

ALTERATIONS

(2300) NO. 156 POWELL. Alter store front.

Owner.....Pearlstein & Jacobs, Prem.

Architect...None.

Contractor..Pacific Woodworking Co., 239 7th, San Francisco.

COST, \$300

RETAINING WALL

(2301) NO. 30 WEST CLAY PARK. Retaining wall.

Owner.....W. C. Culberson, Premises.
Architect...None.
Contractor...J. D. Hannah, 750 Mo-
nadnock Bldg., S. F.
COST, \$1000

DWELLING
(2302) W TWENTY-SEVENTH AVE
150 S Lawton. One-story and base-
ment frame dwelling.

Owner.....J. W. Johnston, 164 Boyce,
San Francisco.
Architect...None.
Day's work. COST, \$800

FLAT AND GARAGE
(2303) W BRYANT 104 N 25th. All
work except plumbing, painting, gas
fixtures and shades for one-story flat
and garage building.

Owner.....Peter Rooney, 2853 Folsom,
San Francisco.
Architect...None.
Contractor...Mager Bros., 110 Jessie,
San Francisco.

Filed Aug. 9, '15. Dated Aug. 9, '15.
Frame up\$710
Brown coated 680
Completed 680
Usual 35 days..... 680
TOTAL COST, \$2750

Bond, limit, forfeit, none. Plans and
specifications filed.

FRAME STORES
(2304) NE CAPITOL AVE & BROAD
All work for one-story frame store
building.

Owner.....Jos. P. McInerney, 156
Broad, San Francisco.
Architect...Frank S. Holland, 100
Haight, San Francisco.
Contractor...Knudsen & Westre.
Filed Aug. 9, '15. Dated Aug. 7, '15.
Itustie, ship lap and roof boards
on\$671
Brown coated 671
Completed and accepted..... 671
Usual 35 days..... 672
TOTAL COST, \$2685

Bond, \$1400. Sureties, S. F. Hogevoil
and Geo. Lagomarsino. Limit, 60 days.
Forfeit, none. Plans and specifications
filed.

ALTERATIONS

(2265) NW STOCKTON AND O'FAR-
rell W 137-6xN 137-6. Alterations to
store front and construction of stair-
way to second floor of building.
Owner.....Hyman Bros., Company
Architect...Henry H. Meyers, Kohl
Bldg., San Francisco.
Contractor...Thomas Elam & Son, 180
Jessie, San Francisco.

Filed Aug. 9, '15. Dated Aug. 7, '15.
On 15th of each month commene-
ing August 15..... 75%
Balance, 25%.....\$1224.62
TOTAL COST, \$4898.50
Bond, \$2449.50. Aetna Accident & Lia-
sonality Co. Limit, 40 days. Bonus, \$30.
Forfeit, \$30. Plans and specifications
filed.

FRAME RESIDENCE
(2306) W TWENTY-FIRST AVE 275
N California N 25xW 120. All work
for two-story and basement frame
residence.

Owner.....R. Gruenberg.
Architect...L. M. Hausmann.
Contractor...J. S. Malloch, 110 Jessie,
San Francisco.
Filed Aug. 9, '15. Dated Aug. 2, '15

Frame up\$1040
Roof on and interior plastering
finished 1040
Completed and accepted..... 1040
TOTAL COST, \$4165

Bond, \$2100. Surety, The Surety Co. of
California. Limit, without delay.
Forfeit, \$3. Plans and specifications
filed.

FRAME COTTAGE
(2307) SE MOSCOW 200 SW Russia
Ave SW 23xSE 100 Ptn Lot 2 Blk 80
Exel Hd. Ass'n. All work for one-
story and basement frame cottage.
Owner.....Henry and Rosa Woods,
643 Moscow, S. F.
Architect...By Contractor.
Contractor...G. H. Browning, 618 Mos-
cow, San Francisco.

Filed Aug. 9, '15. Dated Aug. 3, '15.
Frame up\$200
Brown coated 300
Completed and accepted..... 300
Usual 35 days..... 300
TOTAL COST, \$1200

Bond, \$600. Surety, Massachusetts
Bonding & Insurance Co. Limit, 37
days after Aug. 9. Forfeit, \$3. Plans
and specifications filed.

OIL TANK VESSEL
(2308) TO DELIVER AT SAN FRAN-
cisco. All work for a single screw
oil tank vessel.

Owner.....Union Oil Co. of California,
Mills Bldg., S. F.
Architect...None.
Contractor...Union Iron Works Co., 311
California, San Francisco.

Filed Aug. 10, '15. Dated July 7, '15.
July 25, 1915.....\$75,000
September 25, 1915..... 75,000
November 25, 1915..... 75,000
December 24, 1916..... 75,000
January 25, 1916..... 75,000
February 25, 1916..... 75,000
March 25, 1916..... 75,000
May 25, 1916..... 75,000
June 25, 1916..... 75,000
July 25, 1916..... 75,000
60 days after delivery..... 70,000
TOTAL COST, \$820,000

Bond, none. Limit, July 7, 1916. Forfeit,
\$100. Plans and specifications,
none.

PLATE GLASS, ETC.
(2309) IN GOLDEN GATE PARK.
All work for furnishing and install-
ing all plate glass for show cases for
Museum Building.

Owner.....California Academy of
Sciences.
Architect...Lewis P. Hobart, Crocker
Bldg., San Francisco.
Contractor...W. P. Fuller Co., Beale &
Mission, San Francisco.
Filed Aug. 10, '15. Dated July 7, '15.
On 15th of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$2300

Bond, none. Limit, 10 weeks. Forfeit,
none. Plans and specifications filed.

(2310) FURNISHING AND INSTALL-
ing all show cases on above.
Contractor...W. A. Goerick, 22 Battery
San Francisco.

Filed Aug. 10, '15. Dated July 7, '15.
Payments same as above.....
TOTAL COST, \$3617
Bond, none. Limit, 8 weeks. Forfeit,
none. Plans and specifications filed.

CLASS "C" BUILDING

(2311) N CALIFORNIA 30 E Leides-
dorff E 20 m or 1 by N 124. All work
except piling, plumbing, wiring,
elevator, heating, painting, finish
hardware, light fixtures and shades
for three-story and basement Class
"C" building.

Owner...San Francisco Investment
Corporation.
Architect...Nathaniel Blaisdell, 255
California, San Francisco.
Contractor...Monson Bros., 1907 Bryant
San Francisco.

Filed Aug. 10, '15. Dated Aug. 4, '15.
1st tier of joists and sidewalk
beams set\$2900
3rd floor joists set..... 2900
Roofed and lathed and ready for
plastering 2900
Plastering completed and sashes
glazed and hung..... 2900
Completed and accepted..... 2025
Usual 35 days..... 4875
TOTAL COST, \$19,500

Bond, \$3750. Surety, New England
Casualty Co. Limit, 90 days. Forfeit,
\$20. Plans and specifications filed.

(2312) CUTTING, FURNISHING,
carving and setting of granite and
marble stone work on above.

Contractor...Colusa Sandstone Co., 3
Potrero Ave., S. F.
Filed Aug. 10, '15. Dated Aug. 7, '15
Stone work in place to level of
2nd story sill course.....\$1500
Completed and accepted..... 1662
Usual 35 days..... 1388
TOTAL COST, \$4550

Bond, \$2275. Surety, Massachusetts
Bonding & Insurance Co. Limit, 60
days. Forfeit, \$10. Plans and speci-
fications filed.

FRAME COTTAGE
(2313) NW VIENNA 100 NE Persia
Ave NE 25xNW 100. All work for
one and one-half-story 6-room and
basement frame cottage

Owner.....William J. Bowler, 466
Vienna, San Francisco.
Architect...None.
Contractor...Louis J. Roberts, 557 Do-
lores, San Francisco.

Filed Aug. 10, '15. Dated July 28, '15.
On execution of agreement.....\$175.00
Frame up 481.25
Brown coated 481.25
Completed 481.25
Usual 35 days..... 481.25
TOTAL COST, \$2100.00

Bond, \$1050. Sureties, L. Ferreiros and
L. Depauli. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

REPAIRING

(2314) SW THIRD AND MARKET SW
75xSE 70. All work for repairing
stone work on Claus Spreckels Bldg.
Owner.....City Investment Co., 1st
National Bank Bldg., S. F.
Architect...J. R. Miller, Lick Bldg.,
San Francisco.

Contractor...The McGilvray Stone Co.,
631 Townsend, S. F.
Filed Aug. 10, '15. Dated Aug. 5, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, Contractor to receive
cost and 10% additional.
Bond, \$2500. Surety, U. S. Fidelity Co.
Limit, 60 days as required. Forfeit, none.
Plans and specifications filed

FRAME DWELLING

(2315) N PARNASSUS 114 E Arguello
Bldg. Two-story and basement frame
dwelling.Owner.....F. Nelson, 30 Presidio Ter-
race, San Francisco.

Architect...None.

Day's work. COST, \$2500

FRAME DWELLING

(2316) N PARNASSUS 62 E Arguello
Bldg. Two-story and basement frame
dwelling.Owner.....F. Nelson, 30 Presidio Ter-
race, San Francisco.

Architect...None.

Day's work. COST, \$2500

FRAME DWELLING

(2317) N PARNASSUS 88 E Arguello
Bldg. Two-story and basement frame
dwelling.Owner.....F. Nelson, 30 Presidio Ter-
race, San Francisco.

Architect...None.

Day's work. COST, \$2500

FRAME DWELLING

(2318) W BRYANT 76-5 N Army. One
and one-half-story and basement
frame dwelling.Owner.....P. W. Montrouil, 270 An-
dover, San Francisco.

Architect...None.

Day's work. COST, \$2000

FRAME DWELLING

(2319) E EIGHTEENTH AVE 352 N
Cabrillo One and one-half-story and
basement frame dwelling.

Owner.....N. J. Nelson 4278 23rd, S. F.

Architect...None.

Day's work. COST, \$2300

FRAME DWELLING

(2320) E EIGHTEENTH AVE 375 N
Cabrillo One and one-half-story and
basement frame dwelling.

Owner.....N. J. Nelson, 4278 23d, S. F.

Architect...None.

Day's work. COST, \$2000

FRAME DWELLING

(2321) W SIXTYEIGHTH AVE 25 N Bal-
boa. Two-story and basement frame
dwelling.Owner.....Thos. Vodden, 1015 Cole,
San Francisco.Architect...Walter G. Vodden, 760 Cole
San Francisco.Contractor...Thos. Vodden & Son, 1015
Cole, San Francisco.

COST, \$1000

FRAME DWELLING

(2322) W ELEVENTH AVE 150 N Bal-
boa. Two-story and basement frame
dwelling.Owner.....A. T. Morris, 504 11th Ave.,
San Francisco.

Architect...None.

Day's work. COST, \$2300

FRAME FLATS AND STORE

(2323) E BARKS 25 S Eugenia Ave S
25x60. All work for two-story and
basement frame flats and store.Owner.....Vincenzo and Joseph Ru-
bino, 370 Filbert, S. F.

Architect...None.

Contractor...O. Olsen, 307 Bradford,
San Francisco.

Filed Aug. 11, '15. Dated Aug. 10, '15.

Frame up and roof on.....\$500

Outside finish on & brown coated 500

Completed and accepted.....500

Usual 35 days.....500

TOTAL COST, \$2000

Bond, none. Limit, 60 days from issu-
ing permit. Forfeit, none. Plans and
specifications filed.

SHEET METAL WORK

(2324) N POST 164-3 E Hyde 75-9x
137-6. Sheet metal work for bldg.Owner.....W. H. Bowen, 242 Sutter,
San Francisco.Architect...M. I. Schwartz, 14 Mont-
gomery, San Francisco.Contractor...Henry J. Hughes, 1500
Guerrero, San Francisco.

Filed Aug. 11, '15. Dated Aug. 10, '15.

Completed.....\$800

Usual 35 days.....400

TOTAL COST, \$1200

Bond, none. Limit, 20 days after Aug.
12. Forfeit, \$10. Plans and specifica-
tions, none.(2325) BRICK WORK, CEMENT OR-
nament and plastering, marble, etc.,
on above.Contractor...H. E. Drake, 1333 Lincoln
Way, San Francisco.

Filed Aug. 11, '15. Dated Aug. 10, '15.

50% of work done.....\$900

75% of work done.....900

Completed and accepted.....900

Usual 35 days.....920

TOTAL COST, \$3620

Bond, none. Limit, 20 days after Aug.
12. Forfeit, plans and specifications,
none.(2326) PLUMBING, CONCRETE, CAR-
penter, mill, labor, hardware and
glass on above.Contractor...J. S. Malloch, 110 Jessie,
San Francisco.

Filed Aug. 11, '15. Dated Aug. 10, '15.

50% completed.....\$511.50

75% completed.....511.50

Completed and accepted.....511.50

Usual 35 days.....511.50

TOTAL COST, \$2046.00

Bond, none. Limit, 25 days from Aug.
12. Forfeit, \$10. Plans and specifica-
tions, none.(2327) GRADING, UNDERPINNING
and brick work on above.Contractor...H. E. Drake, 1333 Lincoln
Way, San Francisco.

Filed Aug. 11, '15. Dated Aug. 10, '15.

Completed and accepted.....\$2600

Usual 35 days.....675

TOTAL COST, \$2675

Bond, none. Limit, 15 days after Aug.
12. Forfeit, none. Plans and specifi-
cations, none.(2328) STRUCTURAL STEEL WORK,
trusses, columns, bracing, purlins,
lintels, etc., on above.Contractor...The Schrader Iron Works,
1247 Harrison, S. F.

Filed Aug. 11, '15. Dated Aug. 10, '15.

On completion.....\$1500

Usual 35 days.....590

TOTAL COST, \$2090

Bond, none. Limit, 20 days from Aug.
12. Forfeit, \$10. Plans and specifica-
tions, none.

FRAME DWELLING

(2329) E SAN JOSE 239-8 S Santa
Ynez. One and one-half-story and
basement frame dwelling.Owner.....H. Steinbach, 350 Mills
Bldg., San Francisco.

Architect...None.

Contractor...W. H. Grahn, 2840 Bryant,
San Francisco.

COST, \$1700

FRAME DWELLING

(2330) E SAN JOSE 287-6 S Santa
Ynez. One and one-half-story and
basement frame dwelling.Owner.....H. Steinbach, 350 Mills
Bldg., San Francisco.

Architect...None.

Contractor...W. H. Grahn, 2840 Bryant,
San Francisco.

COST, \$1700

FRAME DWELLING

(2331) E SAN JOSE 263-8 S Santa
Ynez. One and one-half-story and
basement frame dwelling.Owner.....H. Steinbach, 350 Mills
Bldg., San Francisco.

Architect...None.

Contractor...W. H. Grahn, 2840 Bryant,
San Francisco.

COST, \$1700

ALTERATIONS

(2332) W FILLMORE 150 N O'Farrell.
Alter theatre.

Owner.....Progress Theatre Co.

Architect...Reid Bros., California-
Pacific Bldg., S. F.Contractor...Kronnick Bros., 1659
O'Farrell, San Francisco.

COST, \$500

FRAME DWELLING

(2333) E TWENTY-THIRD AVE 30 S
Vincente. One-story and basement
frame dwelling.Owner.....F. Wolfinger, 1193 York,
San Francisco.

Architect...None.

Day's work. COST, \$800

FRAME DWELLING

(2334) S GEARY 65 E 20th Ave. One-
story and basement frame dwlg.Owner.....Thos. Hamill, 268 25th Ave.
San Francisco.

Architect...None.

Day's work. COST, \$1800

ALTERATIONS

(2335) NO. 41 VAN NESS AVE. Ex-
tend elevator shaft.

Owner.....Julius Godeau, Premises.

Architect...None.

Day's work. COST, \$400

ADDITION

(2336) NE FITZGERALD AND JEN-
nings. Add 2 rooms to dwelling.Owner.....G. Murisiale, 2530 Jennings
San Francisco.

Architect...None.

Day's work. COST, \$460

FRAME DWELLING

(2337) S GREEN 173 W Scott. Two-
story and basement frame dwelling.Owner.....H. F. Miller, 72 3rd Ave.,
San Francisco.Architect...Wm. Knowles, Hearst
Bldg. San Francisco.

Day's work. COST, \$7700

FRAME FLATS

(2338) S LAKE 57-6 W 12th Ave. Two
story and basement frame (2) flats.Owner.....Mrs. Grace Yager, 1539
Clay, San Francisco.

Architect...None.

Contractor...W. V. Yager, 1239 Polk,
San Francisco.

COST, \$4060

FRAME SHOP
(2339) W RAILROAD AVE 104 N
Evans. One-story frame shop.
Owner.....P. J. Bellegarde, 1395 New-
combe, San Francisco.
Architect...None.
Contractor...Chas. Olsen 1237 Evans
Ave., San Francisco.
COST, \$700

ADDITION
(2340) NOS. 57-59-61 ALBION AVE.
Add to flats.
Owner.....Mr. Moerey, 123 Folsom,
San Francisco.
Architect...None.
Contractor...John Sperisen, 1834 15th,
San Francisco.
COST, \$400

FRAME DWELLING
(2341) W FORSTER 50 S Staples. One
and one-half-story and basement
frame dwelling.
Owner.....J. B. Garofolo, 246 Precita
Ave., San Francisco.
Architect...None.
Day's work. COST \$1000

ALTERATIONS
(2342) NO. 657 JACKSON. Construct
light well.
Owner.....Hong On Cong, 1152 Stock-
ton, San Francisco.
Architect...None.
Contractor...Ponsero Bros., 3 Stark,
San Francisco.
COST, \$1000

FRAME RESIDENCES
(2343) SE JONES AND VALLEJO 61-6
on Vallejo and 137-6 on Jones. All
work for three two-story and base-
ment frame-residences.
Owner.....H. P. Livermore, 1023 Val-
lejo, San Francisco.
Architect...Chas. W. McCall, Central
Bank Bldg., Oakland.
Contractor...Marcus Marcussen, 606
Royal Insurance Bldg., S. F.
Filed Aug. 12, '15. Dated Aug. 11, '15.
Frames completed\$3500.00
Ready for lathing..... 3500.00
Interior and 2nd coat of exterior
plaster on 1328.50
Interior mill work done..... 4500.00
Completed and accepted..... 5000.00
Usual 35 days..... 6000.00
TOTAL COST, \$23,828.50
Bond, \$12,000. Sureties, Mitchell
Thompson and Fred Linderman. Limit,
115 days. Forfeit, \$7.50. Plans and
specifications filed.

FRAME DWELLING
(2344) FOURTEENTH AVE near Geary
All work for two-story frame dwlg.
Owner.....Mrs. C. Ousset.
Architect...None.
Contractor...Geo. W. McKay Co., 401
14th Ave., San Francisco.
Filed Aug. 12, '15. Dated Aug. 9, '15.
On 1st and 15th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$4500
Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

FRAME APARTMENTS
(2345) NW GOLDEN GATE AVE AND
Pierce N 137-6XW 34-4½. Plumbing,
gas fitting and sewerage for three-
story frame apartment building.
Owner.....O' Brien Bros., Inc.
Architect...O'Brien Bros., Inc., 204
Montgomery, S. F.

Contractor...Frank J. Kimm, 221 Oak,
San Francisco.
Filed Aug. 12, '15. Dated July 23, '15.
Payments on 1st of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$4575
Bond, none. Limit, 30 days after build-
ing white coated. Forfeit, none. Plans
and specifications filed.

(2346) INTERIOR AND EXTERIOR
lath and plaster on above.
Contractor...L. V. Riddle, 1474 Sacra-
mento, San Francisco.
Filed Aug. 12, '15. Dated Aug. 8, '15.
Payments same as above.....
TOTAL COST, \$2881
Bond, none. Limit, 40 days after ready
for lath. Forfeit, none. Plans and
specifications filed.

(2347) ELECTRIC WIRING ON ABOVE
Contractor...Globe Elec. Co., 1959 Mis-
sion, San Francisco.
Filed Aug. 12, '15. Dated Aug. 7, '15.
Payments same as above.....
TOTAL COST, \$1000
Bond, none. Limit, 30 days after white
coated. Forfeit, none. Plans and spec-
ifications filed.

**(2348) STEAM HEATING AND DO-
mestic water heating equipment on
above.**
Contractor...Seibert Co., 1433 Divisa-
dero, San Francisco.
Filed Aug. 12, '15. Dated July 7, '15.
Piping roughed in and covered...\$325
Boiler heater and oil tank in... 325
Completed and accepted..... 325
Usual 35 days..... 325
TOTAL COST, \$1300
Bond, none. Limit, 20 days after build-
ing white coated. Forfeit, none. Plans
and specifications filed.

(2349) 24 WALL BEDS ON ABOVE.
Contractor...Marshall & Stearns Co.,
Phelan Bldg., S. F.
Filed Aug. 12, '15. Dated July 30, '15.
½ cash when bed fronts and
frames delivered
On completionBalance
TOTAL COST, \$1008
Bond, limit, forfeit, plans and spec-
ifications, none.

**(2350) 1 DIRECT CONNECTED ELEC-
tric full automatic elevator on above.**
Contractor...Spencer Elevator Co., 128
Beale, San Francisco.
Filed Aug. 12, '15. Dated June 14, '15.
Guide posts and overhead work in ¼
Elevator delivered..... ¼
On completion ¼
Usual 35 days..... ¼
TOTAL COST, \$1560
Bond, limit, forfeit, plans and specifi-
cations, none.

FRAME FLATS
(2351) S HAYES 181-3 W Clayton W
25X8 137-6. All work except finish
hardware, electric light fixtures,
wall paper and window shades for
two-story and basement frame flats.
Owner.....Henry P. Ryan, 2637 22nd,
San Francisco.
Architect...Albert Schroeffer.
Contractor...Oscar W. Thunberg, 678
9th Ave., San Francisco.
Filed Aug. 12, '15. Dated Aug. 11, '15.
Frame up\$1200
Brown coated 1500
Completed and accepted..... 1690
Usual 35 days..... 1475

TOTAL COST, \$3865
Bond, \$253. Sureties, Edwin T. Peter-
son and O. C. Holt. Limit, 80 days.
Forfeit, none. Plans and specifications
filed.

ADDITIONS
(2352) NE BUSH AND HYDE. Erect
two rooms on roof of present build-
ing, construct same with steel chan-
nel studding for walls, cover outside
with galvanized iron; inside with
metal lath and plaster; roof to have
5-ply felt and gravel; T and G floor.
Owner.....St. Francis Hospital Co.,
Premises.
Architect...None.
Contractor...Vulcan Iron Works, Fran-
cisco and Kearny, S. F.
COST, \$2000

ALTERATIONS
(2353) NO. 241 LEXINGTON. Move
alter and add to dwelling.
Owner.....A. Wagner, Premises.
Architect...None.
Contractor...J. Branch, 1080 Sanchez,
San Francisco.
COST, \$1400

FRAME DWELLING
(2354) E BRUNSWICK 57 S Newton.
One and one-half-story and basement
frame dwelling.
Owner.....A. M. Samuelson, 3732 21st
Ave., San Francisco.
Architect...None.
Contractor...H. C. Olsen, 338 Holloway,
San Francisco.
COST, \$1500

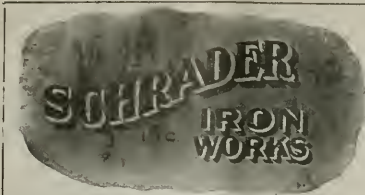
FRAME DWELLING
(2355) S JUDAH 37½ W Twenty-
second Ave. Two-story and basement
frame dwelling.
Owner.....P. Koenig, 1247 45th Ave.,
San Francisco.
Architect...None.
Contractor...Peter M. Leonard, 1247
45th Ave., San Francisco.
COST, \$2840

ADDITION
(2356) NO. 332 PINE (Orient Building.)
Addition of room on roof (Class "A"
construction).
Owner.....McCreery Estate, 221 San-
some, San Francisco.
Architect...Charles Peter Weeks, Mut-
ual Bank Bldg., S. F.
Contractor...N. F. Nielsen, 110 Jessie,
San Francisco.
COST, \$5000

FRAME DWELLING
(2357) E DE HAIRO 27 S 23rd. One-
story and basement frame dwelling.
Owner.....Jos. Bellas.
Architect...None.
Contractor...A. L. and J. E. Lundy, 3
Franklin, San Francisco.
COST, \$1200

FRAME APARTMENTS
(2358) S SEVENTEENTH 107 W
Guerrero. Three-story and basement
frame (12) apartments.
Owner.....Mission Realty Co., 2008
Mission, San Francisco.
Architect...None.
Contractor...John J. Hinet Co., 68 Ra-
mona, San Francisco.
COST, \$15,850

ALTERATIONS
(2359) S CLAY 40 W Sansome. Alter
store.



Structural Steel Contractors

**Works at
HARRISON ST.,
bet. 8th & 9th
San Francisco**

Telephone Market 337

Owner.....Sheehy Estate Co., Care
Madison & Burke, 151 Sutter,
San Francisco.
Architect...None.
Contractor...M. Fisher, 105 Montgomery
San Francisco.
COST, \$1500

FRAME FLATS
(2360) W GUERRERO 101-6 S Cumber-
land. Two-story and basement
frame (2) flats.
Owner.....Louis Escalle, 170 Shotwell
San Francisco.
Architect...None.
Contractor...Frank Elvin, 4017 15th,
San Francisco.
COST, \$1600

CLASS "C" BUILDING
(2361) E BEALE 137-6 N Mission
91-10x137-6. Concrete work, etc., for
foundations and basement for three-
story and basement Class "C" bldg.
Owner.....S. S. Parsons.
Architect...Wright & Rushforth, 354
Pine, San Francisco.
Contractor...Nilson & Arras, 180 Jessie,
San Francisco.
Filed Aug. 13, '15. Dated Aug. 11, '15.
Basement floor done.....\$2000
Completed and accepted.....2490
Usual 35 days.....1500
TOTAL COST, \$5990
Bond, \$2995. Surety, Pacific Coast
Casualty Co. Limit, 38 days. Forfeit,
\$20. Plans and specifications: filed.

FRAME DWELLINGS
(2362) LOTS 26, 27, 30 AND 31 BLK
"N" Mission Street Land Co. All
work for five frame dwelling houses.
Owner.....Homestead Realty Co., Mut-
ual Bank Bldg., S. F.
Architect...Plans by Contractor.
Contractor...W. H. Grahm, 2810 Bryant,
San Francisco.
Filed Aug. 13, '15. Dated Aug. 10, '15.
Frames of buildings up.....\$1900
Buildings brown coated.....1900
Buildings completed & accepted 1900
Usual 35 days.....1900
TOTAL COST, \$7600
Bond, none. Limit, 30 days. Forfeit,
none. Plans and specifications, none.

FRAME STORE AND FLATS
(2363) S SIXTEENTH 179-8 W Guer-
rero S 110xW 25. All work for three
story frame building and alterations
to present building (store and flats).
Owner.....Edw and Margaret Perry,
3235 16th, San Francisco.
Architect...O'Brien Bros., Inc., 240
Montgomery, S. F.
Contractor...Louis R. Holm, 182 2nd,
San Francisco.
Filed Aug. 13, '15. Dated Aug. 12, '15.
Existing house moved to rear
and 2nd story joists of new
building set\$ 984.10
Both buildings enclosed and

roofed 984.10
Both buildings ready for lath-
ing 984.35
Both buildings completed and ac-
cepted 984.35
Usual 35 days.....1312.50
TOTAL COST, \$5250.00
Bond, none. Limit, 90 days. Forfeit,
\$5. Plans and specifications filed.

INCORPORATIONS.

Banner Motion Picture Co. Capital
Stock, \$10,000; subscribed, 3; shares, \$1
each. Directors—N. S. Stewart, C. An-
derson, R. H. Cross, 1 share each.
Place of business, San Francisco.
The Mastic Construction Co. Capital
Stock, \$20,000; subscribed, \$20; shares,
\$1 each. Directors—L. M. Sherman, M.
H. Blake, R. S. Sizer 10 shares each.
Place of business, San Francisco.
Santa Rosa Land & Investment Co.
Capital Stock, \$1,000,000 subscribed,
\$500; shares, \$100 each. Directors—
F. G. Braue, F. Gottfried, H. Danker,
10 shares each. Place of business, S. F.
Porterville Magnesite Co. of Califor-
nia. Capital Stock, \$100,000; subscribed
\$500; shares, \$100 each. Directors—C.
S. Woody, H. M. Hardy, E. De Los
Mague, H. C. Allen, G. A. Collum, 1
share each. Place of business, S. F.
Mount Diablo Villa Homes Associa-
tion. Capital Stock, \$1,500,000; sub-
scribed, \$500; shares, \$100 each. Di-
rectors—D. E. Gunn, M. E. Hutchinson,
A. M. Donovan, W. H. Conlin, J. E. All-
ison, 1 share each. Place of business,
San Francisco.

LEASES.

Aug. 13, 1915—S FIFTEENTH 25 E Noe
E 20xS 40. The Bass Estate, Inc to
Chas Bass, 5 years. \$500.
Aug. 10, 1915—PTN NO. 648 KEARNY
E line bet. Clay and Commercial.
Henry Horwege to Joseph Miller. 2
years. \$600.
Aug. 10, 1915—S SUTTER 80 W Grant
Ave S 137-6 W 27-6 N 17-6 W 20 N
120 E 47-6 and all int. in 50 vara
Block 113. A H Wilhelm to J M and
Mamie R P Copelin. 7 years. \$67,200
Aug. 9, 1915—W FLORIDA 225.6 N
16th W 100xN 58.6. F E Knowles
to E M Moore. 5 years. \$6000 option
to purchase.
Aug. 11, 1915—E MISSION 120 N 25th
N 25xN 115. George Hotte to Fred-
erick E Reinke, 5 years. \$2000.
Aug. 13, 1915—PTN OF GARAGE ON
Merchant Street, 23x42. Perry Gar-
age Co to M C Ellis. 1 year. \$25 per
month.
Aug. 13, 1915—NO. 1002 KEARNY.
Louis and Joseph Parente to M
Bruno and Pasquale Arieta. 2 years.
\$25 per month.

NOTICE OF NON-RESPONSIBILITY.

Aug. 10, 1915—N OCTAVIA 75 N
Chestnut N 25xW 110. Lorenzo
Del Carlo as to improvements on
leased property
Aug. 6, 1915—N CALIFORNIA 102-6
E 15th Ave E 25xN 100. San Fran-
cisco Land Co as to improvements
on leased property.....

RELEASE OF BUILDING CONTRACTS.

Aug. 7, 1915—N POST 164-3 E Hyde
75-9x137-6. W H Bowen with J S
Malloch, The Schrader Iron Works
and Henry J Hughes, contractors.
Releasing contracts filed July 27.
Released August 6, 1915.
Aug. 7, 1915—N POST 164-3 E Hyde N
137-6xN 75-9; N Post 164-3 E Hyde
75-6x137-6. W H Bowen, owner with
H E Drake, contractor. Releasing
contracts filed July 16 and July 21.
1915. Released August 5, 1915.

CESSATION OF LABOR.

Aug. 12, 1915—S PAGE at junction
with Masonic Ave: Nos. 1449-1451
Page. L B Bingley with Harry
Walters. Work ceased, June 7, 1915

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED
Aug. 7, 1915—S FILBERT 87-6 W
Baker W 50xS 112-6. William W
Rednall to whom it may concern...
.....Aug. 7, 1915
Aug. 7, 1915—N POST 137-6 E Larkin
E 63-7xN 137-6. A Rothberg to
Scott Company.....Aug. 4, 1915
Aug. 7, 1915—E THIRTY-FIFTH AVE
95 N Cabrillo N 25 E 120 S 20 W
12-6 S 5 W 107-6. Chas B and
Beulah B Sens to Thos Hamill.....
.....Aug. 6, 1915
Aug. 7, 1915—NE SECOND 275 NE
Mission SE 88 SE 112 to SW New
Anthony NW along New Anthony
88 SW 112. Wells Fargo & Co to
Carnahan & Mulford.....July 26, 1915
Aug. 7, 1915—S FOURTEENTH 225
W Sanchez W 25xS 115. M J Rogers
to whom it may concern.....Aug. 7, 1915
Aug. 7, 1915—LOT 9 BLK 14 Crocker
Amazon Tet Clarence D and Mary
C Bevier to whom it may concern
.....Aug. 7, 1915
Aug. 7, 1915—S BROADWAY 137-6 W
Hyde W 43-10xS 87-6. Joe Harris
Co to Flaherty & Ogle and George
P Haub.....Aug. 3, 1915
Aug. 7, 1915—N BROADWAY 160 W
Montgomery W 46xN 137-6. John
Brickell Co to J S Hannah. Aug. 3, '15
Aug. 9, 1915—THIRD & TOWNSEND.
Southern Pacific Co to McDonald &
Kahn.....July 29, 1915
Aug. 9, 1915—E DOUGLASS 25 N 19th
N 48xN 53. San Francisco Home
Bldg Co to John Carlson and J H
Verner.....Aug. 7, 1915
Aug. 9, 1915—S GREEN 206-3 S Web-
ster W 36-9xS 137-6. Emma B
Hufschmidt to L A Secor. Aug. 6, 1915
Aug. 9, 1915—N WASHINGTON 137-6
W Octavia W 137-6x255-4½. Mary
Louise Phelan to Alonzo G Reed
and Milton J White (as Reed &
White).....Aug. 2, 1915
Aug. 9, 1915—NE THOMAS AVE (20th
Ave South) 175 NW Jennings (J
South) NW 25xNE 400; being Lots

13 Wade Suo and Lot 388 S S F Ir
and R R Ass'n. George Ryan to
Wm H Grabin. Aug. 6, 1915
g. 9, 1915—NE THIRTEENTH AVE
and Cabrillo 35 on 13th Ave and 95
on Cabrillo. Ph L Bannan to An-
drew Helbing. Aug. 2, 1915
g. 10, 1915—N SANCHEZ 50 S 30th.
Joseph O'Connor to Ward C Brown.
 July 26, 1915
g. 9, 1915—N TWENTY-SIXTH 75
E Church E 25xN 51-6. William J
Baumelster to A Klahn & Son. . . .
 Aug. 3, 1915
g. 10, 1915—SW MORSE 267 NE
Lowell NE 29-5x213 Pin Lot 65
West End Hd Ass'n. Thos J or
Thomas J Emery to whom it may
concern. Aug. 10, 1915
g. 9, 1915—S BUSH 137-6 W
Leavenworth W 27-6xS 137-6
Louis D Stoff to whom it may con-
cern. Aug. 7, 1915
g. 9, 1915—S TWENTY-FIFTH 100
W Guerrero S 36xW 25. Ida C
Shaughnessy to E H F Carson. . . .
 Aug. 9, 1915
g. 10, 1915—GOLDEN GATE PARK
California Academy of Sciences to
C Collins. July 26, 1915
g. 10, 1915—N VALLEJO 73 E
Fillmore E 32xN 137-6. George P
Fuller to H Maundrell. Aug. 3, 1915
g. 10, 1915—NE HARRIET 150 SE
Howard SE 50xNE 75. B Schapiro
to L A Hinson. Aug. 6, 1915
g. 11, 1915—SW RITCH 225 NW
Brannan NW 25xSW 75. Geo A
Venish to whom it may concern. . .
 Aug. 11, 1915
g. 11, 1915—NE HAYES AND OC-
tavia N 120xNE 38-3. L Gendotti Est
to Stanquist & Forbes. Aug. 5, 1915
g. 11, 1915—E TWENTY-SIXTH
Ave 250 N Irving N 25x E 120. Chas
A Kurreger to Edw E Manseau. . . .
 Aug. 10, 1915
g. 12, 1915—NOS. 2540 AND 2542
Buchanan. Francis M and Bertha
Wright to Buitenkamp & Gysel-
man. Aug. 2, 1915
g. 12, 1915—E THIRTY-FIFTH
E 225 S Geary S 25x E 120. Ralph
Hupp to Leigh & Schultz.
 Aug. 10, 1915
g. 12, 1915—W TENTH AVE 506-6
N Balboa N 25-3xW 95. James
Welsh to whom it may concern. . . .
 Aug. 8, 1915
g. 12, 1915—N TWENTY-FOURTH
02-6 E Douglass E 25-10xN 114.
John A Johnson to Marks L Kim-
ball. July 29, 1915
g. 12, 1915—N POST 137-6 E Lar-
rin E 63-7xN 137-6. A Rothberg
to E V Lacey, Aug 10; Decker Elec.
onstr Co. Aug. 10; Marcus Marcusen.
Aug. 10; D Zelinsky. Aug. 4, 1915
g. 12, 1915—E SIXTEENTH AVE
00 N Balboa N 25x E 127-6. Samuel
and Ella B Randolph to James P
letcher. Aug. 3, 1915
g. 12, 1915—N POST 80 E Polk E
8-9xN 120. A W Lawson to Guil-
yorn Cornice Works, Aug. 2, 1915;
Daniel O'Neill, Aug. 2; Klernan &
Brien, Aug. 2; V J Donovan, Aug.
2; Philbin & Kaiser, July—; Ameri-
can Elec Eng Co. Aug. 2, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

g. 7, 1915—W ELGIN PARK 75 N
Duboce Ave (Duboce) N 22xW 75.
W Stanley vs James Hagan. \$219.50

Aug. 9, 1915—E CARMELITA 190 S
Waller S 25x E 95. Mike Eiberger
vs Sophie Kaufman. \$173.95
Aug. 10, 1915—E KANSAS 100 S 22nd
E 100xS 25. Jas E Lennon Lime &
Cement Co vs Emanuel Schieve,
Pacific Plastering Co and D D
Uonini. \$12.02
Aug. 11, 1915—E FILLMORE 60 N
Lombard S 60 E 110 N 60 W 110.
M Bertolino vs Clarence R Davis. \$230

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

RECORDED	AMOUNT
Aug. 10, 1915—E FOURTH AVE 75 S Anza S 25x E 120. Paul Adams to John F Haner.	
Aug. 10, 1915—W FOURTH AVE 175 S Anza. W N Flaherty to Jno F Haner et al and Mrs O'Connors. . .	
Aug. 10, 1915—NW BAY AND LYON W 200 S parallel with Lyon to N Chestnut extended E 300 N to beg. Olson Mahony Lumber Co to Ex- position Service Co, Taihakn Ser- vice Co, Panama-Pacific Interna- tional Exposition Co, Formosa Tea House and O Tsuji.	

OAKLAND AND ALAMEDA COUNTY

RESIDENCE — 1 story and base,
frame, \$2,000. Oakland, Cal. Archi-
tect, none. Owner, Joseph T. Hinch,
1748 Broadway, Oakland. The dwelling
has been designed for a five room
house with bath and sleeping porch,
and will be erected on the east side of
Adeline street south of 56th. Interior
finish will be entirely of pine. Some
hardwood floors will be used. There
will be an open fire place in the living
room with tile or brick mantel. Imita-
tion tile will be used in the bath
room. Exterior of the house will be
covered with cement plaster and shin-
gles. Plans are complete and in the
hands of the owner who will do the
work by Day Labor. Materials are
now being purchased.

RESIDENCE — 1 story and base,
frame, \$2,500. Berkeley, Alameda Co.,
Cal. Architect, A. W. Smith, 1010
Broadway, Oakland. Owner, O. R.
Wood. The dwelling will contain five
rooms and bath. Interior will be fin-
ished in pine with some elm panels.
Hardwood floors will be used in the
living and dining rooms and reception
hall. There will be a large open fire
place with tile or brick mantel. Bath
room will have tile floor and wainscot.
An automatic water heater will be in-
stalled. Exterior of the dwelling will
be covered with cement plaster on metal
lath. Plans are complete and figures
are now being taken.

RESIDENCE — 1 story and base,
frame, \$2,500. Oakland, Cal. Archi-
tects, Verriek & Smith, Blake Bldg.,
Oakland. Owner, John Michels. The
dwelling will be erected on West street
between 34th and 35th streets. Interi-
or will be finished in pine and white
enamel. Hardwood floors will be used
in the living and dining rooms. There
will be an open fire place and tile or
brick mantel. Imitation tile will be
used in the bath room. An automatic
water heater will be installed. Exter-
ior of the house will be covered with
rustic and cement plaster on metal
lath. Plans are complete and figures
are being taken.

RESIDENCE — 2 story and base,
frame, \$3,500. Oakland, Cal. Archi-
tect, none. Owners, Fuller & Robbins,
Athens Hotel, Oakland. The dwelling
has been designed for a seven-room
house with bath and sleeping porch,
and will be erected on the east side of
Thomas street south of Prospect. Interi-
or will be finished in pine with
some elm panels and white enamel.
Hardwood floors will be used in the
living and dining rooms. There will
be furnace heat and open fire places.
Mantels will be of tile and brick. Bath
room will have tile floor and wainscot.
An automatic water heater will be in-
stalled. Exterior of the house will be
covered with rustic and cement plaster
on metal lath. Plans are complete and
in the hands of the owners who will
do the work by Day Labor.

RESIDENCE — 2 story and base,
frame, \$6,000. Piedmont, Alameda Co.,
Cal. Architect, C. O. Clausen, Hearst
Bldg., S. F. Owner, G. Erickson. The
dwelling will contain eight rooms,
two baths and sleeping porch. A sepa-
rate garage will be erected on the
property. Interior finish will be of
southern gum and white enamel. Hard-
wood floors will be used throughout
the first floor. There will be furnace
heat and open fire places. Mantels will
be of tile and brick. Bath rooms will
have tile floors and wainscot. An au-
tomatic water heater will be installed.
Exterior of the house will be covered
with cement plaster on metal lath.
Plans are now being prepared.

RESIDENCE — 2 story and base,
frame, \$2,500. Oakland, Cal. Archi-
tect, none. Owner, Hans P. Hansen, 161
Cook street, S. F. The dwelling has
been designed for a six-room house,
and will be erected on the west side of
40th avenue north of Carrington. Interi-
or will be finished in pine through-
out. There will be an open fire place
and tile or brick mantel. Hardwood
floors will be used in the living and
dining rooms. An automatic water
heater will be installed. Exterior of
the house will be covered with rustic.
Plans are complete and in the hands of
the owner who will do the work by
Day Labor.

RESIDENCE — 1 story and base,
frame, \$2,000. Oakland, Cal. Archi-
tect, none. Owner, F. L. de Sarmo, 1853
35th avenue, Oakland. The dwelling
has been designed for a six-room house
and will be erected on the west side of
35th avenue south of Foothill Boul-
vard. Interior will be finished in pine
with some white enamel. Hardwood
floors will be used in the living and
dining rooms. There will be a large
open fire place and tile or brick mantel.
Bath room will be finished in imitation
tile. An automatic water heater will be
installed. Exterior of the house will be
covered with cement plaster on metal
lath. Plans are complete and in the
hands of the owner who will do the
work by Day Labor. Materials are now
being purchased.

SEWER CONSTRUCTION — Cost not
stated. Berkeley, Alameda Co., Cal.
Engineer, City Engineer, Berkeley.
Owners, City of Berkeley. Plans are
complete and bids will be opened on
August 24th for furnishing the neces-
sary materials, tools and labor for the
construction of a combined sewer, man-
holes and appurtenances.

RESIDENCE — 1 story and base,
frame \$2,500. Alameda, Alameda Co.,
Cal. Architects, Universal Drafting

Bureau 1844 5th avenue, Oakland. Owner, C. C. Adams. The dwelling will be erected in Waterside Terrace, and has been designed for a six-room house with bath and sleeping porch. Interior finish will be of pine with some white enamel. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place in the living room with tile or brick mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are being prepared and when complete the work will be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, H. C. Pfrrang, 320 Forest avenue, Oakland. The dwelling has been designed for a five-room house with bath and sleeping porch, and will be erected on the east side of Dover street south of 58th street. Interior finish will be of pine and hardwood veneer with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, R. C. Hillen. The dwelling will be erected in East Piedmont Heights, and has been designed for a five-room house with bath and sleeping porch. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living and dining rooms and reception hall. There will be an open fire place and tile or brick mantel. Bath room will have tile wainscot and floor. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE—2 story and base, frame \$4,500. Oakland, Cal. Architect, Claude B. Barton, First Trust Bldg., Oakland. Owner, Mrs. Ella B. Edwards. The dwelling has been designed for an eight-room house with bath and sleeping porch, and will be erected on Arimo avenue. Interior will be finished in pine with some elm panels and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. Plans provide for an automatic water heater. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and segregated figures are now being taken by the architect.

RESIDENCE—2 story and base, frame, \$3,500. Oakland, Cal. Architect, none. Owner, Leo J. Nichols, 1764 Broadway, Oakland. The dwelling will be erected on the east side of Grand Ave. north of Welden Ave., and has been designed for a seven-room house

with bath and sleeping porch. Interior will be finished in pine with elm panels and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile. Bath room will have tile wainscot and floor. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

APARTMENT HOUSE—3 story and base, frame. Cost not stated. Oakland, Cal. Architects, Oliver & Thomas, Pantages Theatre Bldg., Oakland. Owner's name withheld. The building will be erected at the corner of Harrison and Grand avenue, and has been designed to contain a number of two and three room apartments. Interior finish will be of pine and hardwood. Hardwood floors will be used in the principal rooms and in the entry halls. There will be steam heat, an oil burning furnace and hot water system. Bath rooms will be finished in tile. Wall beds will be used in each apartment. Exterior of the building will be covered with brick veneer and cement plaster on metal lath. Plans are complete and segregated figures will be called for in a week.

APARTMENT HOUSE—2 story and base, frame, \$3,000. Oakland, Cal. Architect, J. Henry Boehrer, Delger Bldg., Oakland. Owner, Lillian B. Emery. The building will be erected on the south side of 41st street between Telegraph and Grove streets, and has been designed to contain four small apartments with wall beds and private baths. Interior finish will be of pine and elm. Some hardwood floors will be used. There will be a hot water system. Bath rooms will have tile floors and wainscot. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and segregated figures are now being taken.

COURT HOUSE ADDITION—2 story and base, brick, \$2,000. Oakland, Cal. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, Alameda County. Plans for the small addition to the present building are now out for figures. Bids will be opened on September 7th. The new portion will contain one court room, judges' chambers and an office for the court reporter. Interior will be finished in pine and oak. The heating system in the old building will be extended. Exterior will be faced with pressed brick. Plans can be secured from the architect or the County Clerk.

FLATS—2 story and base, frame, \$4,000. Berkeley, Alameda Co., Cal. Architect, F. Holberg Riemers, 2125 Shattuck avenue, Berkeley. Owner, Francis L. O'Meara, 302 Mendocino avenue, Santa Rosa. The building will be erected on Rose street near Greenwood Terrace, and will contain twelve rooms. Interiors will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms and reception halls. There will be an open fire place in each living room. Mantels will be of tile. Tile wainscot will be used in the bath rooms. Automatic water heaters are specified. Exterior of the building will be covered with cement plaster on

metal lath. Plans are complete and segregated figures are being taken.

COLLEGE BUILDING—4 story am base. Class A construction, \$800,000. Berkeley, Alameda Co., Cal. Architect John Galen Howard, 604 Mission street S. F. Owners, University of California. Over fifty contractors submitted figures on the various parts of the work in connection with the construction of this building. Awards have not as yet been made. A complete list of the bids submitted will be found under the heading of Oakland and Alameda County in this issue.

Contracts Awarded

BRIDGE—Reinforced concrete, \$5,675. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractor D. McDonald, Berkeley. Contract price \$5,675.

FACORY—4 story and base, reinforced concrete. Cost not stated. Oakland, Cal. Architect, Lewis P. Hobart Crocker Bldg., S. F. Owners, Shredded Wheat Biscuit Co. Contractors, Clinton Fireproofing Co., Mutual Bank Bldg., S. F. Contract price not stated.

AMERICAN CUTLERY FOR CANADA

Reiterating his earlier statements that Canada now presents a favorable opening for the sale of American cutlery, Consul Felix S. S. Johnson, of Kingston, writes:

I fear that American manufacturers, as a body, fail to appreciate the obvious truth that the present is a golden opportunity for entering the Canadian market; yet unless that truth is grasped and acted upon, Canadian buyers in the future may go elsewhere for their cutlery. The English cutlery industry is clearly inadequate to meet the demands made upon it; the number of operatives continues to decline, raw materials (particularly brass parts and brass wire) are hard to get, and the price of celluloid has been advanced another 10 per cent. I sincerely hope that American firms will awaken to the present opportunity and make efforts to establish a permanent trade in Canada.

Bids Opened For Big U. of C. Job.

Many Contractors Submit Figures on
Various Part of Work for Benjamin
Ide Wheeler Hall.

Bids were opened at the Monday meeting of the Regents of the University of California for the majority of the work in connection with the construction of the Benjamin Ide Wheeler "A" building, designed by Architect Hall, a four-story and basement Class John Galen Howard.

The work was segregated into the following: Excavating and concrete, structural steel and steel erection, roofing and sheet metal work, lathing and plastering, marble and terrazzo work, carpentry and interior finish, plumbing, ornamental metal work, elevator and acoustics. Following is a complete list of the bids received. All bids were referred to the Board of Regents and will receive further consideration Tuesday.

Roofing and Sheet Metal Work.

Capitol Sheet Metal Works	\$19,997
F. O. Engstrom	19,970
Robert Dalziel	16,987
W. Heldt Cornice Co.	23,665

Yager Sheet Metal Works.....	18,075
Forderer Cornice Works.....	21,470
Conlin & Roberts.....	19,850
United States Metal Products Co.	19,253
Western Furnace & Cornice Co.	20,830
Carpentry Work and Interior Finish.	
L. & E. Emanuel.....	\$103,500
C. L. Wold.....	93,560
McLaren & Peterson.....	84,500
Williams Bros. & Henderson..	89,500
Val Franz.....	86,900
Van Sant-Houghton Co.....	92,930
W. D. Henderson.....	87,734
D. B. Farquaharson.....	87,400
A. J. Forbes & Son.....	113,350
Collman & Collman.....	91,651
Thomas Elam & Son.....	98,500
Western Bldg. & Eng. Co.....	84,000
A. D. Nelson.....	89,790
Pink & Schindler Co.....	98,750
Foster-Vogt Co.....	35,000
Lange & Bergstrom.....	83,921
P. O. Engstrom.....	89,879

Ornamental Iron Work.

American Art Metal Works.....	\$3,947
Louis De Rome.....	5,495
Italston Iron Works.....	4,792
Vulcan Iron Works.....	6,566
Rudgear-Merle Co.....	4,947
Monarch Iron Works.....	7,835
Pacific Iron Works.....	4,580
C. J. Hilliard & Co.....	4,250

Excavating and Concrete Work.

	Amount	Days
H. L. Peterson, San Francisco	\$114,340	200
F. O. Engstrom, Los Angeles	127,572	150
Teichert & Son, Sacramento	123,900	200
Collman & Collman, San Francisco	96,913	300
W. D. Henderson, San Francisco	88,987	250
McLaren & Peterson	111,000	120
Western Building and Engineering Co.	119,600	150
Sound Eng. & Constr. Co., S. F.	114,976	150
Dillon Teaming Co., San Francisco	120,000	220
Lange & Bergstrom, San Francisco	102,500	
	30 days after last stone set.	
Foster & Vogt Co., San Francisco	98,400	200
Contra Costa Constr. Co., Berkeley	149,035	200
C. L. Wold Co., San Francisco	124,618	160
Van Sant-Houghton Co., San Francisco	116,850	150
Clinton Fireproofing Co., San Francisco	104,300	150

Lath and Plaster.

Lyden & Bickel	\$40,204	200
James F. Smith	38,750	70
MacGruer & Co.	44,350	90
H. Bosch	40,600	90
C. C. Morehouse	47,312	100
A. Knowles	42,500	100
Terranova Bros.	45,000	120
It. O. Felt	43,846	100
Donald Mowat	47,200	70
W. D. Henderson	44,979	120
Bradley & O'Reilly	39,500	170
Van Sant-Houghton Co.	43,400	100
Greenback Plastering Co.	39,925	100
Western Bldg. & Eng. Co.	41,800	90
H. A. Chalmers, Inc.	49,990	90
William Makin	44,237	120
Alexander Mennie	46,500	90

Marble and Terrazzo Work.

Vermont Marble Co	\$20,666
American Marble & Mosaic Co.	23,196
Mission Marble Works	22,480
Wineen Marble Works	20,670
Musto Sons-Keenan Co.	23,896

Plumbing.

J. J. McLeod, San Francisco	\$15,322
Wittman-Lyman, San Francisco	15,890
Geo. Stoddard, Berkeley	15,984
Scott Co., San Francisco	14,234
Wm. F. Wilson, San Francisco	14,717
Robert Dalziel, Oakland	18,567
James H. Pinkerton, San Francisco	15,900
Turner Co., San Francisco	15,250
Frederick W. Snook Co., S. F.	16,200
Carl Doell, Oakland	15,117

California Metal Works.....	4,188
California Artistic Metal & Wire	
Co (no check or bond).....	3,876

Elevator Work.

Spencer Elevator Co.....	\$2,350
Otis Elevator Co.....	2,425

Acoustic Felt.

Johns Manville Co.....	\$10,150
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Steel and Steel Erection.

Pacific Rolling Mill Co., S. F.,	\$19.
420 (steel), \$61,539 (both).	
United States Steel Co., Chicago,	\$19.
012 (at Chicago), \$61,222 (at S. F.)	
Milliken Bros., S. F., \$60,250 (at S.	
F.), \$58,000 (at New York), \$69,950	
(both); 150 days.	
J. G. Williams Construction Co., \$11.	
914 (erection); 30 days.	
Pioneer Construction Co., S. F., \$12.	
337 (erection); 40 days.	
C. Lamburth, S. F., \$15,900 (erection);	
80 days.	
Dwyer Bros., S. F., \$51,465 (at Pitts-	
burgh) \$61,600 (both); 100 days.	
C. A. Blume, \$13,600 (erection); 55	
days.	
Kalston Iron Works, S. F., \$66,900	
(both); 125 days.	
McClintock-Marsh, \$46,950 (at Pitts-	
burgh), \$62,420 (at S. F.); 90 days.	
California Construction Co., S. F.,	
\$11,475 (erection.)	

Building Contracts Awarded**Oakland**

No.	Owner	Contractor	Amt.
1516	Parratt	.....Knight	2548
1517	Norris	.....Norris	1500
1518	Compiano	.....Rose	400
1519	Coit	.....Coit	2500
1520	Jones	.....Hayes	5200
1521	O'Neill	.....Wendt	2400
1522	Same	.....Same	2400
1523	Same	.....Same	2400
1524	Same	.....Same	2400
1525	Same	.....Same	2400
1526	de Sarmo	.....Owner	2000
1527	Hansen	.....Hansen	2500
1528	Reid	.....Reid	1400
1529	Dolan	.....Hammarberg	2400
1531	O'Meara	.....Holberg	4000
1534	Fuller	.....Robbins	3500
1536	Saxton	.....Burnett	1670
1537	Olson	.....Meltea	400
1538	Merithew	.....Merithew	850
1539	Lymon	.....Andersen	400
1540	Lind	.....Sommarstrom	1000
1541	Best	.....Best	450
1542	Elmhurst Floral	.....Owner	500
1549	Hansen	.....Hansen	700
1581	Hinch	.....Hinch	2000
1582	Carvello	.....Carvello	400
1583	Alapes	.....Schnely	1000
1589	Pfrang	.....Pfrang	2500
1590	Magliano	.....Kaler	500
1591	Pedersen	.....Nethken	900
1594	Bernstein	.....Corbett	500
1595	De Lancy	.....Owner	400
1596	Nichols	.....Nichols	3500
1597	Emery	.....Boehrer	2575
1598	Lawton	.....Van Sant	3500

DWELLING AND GARAGE

(1546) PTN LOTS 78 AND 79 Pleasant Valley Court, Piedmont. All work for one-story 5-room dwelling and garage.

Owner.....Harry V. Parratt, Care Tribune, 412 8th, Oakland.
Architect...Chester H. Miller, Dalziel Bldg., Oakland.

Contractor...Harry C. Knight, 3857 Market, Oakland.

Filed Aug. 7, '15. Dated Aug. 5, '15.

1st floor laid.....	\$537
Brown coated.....	537
Interior ready for stain.....	537
Accepted.....	537
Usual 35 days.....	400

TOTAL COST, \$2548

Bond, none. Limit, 75 days after laying mud sill. Forfeit, none. Plans and specifications filed.

DWELLING

(1547) E RICHMOND AVE 200 S 25th., Oakland. One-story 5-room dwelling.
Owner.....Justus Norris, 2828 Richmond Ave, Oakland.

Architect...None.
Day's work. COST, \$1500

TANK FRAME

(1548) NO. 5276 MILES AVE., Oakland.
Tank frame.

Owner.....A. Compiano, Premises.
Architect...None.
Contractor...F. F. Rose & Co., 2005 San Jose Ave., Alameda.
COST, \$400

DWELLING

(1549) N FORTY-FIRST 635 W Telegraph Ave., Oakland. Two-story five room dwelling.

Owner.....C. B. Coit, 306 14th, Okd.
Architect...None.
Contractor...Roger Coit, 306 14th, Okd.
COST, \$2500

FRAME STORE, ETC.

(1550) SW PACIFIC AND WILLOW, Oakland. All work for two-story frame store and living rooms and wreck old buildings.

Owner.....Henry Z. Jones, 488 9th, Oakland.

Architect...None.

Contractor...E. W. Hayes, 824 Third Ave., Oakland.

Filed Aug. 6, '15. Dated Aug 6, '15.

Foundation in and lumber on ground ¼
Ready for lath..... ¼
Lathed and plastered..... ¼
Usual 35 days..... ¼

TOTAL COST, \$5200

Bond, \$2600. Sureties, John A. Wilds and A. H. White. Limit, 64 days after July 24. Forfeit, \$10. Plans and specifications filed.

DWELLING

(1551) S FIFTY-SEVENTH 100 W Los Angeles, Oakland. One-story 7-room dwelling.

Owner.....Wm. O'Neill, 1082 57th, Oakland.

Architect...None.

Contractor...G. H. Wendt, 2425 Le Conte Ave., Berkeley.

COST, \$2400

DWELLING

(1552) S FIFTY-SEVENTH 260 W Los Angeles, Oakland. One-story 6-room dwelling.

Owner.....Wm. O'Neill, 1082 57th, Oakland.

Architect...None.

Contractor...G. H. Wendt, 2425 Le Conte Ave., Berkeley.

COST, \$2400

DWELLING

(1553) S FIFTY-SEVENTH 140 W Los Angeles, Oakland. One-story 6-room dwelling.

Owner.....Wm. O'Neill, 1082 57th, Oakland.

Architect...None.

Contractor...G. H. Wendt, 2425 Le Conte Ave., Berkeley.

COST, \$2400

DWELLING

(1554) S FIFTY-SEVENTH 180 W Los Angeles, Oakland. One-story 6-room dwelling.

Owner.....Wm. O'Neill, 1082 57th, Oakland.

Architect...None.

Contractor...G. H. Wendt, 2425 Le Conte Ave., Berkeley.

COST, \$2400

DWELLING

(1555) W FIFTY-SEVENTH 220 W Los Angeles, Oakland. One-story 6-room dwelling.

Owner.....Wm. O'Neill, 1082 57th, Oakland.

Architect...None.

Contractor...G. H. Wendt, 2425 Le Conte Ave., Berkeley.

COST, \$2400

DWELLING

(1556) W THIRTY-EIGHTH 284 S Foothill Blvd., Oakland. One-story 6-room dwelling.

Owner.....F. L. de Sarmo, 1853 38th Ave., Oakland.

Architect...None.

Day's work. COST, \$2000

DWELLING

(1557) W FORTIETH AVE 215 N Carrington, Oakland. Two-story 6-room dwelling.

Owner.....Hans P. Hansen, 164 Cook, San Francisco.

Architect...None.

Day's work. COST, \$2500

DWELLING

(1559) NO. 132 DRACENA AVE., Piedmont. All work for alterations to two-story dwelling.

Owner.....C. W. Dickey, Agent for C. H. Dickey.

Architect...C. W. Dickey, Central Bk. Bldg., Oakland.

Contractor...Sampson & Doane, 3502 Grove, Oakland.

Filed Aug. 9, '15. Dated Aug. 7, '15.

Rough plastered \$255
Completed and accepted..... 255
Usual 35 days..... 170

TOTAL COST, \$680

Bond, none. Limit, 30 days. Forfeit, none. Plans and specifications filed.

DWELLING

(1560) E SANTA CLARA 100 N Valle Vista, Oakland. One-story 6-room dwelling.

Owner.....L. J. Dolan, 601 E-16th, Oakland.

Architect...None.

Contractor...A. Hammarberg, 3758 Piedmont Ave., Okd.

ALTERATIONS

(1563) NO. 535 THIRTEENTH, Oakland. Alterations.

Owner.....F. J. Woodward, Oakland Bank of Svcs. Bldg., Okd.

Architect...None.

Contractor...A. J. McPhee, 2144 E-27th, Oakland.

COST, \$1000

DWELLING

(1564) E THOMAS 285 S Prospect, Oakland. Two-story 7-room dwelling

Owner.....Fuller & Robbins, Athens Hotel, Oakland.

Architect...None.

Day's work. COST, \$3500

DWELLING

(1566) NW HAAS AVE 388.15 NE E-14th 155x260, San Leandro. All work for one-story dwelling.

Owner.....Leo J. Saxton, San Leandro

Architect...None.

Contractor...F. L. Burnett, 745 Alleen, Oakland.

Filed Aug. 10, '15 Dated Aug. 9, '15.

Frame up ¼
Plastered ¼
Completed ¼
Usual 35 days..... ¼

TOTAL COST, \$1670

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(1567) NO. 481 SEVENTH, Oakland. Alterations.

Owner.....P. E. Olson, 230 Santa Clara Ave., Oakland.

Architect...None.

Contractor...D. McRea

COST, \$400

DWELLING

(1568) N "E" 256 W Jones Oakland. One-story 4-room dwelling.

Owner.....T. H. Merithew Jr., 1331 Brush, Oakland.

Day's work. COST, \$850

ALTERATIONS

(1569) NO. 785 KINGSTON AVE., Oakland. Alterations.

Owner.....S. C. Lymon, Premises. Architect...None.

Contractor...C. A. Andersen, 400 N-Park Ave., Daly City.

COST, \$400

REPAIRS

(1570) SE MAPLE AVE AND DAKOTA Oakland. Fire repairs.

Owner.....Arthur Lind, 3476 Maple, Oakland.

Architect...None.

Contractor...Sommarstrom Bros., 202 E-12th, Oakland.

COST, \$1000

ALTERATIONS

(1571) NO. 5415 MARKET, Oakland. Alterations.

Owner.....A. W. Best, Premises.

Architect...None.

Day's work. COST, \$450

GREENHOUSE

(1572) NO. 2277 EIGHTY-SECOND Ave., Oakland. Greenhouse.

Owner.....Elmhurst Floral Co., 2277 82nd Ave., Oakland.

Architect...None.

Day's work. COST, \$500

DWELLING

(1579) E FIFTY-SECOND AVE 730 N E-14th, Oakland. One-story 4-room dwelling.

Owner.....F. Hansen, 1605 54th Ave., Oakland.

Architect...None.

Day's work. COST, \$700

DWELLING

(1581) E ADELINE 40 S 56th, Oakland One-story 5-room dwelling.

Owner.....Joe. T. Hinch, 1748 Broadway, Oakland.

Architect...None.

Day's work. COST, \$2000

ADDITION

(1582) NO. 3875 LYMA VISTA AVE., Oakland. Addition.

Owner.....J. J. Carvello, Premises. Architect...None.

Day's work. COST, \$400

GARAGE

(1588) NO. 945 LAKESHORE AVE., Oakland. Garage.

Owner.....Geo. L. Mapes, Premises. Architect...None.

Contractor...Schnebley, Hostrawser & Pedgrift, 6th and Jackson, Oakland.

COST, \$1000

DWELLING

(1589) E DOVER 100 S 58th, Oakland. One-story 5-room dwelling.

Owner.....H. C. Pirang, 320 Forest, Oakland.

Architect...None.

Day's work. COST, \$2500

ALTERATIONS

(1590) NO. 729 SIXTH, Oakland. Alterations.

Owner.....G. Magliano, Premises. Architect...None.

Contractor...M. C. Kaler, 1125 Fleet Road, Oakland.

COST, \$500

WELLING

5911 E PATERSON 150 N Kansas, Oakland. One-story 3-room dwlg. Owner.....Miss Pedersen, Brown and Hopkins, Oakland.
Architect...None.
Contractor...H. Nethken, 3751 Brown Ave., Oakland.

COST, \$900

CONCRETE WORK, ETC.

5933 LOTS 8 TO 24 INCL and ptn Lots 4, 5, 7, 25, 26, 27, 28, 29, 30, 31 and 32 Map R. J. McMullen's Sbdvn Blk 576, etc., Oakland. Concrete and reinforced concrete work for four-story reinforced concrete factory. Owner.....Pacific Coast Shredded Wheat Company.

Architect...Hohart & Cheney, Crocker Bldg., San Francisco.
Contractor...Clinton Constr. Co., Mutual Bank Bldg., S. F.

Filed Aug. 12, '15. Dated
Monthly payments of..... 75%
Usual 35 days..... 25%
TOTAL COST, \$76,800
Bond, \$38,400. Sureties, L. A. Norris & Co. Limit, 150 days. Forfeit, \$50. Plans and specifications filed.

ALTERATIONS

5941 NO. 1456 BROADWAY, Oakland Alterations.
Owner.....M. Bernstein, Premises.
Architect...None.
Contractor...Corbett & Bayless, 1110 Franklin, San Francisco.
COST, \$500

ALTERATIONS

5951 E MARKET 50 S 28th, Oakland. Alterations.
Owner.....John De Lancey, 625 Sycamore, Oakland.
Architect...None.
Contractor...None.
COST, \$400

WELLING

5961 E GRAND AVE 350 N Welden Ave., Oakland. Two-story 7-room dwelling.
Owner.....Leo L. Nichols, 1764 Broadway, Oakland.
Architect...None.
Contractor...None.
COST, \$3500

FRAME APARTMENTS

5971 W 18 LOT 31 and E 14 Lot 32, Map Resbdvn, Montgomery Tract, Oakland. All work except interior and exterior plastering, gas radiators and vents for same, finish hardware, electric fixtures and wall beds for two-story frame apartments.
Owner.....Lillian E. Emery, Oakland.
Architect...J. Henry Bohrer, Delger Bldg., Oakland.
Contractor...J. Henry Bohrer and Alfred Legault, Delger Bldg., Oakland.

Filed Aug. 13, '15. Dated Aug. 12, '15.
Frame up ¼
Ready for interior finish..... ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$2575

Bond, \$1285. Surety, Southwestern Surety Insurance Co. Limit, 70 days. Forfeit, \$3. Plans and specifications filed.

FRAME DWELLING

5981 PTN LOT 2 BLK 1, Claremont, Oakland. Concrete, carpenter, brick

and plaster work, etc., for two-story frame dwelling.

Owner.....O. G. Lawton, 337 12th, Oakland.
Architect...Harris Allen, Central Bk. Bldg., Oakland.

Contractor...Van Sant-Houghton Co., 503 Market, San Francisco.
Filed Aug. 13, '15. Dated Aug. 10, '15.

Frame up ¼
Brown coated ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$3500

Bond, none. Limit, 10 days. Forfeit, none. Plans and specifications filed.

Building Contracts Awarded

Berkeley.

No.	Owner	Contractor	Amt.
1559	Dickey	Sampson	680
1562	Berkeley	Pratt	1500
1563	Woodward	McPhee	1000
1565	Wiggs	Peake	3000
1573	Edwards	Pinkerton	400
1587	Andrew	Armstrong	1250
1592	Herbert	Dolder	400

DWELLING

(1558) E CALIFORNIA 50 N Fairview, Berkeley. One-story 4-room dwelling.
Owner.....Jas. A. Reid, 1510 Ashby Ave., Berkeley.
Architect...None.
Contractor...R. Reid, 1510 Ashby Ave., Berkeley.

COST, \$1400

COST, \$2400

FLATS

(1561) N ROSE 100 E Greenwood Terrace, Berkeley. Two-story 12-room flats.
Owner.....Francis L. O'Meara, 302 Mendocino Av., Santa Rosa
Architect...None.
Contractor...L. Holberg Reimers, 2125 Shattuck Ave., Berkeley.

COST, \$4000

FURNACE, ETC.

(1562) NE WARD AND CALIFORNIA, Berkeley. Furnace and oil burner in school.
Owner.....City of Berkeley.
Architect...None.
Contractor...E. P. Pratt, 2133 Allston Way, Berkeley.

COST, \$1500

DWELLING

(1565) E MARIPOSA AVE 50 from Terrace Walk, Berkeley. Two-story six-room dwelling.
Owner.....T. A. Wiggs.
Architect...None.
Contractor...F. R. Peake Co., 2127 University Ave., Berkeley.

COST, \$3000

STORES

(1573) SW ALLSTON AND UNION, Berkeley. One-story 3-room stores.
Owner.....C. L. Edwards, 2208 Allston Way, Berkeley.
Architect...None.
Contractor...J. A. Pinkerton, 1931 Berryman, Berkeley.

COST, \$100

DWELLING AND GARAGE

(1587) LOTS 18 AND 19 BLK "H" Okridge Claremont, Berkeley. Excavating, grading, concrete and ce-

ment work for two-story dwelling, and Class "C" garage.

Owner.....A. Andrew, Oakland.
Architect...C. W. Dickey, Central Bk. Bldg., Oakland.
Contractor...G. Armstrong, 220 E-11th, Oakland.

Filed Aug. 11, '15. Dated Aug. 10, '15.
1st and 15th of each month..... 75%
Usual 35 days..... 25%

TOTAL COST, \$1250

Bond, none. Limit, 30 days. Forfeit, none. Plans and specifications filed.

ADDITION

(1592) 2238 ELLSWORTH, Berkeley. Addition.
Owner.....C. Herbert, Premises.
Architect...None.
Contractor...Dolder & Derrickson.
COST, \$400

Building Contracts Awarded

Alameda.

No.	Owner	Contractor	Amt.
1574	Fortman	Kneppler	1500
1575	Same	Same	1500
1576	Schmidt	Schmidt	500
1577	Stevens	Stewart	450
1578	Shaw	Shaw	400
1580	Reinhold	McChesney	3225
1583	Bayne	Roth	4600
1584	Wever	MacKee	500
1585	Bonnemazon	Dufour	450
1586	Wright	Kneppler	1000
1593	Shredded Wheat	Clinton	76800

DWELLING

(1574) N PACIFIC AVE 86 W Bay, Alameda. One-story 5-room dwlg.
Owner.....E. D. Fortman, 803 Haight Ave., Alameda.

Architect...None.

Contractor...R. W. Kneppler, 606 Haight Ave., Alameda.

COST, \$1500

DWELLING

(1575) N PACIFIC AVE 56 W Bay, Alameda. One-story 5-room dwlg.
Owner.....E. D. Fortman, 803 Haight Ave., Alameda.

Architect...None.

Contractor...R. W. Kneppler, 606 Haight Ave., Alameda.

COST, \$1500

ADDITION

(1576) NO. 564 CENTRAL AVE., Alameda. Addition.

Owner.....Mrs. A. Schmidt, Premises.

Architect...None.

Contractor...P. Schmidt, Premises.

COST, \$500

ADDITION

(1577) NO. 1143 BROADWAY, Alameda. Addition.

Owner.....Dr. C. Stevens, Premises.

Architect...None.

Contractor...G. W. Stewart, 3219 Briggs Ave., Alameda.

COST, \$450

ALTERATIONS

(1578) NO. 475 CENTRAL AVE., Alameda. Alterations.

Owner.....E. E. Shaw, Premises.

Architect...None.

Day's work. COST, \$400

DWELLING

(1580) NO. 1317 GROVE, Alameda. Two-story 7-room dwelling.

Owner.....A. E. Reinhold, 2254 Buena Vista, Alameda.

Architect...None.

Professional Directory

George Nelson, C. E.

Engineering 560 Mission St.
Financing San Francisco, Cal.
Developments 503 Grant Bldg.
Construction Los Angeles, Cal.

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dertaken and reports rendered.

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Attorney-at-Law

Phone Garfield 2856

Phelan Bldg. San Francisco

Contractor..W. E. McChesney, 2605
Etna, Berkeley.
COST, \$3325

DWELLING
(1583) — CENTRAL AVE 288 E Grand
Alameda. One-story 7-room dwlg.
Owner.....D. B. Bayne.
Architect...None.
Contractor..C. Roth, 2117 Pacific Ave.,
Alameda. COST, \$4606

ADDITION
(1584) NO. 2110 SANTA CLARA AVE.,
Alameda. Addition.
Owner.....Wever & Brown Co., 2322
Santa Clara Ave., Alameda.
Architect...None.
Contractor..C. MacRae, 1091 Park
Ave., Alameda. COST, \$500

ALTERATIONS
(1585) NO. 2306 CLINTON AVE., Ala-
ameda. Alterations.
Owner.....Estate C. Bonnemazon.
Architect...None.
Contractor..Wm. Dufour, 2326 Santa
Clara Ave., Alameda.
COST, \$450

FRAME DWELLING
(1586) E WEBSTER 25 N Santa Clara
Ave., Alameda. Two-story frame
dwelling.
Owner.....Geo. T. Wright, 1421 San
Antonio Ave., Alameda.
Architect...None.
Contractor..R. W. Kneppler, 606 Haight
Ave., Alameda.
COST, \$1000

COMPLETION NOTICES.

ALAMEDA COUNTY

Aug. 7, 1915—PTN LOT 40 Map
Crocker Terrace, Piedmont. F F
McHenry to W D Sampson and C A
Doane.....Aug. 6, 1915
Aug. 9, 1915—SW EIGHTY-SEVENTH
Ave and Holly, being Lot 17 Blk B
Kenwood Park Tract, Okd. C W
Glantz to whom it may concern..
.....Aug. 6, 1915
Aug. 9, 1915—E FIFTH AVE 165 N
E-21st 35x150, Okd. W S Hamilton
to whom it may concern.....
Aug. 9, 1915—S FAIRVIEW 100 E
Shattuck Ave being Lot 4 Idora
Park Tract, Okd. Maude Beekley
to H M Beekley.....Aug. 3, 1915
Aug. 9, 1915—LOT 9 BLK "M" North-
brae Terrace, Bkly. Roy J Hand
to F R Peake Co.....Aug. 6, 1915
Aug. 10, 1915—SW MONTE VISTA
Ave being SE 35 Lot 15 and NW 5
Lot 14 Blk "B" Map No. 2, Linda
Vista Terrace, Okd. E L Warner
to Edward Olsen.....Aug. 5, 1915
Aug. 10, 1915—NW HIGH 215 NE —
S line tract conveyed by P H Blake
to H A Pleitner by deed dated June
8, 1904, of record June 9, 1904; NE
67.80 NW 150 SW to pt distant 215
NE from S line said tract SE 150,
Okd. M Eggers to Chris C Ander-
senAug. 2, 1915
Aug. 10, 1915—SE COLLEGE AVE &
Forest S 100xE 184-6, Okd. W H
Orrick to Van Sant-Houghton Co.
.....July 30, 1915
Aug. 10, 1915—SW HEMPHILL PL
and Coronado Ave S 33xW 90, Okd.

Charles E Faulhaber and W H
Picard to whom it may concern...
.....Aug. 10, 1915
Aug. 10, 1915—E BONITA AVE 50 S
Rose 50x100, Bkly. Elisa M Madsen
to O G Smith.....Aug. 1, 1915
Aug. 11, 1915—S JEAN NO. 482, bet.
Perry and Santa Clara, Okd. J A
Nadon to Edwin C Graff, Aug. 10, 1915
Aug. 12, 1915—NE FAIRVIEW AVE
and W Bayo Vista Ave NW 112.06
NE 90 SE 53.24 S 109.29, Ala. F N
Strang to whom it may concern...
.....July 23, 1915
Aug. 12, 1915—NE E-TWENTY-5TH
153.60 SE 21st Ave NW 53.60 NE 80
SE 21.80 S 86.09, Okd. W H Ramsey
to Haley, Wheatley & Paul.....
.....Aug. 11, 1915
Aug. 12, 1915—SEC. 8 NE ¼ SEC 7 S
¼ Sec 6 NW ¼ Sec 6 Tp 2 S Range 4
East NE ¼ Sec 1 Tp 2 S Range 3
East S ¼ Sec 36 NW ¼ Sec 36 Tp
1 S Range 3 East, Alameda Co.
Valley Pipe Line Co to F F Ware..
.....Aug. 2, 1915
Aug. 12, 1915—SW 15 LOT 7 and NE
23.34 Lot 6 Blk "F" Map Broadway
Terrace, Okd. C E Carlson to
whom it may concern.....Aug. 9, 1915
Aug. 12, 1915—N E-THIRTIETH 660.9
W intersection E line N Addition
to Town of Brooklyn W 35 N 95.35
E 38.27 S 110.55, Louis Johnson to
whom it may concern..Aug. 12, 1915

LIENS FILED

ALAMEDA COUNTY.

Aug. 6, 1915—SW SANTA CLARA AV
and SE Oakland Ave SW 29-6xE
70, Okd. Guy Taylor vs Mary E

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Through Cool and
Shady Canyons

Fast Electric trains
Make the Trip Shorter.

Transcontinental Scrip Honored

Oakland, Antioch & Eastern Railway

San Francisco Depot - Key Route Ferry

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Branch Office, 11 F St., Washington, D. C.

and Charles L Hogue.....\$60
ug. 11, 1915—LOT 3 BLK "B" Map
Oakland Highlands, Okd. Panama
Lumber & Mill Co., \$455.75; Cali-
fornia Door Co., \$211.30 vs Augusta
E and A B Chase and William
Heirs
ug. 11, 1915—LOT 16 BLK 19 Map
Northbrae, Albany. The Art Fix-
ture Co., \$50; R H McBeth, \$60 vs
W N and J G Taylor.....
ug. 12, 1915—LOT 16 BLK 19 Map
Northbrae, Bkly. T Neal, \$10; L E
Dobson Co., \$95.50 vs W N and J C
Taylor
ug. 12, 1915—E INVO 151.17 N Marin
Ave being Lot 16 Blk 19 Map North-
brae, Albany. E Lightfoot vs W
N and J G Taylor.....\$33
ug. 11, 1915—E HIGH 418.38 S
Congress Ave S 50x120, Oakland.
Melrose Lumber & Supply Co vs
Warren A De Sosa and Crescent
Investment Co\$237.70

SAN JOSE AND THE SANTA CLARA VALLEY.

RESIDENCE—1 story and base, frame, \$2,000. San Jose, Santa Clara Co., Cal. Architect, none. Owner, W. O. Miller 471 Julian street, San Jose. The dwelling has been designed for a six-room house with bath and sleeping porch, and will be erected on Julian street between 13th and 14th streets. Interior will be finished in pine throughout. Some hardwood floors will be used. There will be a large open fire place in the living room with a tile or brick mantel. Imitation tile floor and wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

HIGHWAY CONSTRUCTION—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Plans are complete and bids will be opened on September 7th for the construction of two pieces of road in Road District No. 4. The work to be done is as follows: The paving with waterbound macadam of 2,079 miles of highway in the Fourth Road District of San Mateo County. 1. The Sunshine Valley road from Colma to Half Moon Bay highway through Sunshine Valley and through Montara to the intersection of George street and Cedar street, etc. 2. Road from Montara to Martini's, beginning at the point where Farrallone avenue, Farrallone City, intersects the Colma to Half Moon Bay highway, etc.

Contracts Awarded

STREET PAVING—Cost as follows. San Mateo, San Mateo Co., Cal. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Eight sets of figures were opened in San Mateo for street paving, the two most important jobs being for San Mateo Park and for Fourth avenue. Ransome-Crummey Co., First National Bank Bldg., Oakland, were low for the San Mateo Park work at \$70,832.42; and the Federal Construction Co. low for Fourth avenue work at \$77,807. Following is a list of the bids received: For San Mateo Park—Ransome-Crummey Co., Oakland, \$70,832.42; Federal Construction Co., San Francisco, \$74,449.21; McGilivray Construction Co., Sacramento, \$75,097.61; F. R. Ritchie & Co., San Francisco, \$75,133.87. Fourth avenue, etc.—Federal Construction Co., San Francisco, \$77,807; City Improvement Co., San Francisco, \$80,872; F. R. Ritchie & Co., San Francisco, \$81,232; Clark & Henery Co., Sacramento, \$81,725; Itaisch Improvement Co., Sacramento, \$82,100; McGilivray Construction Co., Sacramento, \$88,087; Ransome-Crummey Co., Oakland, \$88,510; Church & Clark, \$92,250.

STORE FIXTURES—Cost not stated. Palo Alto, Santa Clara Co., Cal. Architect, Henry Sherrnund, Mills Bldg., S. F. Owner, James Prazier, Palo Alto. This work will include show cases, cabinets, shelves, counters, tables for clothing and interior trim. Bids are being taken on both sugar pine and birch.

BUILDING CONTRACTS

SANTA CLARA COUNTY.

COTTAGE

W SEVENTEENTH, bet. Empire and Jackson, San Jose. Six-room cottage
Owner.....H. De Smet, 398 N-11th St., San Jose.

Architect...None.
Contractor...C. De Smet.

COST, \$2000

ALTERATIONS

NE FIRST AND SAN ANTONIO, San Jose. Alterations.
Owner.....M. O'Brien.
Architect...None.
Contractor...Shottenhamer Bros., 143 S-16th St., San Jose.

COST, \$1500

COTTAGE

JULIAN bet. 13th and 14th Sts., San Jose. Six-room cottage.
Owner.....W. O. Miller, 471 Julian St., San Jose.

Architect...None.

Day's work. COST, \$1900

ADDITION

NINETEENTH AND SANTA CLARA Sts., San Jose. Addition.
Owner.....Garden City Sanitarium, Premises.
Architect...None.
Contractor...W. M. Lewis.

COST, \$600

COTTAGE

NO. 676 VESTAL AVE. San Jose. Four room cottage.
Owner.....J. Russo.
Architect...None.
Contractor...Ed. Lulhold, 672 Vestal Ave., San Jose.

COST, \$600

REPAIRS

NO. 123 VINE ST., San Jose. Repairs.
Owner.....San Jose Baking Co., Prem.
Architect...None.
Day's work.

COST, \$100

ADDITION

NO. 672 N-FOURTH ST., San Jose. Addition.
Owner.....D. Battagliese, Premises.
Architect...None.
Day's work.

COST, \$400

BUILDING CONTRACTS.

SAN MATEO COUNTY.

TILING

CAROLANDS, Hillsboro, Cal. All work tiling residence in course of construction.

Owner.....Harriett Pullman Carolan, Hillsboro, Cal.
Architect...Willis Polk & Co., Holbrook Bldg., S. F.

Contractor...Mangrum & Otter, Inc., 561 Mission, San Francisco.

Filed Aug. 7, '15. Dated July 23, '15. Work done up to time of completion.....75%
Usual 35 days.....25%

TOTAL COST, \$5600

Bond, \$2800 Surety, National Surety Co. Limit, Sept. 1, 1915. Forfeit, \$15 per day. Plans and specifications filed.

CARPENTRY AND CABINET WORK
of dining room and studio on above.
Contractor, A. J. Forbes & Son, 1530
Filbert, San Francisco.
Filed Aug. 7, '15. Dated July 27, '15.
Payments same as above.....
Usual 35 days..... 25%

TOTAL COST, \$4850

Bond, \$2125. Sureties, F. M. Lorenz and
W. Ziener. Limit, Oct. 1, 1915. For-
feit, \$10 per day. Plans and specifica-
tions filed.

FURNISH AND INSTALL HARDWOOD
floors for living room, dining room,
studio and ball room on above.
Contractor, Inlaid Floor Co., 18th and
Harrison, S. F.

Filed Aug. 7, '15. Dated July 27, '15.
Payments same as above.....

TOTAL COST, \$4000

Bond, \$2000. Surety, Pacific Coast
Casualty Co. Limit Sept. 27, 1915. For-
feit, \$10. Plans and specifications filed

FRAME RESIDENCE

LOT 25 BLK 1 Map No. 2, Burlingame
Terrace, Burlingame. All work for
two-story and basement frame residence.

Owner.....A. M. Elford, S. F.
Architect.....C. O. Clausen, Hearst Bldg
San Francisco.

Contractor, D. Charles Scanlon, Bur-
lingame.

Filed Aug. 6, '15. Dated July 31, '15.
Frame up\$850
When plastered 800
Completed and accepted..... 922
Usual 35 days..... 950

TOTAL COST, \$3532

Bond, \$1768. Sureties, John P. Cleese
and W. C. McCune. Limit, 90 working
days. Forfeit, none. Plans and speci-
fications filed.

FRAME RESIDENCE

1/2N LOTS 11 AND 12 Map of Highland
Park, Hillsboro. All work except
plumbing, painting wiring and heat-
ing for two-story and basement
frame residence.

Owner.....Edward Livingston, Geary
and Grant Ave., S. F.

Architect.....Sylvain Schnaittacher, 233
Post, San Francisco.

Contractor, Louis Cereghino & Son, 180
Jessie, San Francisco.

Filed Aug. 6, '15. Dated Aug. 3, '15.
Frame up\$1774
Brown plastered 1774
Completed and accepted..... 1774
Usual 35 days..... 1775

TOTAL COST, \$7097

Bond, \$3550. Sureties, G. B. Cordano
and R. Cereghino. Limit, 110 working
days. Forfeit, \$5 per day. Plans and
specifications filed.

COMPLETION NOTICES

SAN MATEO COUNTY.

Aug. 2, 1915—LOT 26 BLK 28 Red-
wood Highlands, Redwood City. H
H Putnam to whom it may concern

Aug. 3, 1915—LOTS 14, 15, 16 & 17,
Glenwood Park, Burlingame, Irving
C Ackerman to F L Hansen.....

.....July 27, 1915
Aug. 5, 1915—GRANT AND LINDEN
Aves, South San Francisco. A
Galli to A De Benedetti and G
Cunco.....July 12, 1915

Aug. 7, 1915—LOT 15 BLK 44 Red-
wood Highlands, Redwood City.

Redwood Highlands Co to whom it
may concern.....Aug. 6, 1915

MARIN, CONTRA COSTA AND SONOMA COUNTIES

RESIDENCE—2 story and base,
frame. Cost not stated. Martinez,
Contra Costa Co., Cal. Architect, James
T. Nabbett, 704 Macdonald avenue,
Richmond. Owner, John Marchi. The
dwelling has been designed for a seven
room house with bath and sleeping
porch. Interior finish will be of pine,
elm panels and white enamel. Hard-
wood floors will be used in the living
room, dining room and reception hall.
There will be furnace heat and open
fire place. Mantel will be of tile. An
automatic water heater will be in-
stalled. Bath room will be finished in
tile. Exterior of the house will be
covered with cement plaster on metal
lath. Plans are now being prepared
and figures will be called for shortly.

APARTMENTS AND OFFICES—2
story and base, frame. Cost not stat-
ed. Martinez, Contra Costa Co., Cal.
Architect, James T. Nabbett, 704 Mac-
donald avenue, Richmond. Owner, J.
J. McNamara. The building will con-
tain offices on the first floor and a
number of modern apartments on the
upper floor. Interior will be finished
in pine. There will be wall beds and
private bath rooms. Kawnner store
fronts are specified. Exterior of the
building will be faced with cement
plaster on metal lath. Plans are nearly
complete and figures will be called for
shortly.

THEATRE ALTERATION—Cost not
stated. Richmond, Contra Costa Co.,
Cal. Architect, A. W. Cornelius, Mer-
chants' National Bank Bldg., S. F.
Owners, Richmond Theatre Co. Archi-
tect A. W. Cornelius is preparing plans
for the installation of a new ventilat-
ing system and other extensive im-
provements to be made to the Rich-
mond Theatre. Manager Hunter will
be in charge of the work.

Contracts Awarded.

BRIDGE—Reinforced concrete. Cost
as follows. Santa Rosa, Sonoma Co.,
Cal. Engineer, County Surveyor, Santa
Rosa. Owners, Sonoma County. Con-
tractor, Charles Gildersleeve, Napa.
Contract price, \$5,600. Comstock Con-
struction Co., Santa Rosa, bridge re-
pairs, \$1,521.

BUILDING CONTRACTS.

MARIN COUNTY.

FRAME RESIDENCE

BUSH TRACT, San Anselmo. All work
for frame residence.

Owner.....Capt. Wm. Schultze.
Architect.....Carl Nuess, Service Bldg.,
Exposition Site.

Contractor, Carl Nuess.

Filed Aug. 6, '15. Dated July 23, '15.

5% of final cost of work shall be
paid upon completion of plans
and specifications and 85% of
labor and materials in place at
intervals of 14 days each, starting
from date contract is signed,
leaving a cumulative balance of
15% as final payment.....

TOTAL COST, \$1200

Bond, none. Limit, forfeit, plans and

FRAME BUNGALOW

SAN ANSELMO, Marin Co. All work

for frame bungalow.

Owner.....L. C. Elgin, 112½ Noe St.
San Francisco.

Architect.....Charles Fantoni, 914
Kearny St., San Francisco

Contractor, L. E. Warden, San Rafael
Filed Aug. 12, '15. Dated.....

Roof on\$510
Hard finished 510

Usual 35 days..... 510

TOTAL COST, \$2040

Bond, \$1020. Sureties, R. H. Warden
Thos Hansen. Limit, 75 working days.
Forfeit, none. Plans and specifications
filed.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

FRAME BUILDING, ETC.

PROPERTY OF RIVERVIEW UNION
High School District near City of
Antioch. All work for one-story
frame building and repairs to school
building.

Owner.....Trustees of Riverview
Union High School, Antioch
Designer.....C. C. Peppin.

Contractor, D. H. MacQuiddy, Pitts-
burg, Cal.

Filed Aug. 5, '15. Dated July 30, '15.

Floor joists laid.....\$296.25

Roof on and repair work done 296.25

Completed and accepted..... 296.25

Usual 35 days..... 296.25

TOTAL COST, \$1185.00

Bond, \$595. Sureties, D. Israel and
Casper Cantella. Limit, within 30
days. Forfeit, none. Plans and speci-
fications filed.

DITCH

IN SECS. 9, 10 AND 22 OF TOWNSHIP
1 South of Range 3 East of Mt.
Diablo Base Meridian. Cutting, grad-
ing and filling for construction of 2
mile ditch.

Owner.....Byron-Bethany Irrigation
Co., Byron, California.

Architect.....None.

Contractor, J. M. Mills and R. C. Mills,
Lathrop, San Joaquin Co.,
California.

Filed Aug. 3, '15. Dated July 15, '15.

At end of each calendar month
the amount of work done esti-
mated by engineer and given to
contractor within 10 days after
expiration and 75% of amount
shall be paid on 10th of each
month.....

Usual 35 days..... 25%

TOTAL COST, \$

Bond, \$500. Surety, F. Haney. Limit
within 90 days. Forfeit, none. Plans
and specifications filed.

COMPLETION NOTICES

CONTRA COSTA COUNTY.

RECORDED ACCEPTED

Aug. 4, 1915—LIME QUARRY
School District. Lime Quarry

School District to Thomas Halla-
day.....Aug. 2, 1915

Aug. 5, 1915—LOT 20 BLK 19 as laid
out in Map of City of Richmond.

Fred C Schram to Carl Overa.....
.....Aug. 4, 1915

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

RESIDENCE—1 story and base
frame, \$2,000. Fresno, Fresno Co., Cal.
Architect, none. Owner, J. E. Saylor

2561 Emma street, Fresno. The dwelling has been designed for a five-room house with bath and sleeping porch and will be erected in Buena Vista Tract. Interior will be finished in pine throughout. Some oak floors will be used. There will be an open fire place and tile or brick mantle. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and in the hands of the owner who will do the work by Day Labor.

SEWER CONSTRUCTION—Cost not stated. Turlock, Stanislaus Co., Cal. Engineer, City Engineer, Turlock. Owners, City of Turlock. Plans have been completed and approved for furnishing materials and labor, together with all appliances and accessories for the construction of an extension to the present sewer system. Bids are now being taken and will be opened on September 7th. Plans can be secured from the City Clerk.

ROAD CONSTRUCTION — \$28,858.58. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids were opened for the construction of a concrete road from Bakersfield to Edison, a distance of 6 1/4 miles and show Leigh G. Ramsey, 403 East 3rd street, L. A., the lowest bidder at \$28,858.58. Bids were taken under advisement.

FURNISHING CRUSHED ROCK — Cost not stated. Hanford, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. The Board of Supervisors instructed the Clerk to readvertise for 300,000 tons of crushed rock, which will enter into the construction of the highway system, bids to be received on August 21st. Bids received last week were all rejected because they were deemed excessive.

HIGHWAY CONSTRUCTION — Cost not stated. Hanford, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. The Board of Supervisors adopted plans and specifications for the first unit of the Kings County highway system and instructed the Clerk to advertise for bids for the construction work. The bids will be opened on August 21st. The first unit of the 103-mile system of permanent highway will embrace the nine miles between Hanford and Lemoore.

FREIGHT HOUSE ALTERATION—Reinforced concrete, \$14,000. Fresno, Fresno Co., Cal. Engineer's name not given. Owners, Santa Fe Railroad Co. This work will include some exterior concrete walls, interior alteration, plastering, electric work and carpentry. Plans are complete and the work will be done by Day Labor under the direction of the superintendent.

Contracts Awarded.

BRIDGE—Reinforced concrete, \$29,870. Roberts Ferry, Stanislaus Co., Cal. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Contractors, Ross Construction Co., Forum Bldg., Sacramento. Contract price, \$29,870.

BRIDGE—Reinforced concrete, \$11,971. Fresno, Fresno Co., Cal. Engineer, County Surveyor, Fresno. Owners, Fresno County. Contractor, J. E. Mitchell, Fresno. Contract price, \$11,971.

BUILDING CONTRACTS.

FRESNO COUNTY.

ADDITION
BLK 113, Fresno. Addition to freight house.

Owner.....A. T. & S. F. Railway Co.,
673 Market, San Francisco.

Architect.....None.
Day's work. \$14,000

ADDITION
NO. 129 M ST., Fresno. Addition.
Owner.....G. Y. Wilson.
Architect.....None.
Contractor.....E. E. Otis, 1011 O St.,
Fresno. COST, \$2000

DWELLING
LOT 29 BLK 2 Villa Addition, Fresno.
Dwelling.
Owner.....D. Thomas.
Architect.....None.
Contractor.....G. Romano. COST, \$1950

DWELLING
LOTS 31 AND 32 BLK 17, Arlington Heights, Fresno. Dwelling.
Owner.....H. Eguinian.
Architect.....None.
Contractor.....M. H. Melekian. COST, \$1000

DWELLING
LOT 39 S 15 feet Lot 31 Blk 4 Buena Vista Tract, Fresno. Dwelling.
Owner.....J. E. Saylor, 2561 Emma St.
Fresno.
Architect.....None
Day's work. COST, \$1500

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED **ACCEPTED**
Aug. 7, 1915—AT PUMPING STATIONS Nos. 1, 2, 3 and 4, Fresno. (3 cottages and one dormitory). Valley Pipe Line Co to Frank Hudson and B E Shaw.....July 30, 1915
Aug. 12, 1915—SEC 4 TP 20 RANGE 16 to Sec 21, Tp 12 Range 11, Fresno. Valley Pipe Line Co to R F WareAug. 2, 1915

LIENS FILED.

FRESNO COUNTY.

RECORDED **AMOUNT**
Aug. 7, 1915—LOTS 28-29 BLK 74, Fresno. D F Griffin s Vartan Jeragian\$100
Aug. 4, 1915—LOTS 28 AND 29 BLK 74, Fresno. Jas H Harrison vs V Jarmajian\$208

NOTICE OF NON-LIABILITY.

FRESNO COUNTY.

Aug. 7, 1915—SEC. 3 12-23 Ptn Sec 5, 13-21, Fresno. Hart Copper Co as to improvements on leased property

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

BRIDGE—Reinforced concrete. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer—County Surveyor, Red Bluff. Owners, Tehama County. Plans and

specifications for a steel bridge across Mill Creek on the Sherwood Boulevard in the Los Molinos Colony were adopted and bids were ordered to be advertised for. The bids will be opened on September 9th.

HIGHWAY CONSTRUCTION — \$60,000. Yreka, Siskiyou Co., Cal. Engineer, County Surveyor, Yreka. Owners, Siskiyou County. The matter of constructing a hard-surfaced road over the Forest House Mountain to Fort Jones and Scott Valley, at a grade not to exceed 6 1/2 per cent, is now being considered by the County Supervisors. According to reports the work will be under way shortly as it has been a long talked project and favored by all concerned. It is estimated that it will ultimately cost \$60,000 to grade and hard surface this six or eight miles over the mountain.

BRIDGES—Steel and timber. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. The Tehama County Board of Supervisors has ordered the County Surveyor to prepare plans and specifications for wooden bridges and steel bridges across New Creek and Antelope Creek and a wooden bridge across the slough near Cone's grove, all of said bridges being on the Sycamore road, in Road District No. 3. The motion was duly seconded by Supervisor Samson and carried.

BRIDGE—Reinforced concrete. Cost not stated. Grass Valley, Nevada Co., Cal. Engineer, County Surveyor, Grass Valley. Owners, Nevada and Placer Counties. Work on the new Dog Bar bridge over Bear River to be built jointly by Nevada and Placer Counties, will start immediately under the direction of Henry Nolte of Colfax. The bridge will be 130 feet long, of the Howe truss plan, and the one span will be 160 feet.

BRIDGE—Steel. Cost not stated. Railroad Flat, Calaveras Co., Cal. Engineers, Jones, Reddick & Holly, Humboldt Bank Bldg., S. F. Owners, Calaveras County. Plans prepared by Engineers Jones, Reddick & Holly have been approved by the Calaveras County Board of Supervisors for a steel truss bridge to be erected over the Mokelumne River near Railroad Flat. The bridge will be 670 feet long, of the riveted pony truss type, carried on concrete abutments. Bids will be called for shortly.

HALL OF RECORDS—2 story and base, reinforced concrete, \$55,000. Oroville, Butte County, Cal. Architect, Charles S. Kaiser, Mechanics' Institute Bldg., S. F. Owners, Butte County. Plans have been completed and approved for the construction of the new Hall of Records. The building will contain the offices of the recorder, clerk, treasurer, registrar, district attorney and auditor, besides a large auditorium and several smaller private offices. Interior will be finished in oak. Terrazzo and tile floors are specified. The Rector system of heating will be installed. There will be metal window sash and frames, special fireproof vaults and metal doors. Vacuum cleaning is also specified. Exterior of the building will be faced with terra cotta. Plans are complete and figures are being taken. Bids will be opened on September 7th.

COUNTY COURT HOUSE—2 story and base, reinforced concrete, \$71,000. Susanville, Lassen Co., Cal. Architect, George C. Selson, Sacramento. Owners, Lassen County. Bids opened for this work show James L. McLaughlin, 244 Kearny street, low at \$74,222, and Sellman Co., Reno, Nev., second low, at \$74,400. All bids have been taken under advisement until the next meeting of the Board of Supervisors. A complete list of the bids received will be found under the heading of Sacramento and Northern California in this issue.

HOTEL ALTERATION AND ADDITION—3 story and base, brick. Cost not stated. Stockton, San Joaquin Co., Cal. Architect, Joseph Losekan, San Joaquin Bldg., Stockton. Owners, Yosemite Hotel Co. The present building at the corner of Main and Sutter streets will undergo extensive repairs. The two upper floors will be razed and new steel and brick work installed. Included in the work will be carpentry, plastering, electric work, plumbing, painting and heating. The work of razing the building has been let to Thomas Lewis and is now underway.

SCHOOL—1 story and base, reinforced concrete. Cost not stated. Yreka, Siskiyou Co., Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, Yreka School District. The building has been designed to contain a gymnasium and departments for manual training and domestic science. Interior will be finished in pine. Modern plumbing and a central heating system will be installed. Exterior will be faced with cement plaster. Plans are nearly complete and figures will shortly be called.

Contracts Awarded

BRIDGE—Reinforced concrete, \$11,725. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. Contractor, E. J. D. Sharp, Chico. Contract price, \$11,725.

BRIDGES—Reinforced concrete and suspension. Cost as follows. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractors, Moore—Lentell, Eureka. Contract price, \$3,475. Mercer-Fraser Co., Eureka. Contract price, \$965.

SPRINKLING SYSTEM AND TANK—\$3,800. Gridley Butte Co., Cal. Engineer's name not given. Owners East Gridley Sprinkling District. Contractor, J. L. Mery Chico. Contract price, tank, tower and 2½ miles of pipe, \$3,800.

URINS AND GUTTERS—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractor, W. C. Gaskell, 1743 South California street Stockton. Contract price not stated.

GRAVELING ROADS—Cost as follows. Eureka, Humboldt Co., Cal. Engineer, County Surveyor Eureka. Owners, Humboldt County. Contractor, Frank Bertsch, Eureka, Sections 1 and 2. Contract price, 78c and 74c per yard respectively. George E. Hansen, Eureka, Section 3. Contract price, \$1.53 per yard.

STATE HIGHWAY WORK—Cost as follows. Sacramento, Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. The following contracts have just been awarded by the State

Highway Commission: San Luis Obispo County, 10 miles between Atascadero and Paso Robles to John D. Marsh, Box 211, Bakersfield, for \$17,809.10. Monterey County, 11.7 miles between Greenfield and Camphora, to Highway Paving Co., Room 201, 26 Montgomery street, S. F., for \$82,019.77. Santa Barbara County, 11.4 miles between Gavitoa and Zaca Station, to C. H. Hudson, Trust and Savings Bldg., Los Angeles for \$54,586. Colusa County, 3 miles through town of Arbuckle, to Clark & Henry Construction Co., Ochsner Bldg., Sacramento, for \$5,778.75. Marin County 4 miles between Burdell and St. Vincent, to R. B. Markle, Jr., Hearst Bldg., San Francisco, for \$21,355.40.

SPECIAL CELL WORK—Cost not stated. Folsom, Sacramento Co., Cal. Engineer, State Engineer, Sacramento. Owners, State of California. Contractors, C. A. Palm Bridge and Iron Works, Sacramento. Contract price not stated.

BUILDING CONTRACTS.

SACRAMENTO COUNTY.

FRAME DWELLING

NO. 3024 I ST., on W ½ Lot 4 I, J, 30th and 31st Sts., Sacramento. One-story five-room and bath frame dwelling. Owner.....Robert Gleason, 608 G St., Sacramento.

Architect...None.

Contractor...E. W. Book, 2912 G St., Sacramento.

COST, \$1600

COMPLETION NOTICES

SACRAMENTO COUNTY.

RECORDED

Aug. 7, 1915—8 SIDE OF R ST 8x160, Sacramento. The Sacramento Warehouse Co to Murrell & Haley.....

.....Aug. 7, 1915

ACCEPTED

BUILDING CONTRACTS

SAN JOAQUIN COUNTY.

FRAME BUILDING

KIDD'S ADDITION to Stockton. All work for frame building (Sikh Temple, Hindu).

Owner.....The Pacific Coast Kahlsa Diwan Society.

Architect...W. B. Thomas, Room 421, Yosemite Bldg., Stockton.

Contractor...A. J. McPhee & Sons, 316 N-California St., Stockton.

Filed Aug. 11, '15. Dated July 31, '15.

Roof on\$1000

Plastering finished 740

Building finished 1000

TOTAL COST, \$2740

Bond, \$1370. Sureties, J. W. Winder and L. Cassinelli. Limit 75 days. Forfeit, \$5 per day. Plans and specifications filed.

COMPLETION NOTICES

SAN JOAQUIN COUNTY.

Aug. 7, 1915—COR SUTTER AND Main, Stockton. Commercial & Savings Bank to Hately & HatelyAug. 3, 1915

LOS ANGELES AND SOUTHERN CALIFORNIA.

RESIDENCE—1 story and base, hollow tile. Cost not stated. San Fernando, Los Angeles Co., Cal. Architect, Charles F. Heyer, 1901 West 11st street, L. A. Owner, General H. G. Otis. The dwelling will be erected on a large tract in the San Fernando Valley, and has been designed to contain 17 rooms, 5 baths and sleeping porches. Interior will be finished in hardwood and white enamel. Hardwood floors will be used throughout. Bath rooms will be finished in tile. Plans provide for a central heating system, hot water circulating system and vacuum cleaning. There will be open fire places and tile or brick mantels. Exterior of the house will be covered with cement plaster. Plans are complete and figures are now being taken.

APARTMENT HOUSE—7 story and base. Class A construction, \$150,000. Los Angeles, Cal. Architect, John Parkinson, Security Bldg., L. A. Owner, Dr. James H. Edmonds. The building will be erected on the west side of 6th street near Westlake Park, and will cover an area of 100 by 100 feet. There will be a reinforced concrete frame and floors and hollow tile interior partitions. The building is designed to contain a total of 150 rooms, which will be arranged in suites of two and three rooms. Interior will be finished in hardwood and white enamel. Hardwood floors will be used in the principal rooms. There will be steam heat, elevator service, a hot water system, vacuum cleaning and dumb waiters. All suites will wall beds and private baths. Bath rooms will be finished in tile and equipped with high class fixtures. Marble and tile wainscot will be used in the lobby. Exterior of the building will be faced with cement plaster. Plans are being prepared.

APARTMENT HOUSE—3 story and base. Class C construction, \$25,000. Los Angeles, Cal. Architect, L. L. Jones, I. W. Hellman Bldg., L. A. Owner, W. W. Padden. The building will be erected on Fremont avenue near 4th, and will cover an area of 45 by 105 feet. There will be a total of 50 rooms arranged in two and three room suites with wall beds and private baths. Interior will be finished in pine and hardwood. Some hardwood floors will be used. There will be steam heat and a hot water system. Bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance. Exterior of the building will be faced with pressed brick. Plans are complete and the work will be done by Day Labor under the direction of the architect.

WAREHOUSE—2 story and base, reinforced concrete. Cost not stated. Los Angeles, Cal. Architect, Thomas Preston, Investment Bldg., L. A. Owners, National Transfer Co. The building will be erected on Ann street near Marguerite, covering an area of 57 by 110 feet. Construction will be fireproof with reinforced concrete floors, halls and roof slabs. Metal window frames and sash and fireproof doors will be installed. Modern electric work and plumbing are specified. Exterior of the building will be faced with cement plaster. Plans are now being prepared.



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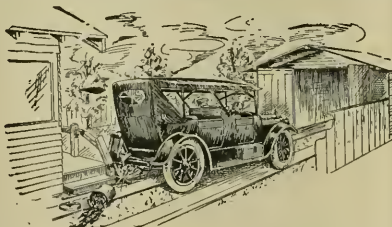
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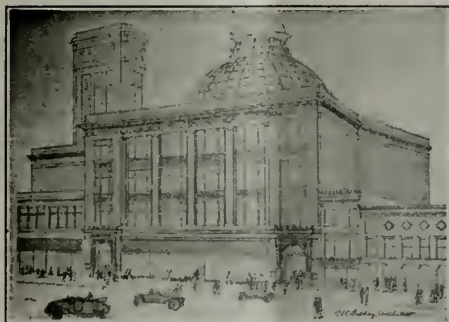
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C. W. Dickey, Architect

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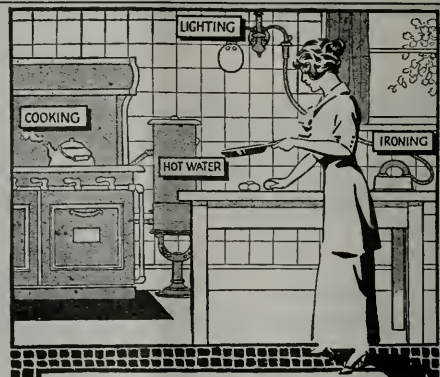
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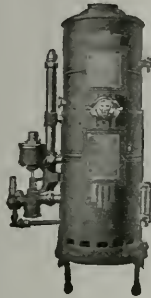
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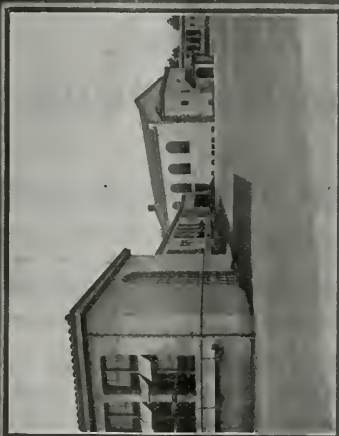
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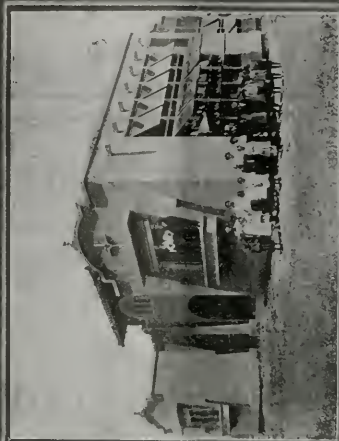
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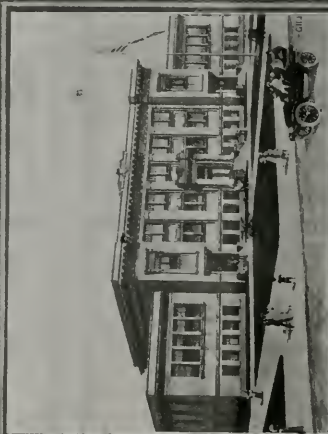
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San Francisco, August 25, 1915

Fifteenth Year, No. 34

With the city authorities taking a definite part in the preservation plans, the people of San Francisco are now practically unanimous in urging that the Marina be kept after the Exposition closes, as a beautiful bay boulevard.

The Marina should be converted into a boulevard extending from Van Ness Avenue through Fort Mason to the Presidio, thence through Fort Riley and Lincoln Park to connect with the Ocean Boulevard.

This would give San Francisco the finest ocean boulevards in the United States. With some of the buildings saved as museums and exhibit palaces, and with gardens, walks and parks flanking the boulevards, San Francisco would be transformed into a perpetual Exposition City.

The United States Department of Agriculture has assigned O. W. Schleussner, one of its commissioners, to Brawley, Imperial Valley, to direct a federal distribution of cantaloupes throughout the country. The government sees to it that while the cantaloupes reach all the markets, none of the latter is glutted with the melons. The producer thus is enabled to sell his crop at a fair price, and the consumer gets them at a fair price. More than 1500 carloads of the melons are shipped out during the season from Imperial.

The crops of the Imperial Valley, which from present indications would seem to be the largest in the history of that section, brought about the organization of a concern known as the Wichita Transportation Company. President E. M. Hackett, formerly of Texas, is now a resident of this city.

The company is operating five Wichita trucks, a value in rolling stock of \$12,000, less than the cost of building one mile of railroad. This line is running from San Diego to El Centro, through a territory not paralleled by any railroad, also stopping at intermediate points.

A railroad is now under construction between these two points, but will not be completed for some time. The transportation company is making deliveries to towns that even this railroad will not touch.

What is undoubtedly a test case, has been brought against the company by the combined railroad interest of the State seeking to have them pay heavy fines for not having conducted their business in the same manner and under the same laws which govern the steam and electric railways.

If in this test case the railways should be successful, every man who owns a motor truck, hauling freight out of the cities to small towns would be compelled to operate under the Railroad Commission governing railways and electric lines. This would necessarily force the truck man out of the business, and the railroads could not and would not give the service necessary of handling the limited freight business at small towns and out of the way places.

A novel safety exit for elevators has been incorporated for the first time in Los Angeles by the J. W. Robinson company in its new building on Seventh street, Hope and Grand avenue, has met with such immediate approval by the Los Angeles building inspector that an ordinance has been passed making it an obligatory feature in all buildings of this type erected in the future.

The eight big elevators, each with its eight by ten platform, are operated upon two separate electric currents. This power is furnished to alternating elevators so that in case any accident should occur to stop one current, the elevator adjoining it can take its passengers and continue the trip from basement to seventh floor. The particular part on which the city ordinance hinges, however, is a wide paneled door in one side of each elevator. This is so arranged that it can be opened in case of any stoppage of the lift between floors, the elevator next may be run to the same level and the passengers transported by means of a stout bridge from one car to the other with perfect convenience and safety.

A profit of \$219,212.99 has been made by the Panama-Pacific International Exposition during the three weeks ended July 31, or more than was earned by the exposition during the first twenty weeks of operation. This brings the total net profits to date up to \$399,211.01. During the period from the opening date, February 20th to Saturday, July 31, inclusive, the total attendance has been approximately 9,381,092. At this rate it is conservatively estimated by exposition officials that more than ten millions of persons will pass through the exposition gates from the date named until the closing day, December 1th.

July furnished crowds which broke all monthly attendance records at the San Diego Panama-California Exposition, according to official figures made public by the bureau of admissions. The July attendance was 301,937, a daily average of 9,110. Attendance since the opening to August 1, totals 1,265,518. A statement issued by Exposition President G. A. Davidson, which accompanied the report of the bureau of admissions, declared that bookings of large delegations with the natural influx of visitors for August will give this month a total to exceed that of July. With the increase in attendance the statement says that there has been a corresponding increase in patronage of the concessions.

LOS ANGELES AQUEDUCT.

CHECKED AND AUTHORIZED BY
THE AQUEDUCT ENGINEERING DEPARTMENT*

The Los Angeles aqueduct, the country through which it passes and the mountainous region from which its water comes have been reproduced. Under the personal direction of Chief Engineer Mulholland an accurate topographical model has been built and will be exhibited at both expositions that visitors from away may get a comprehensive idea of the big project.

The model is twenty-six feet long and thirty inches wide. It includes a wide strip of country all the way from the northern tip of the divide to the sea. It portrays the exact nature of the country, extraordinary care having been taken to make the reproduction exactly correct. The horizontal scale is one mile to the inch and the vertical scale 1600 feet to the inch.

The topographical sheets of the Geological Survey covering the strip of country represented by the model were all pantographed to the same scale and each contour transferred to plates of fiber one-sixteenth of an inch thick and then cut with a jigsaw run by an electric motor. The supply of fiber available in Los Angeles was soon exhausted and more had to be ordered from San Francisco to complete the work. On portions of the country not yet covered by surveys, these were ordered and work rushed to a speedy completion.

The coloring, also, is a close copy of nature, the artist who painted it having first made a trip through the Owens Valley.

The extreme northwest tip of the model ends at the divide, where the San Francisco as well as the Los Angeles water supply have their inception. On one side of the divide is the beginning of the Owens River tributaries. Just on the other side begins the stream which flows into and becomes a part of the Hetch-Hetchy supply.

The model shows, far above the aqueduct intake, a great mountain range, some of whose peaks are perpetually snow-capped. Mt. Whitney, the highest point, is 14,500 feet high and there are several other peaks almost as high. These mountains are much newer in formation than the volcanic Alabama hills on the other side of the valley. They are of granite and contain enormous fissures. One gorge, plainly revealed on the model, is more than 800 feet deep.

The aqueduct is shown on the model in a broad red line. The fifty-three miles of tunnels are indicated by black lines.

The model will be encased in glass and supplemented with explanatory diagrams. Another portion of the exhibit will be about fifty large transparent views of the aqueduct. These are from photographs recently taken and hand-colored to represent nature as faithfully as possible.

The pictures have been taken from the northern edge of the watershed, following down to include all the mountain ranges and showing the reservoirs, power plants and other important features of construction. One of the pictures is of an ice-bound stream with fields of snow on either side. It was taken the 5th of June, at which time the snow was four feet deep. Other pictures show, lower down, the water released from its snowy fastnesses leaping madly down the steep mountain side. The entire exhibit will constitute an instructive, accurate and interesting presentation of the aqueduct project from its physical side.

Exhibition of the aqueduct model will correct several popular misapprehension concerning the aqueduct. It has been stated many times that the water comes from Owens Lake. The model clearly shows that the water sources are far above the lake and that the aqueduct skirts that body of brackish water without at any point coming in contact with it.

One may see, as well as by taking a trip through the regions, how ruggedly wild and uninhabitable is the great watershed. Viewing the topography, the absurdity of the allegations of contamination by large numbers of people

at the headwaters or any other point above the intake is obvious.

Better than volumes of printed matter, the model reveals how stupendous the project was from an engineering point of view. It indicates how huge steel siphons were laid across the desert and up steep mountainsides; how for miles tunnels were driven through hard rock to emerge in places where there are magnificent power drops.

It is Mr. Mulholland's desire to have the model and views at the Fair in time for the Engineering Congress in September. After the Fairs are over it is proposed to have the exhibit permanently installed in Los Angeles, possibly at Exposition park.

The construction of the aqueduct that brings the waters of Owens River across 250 miles of desolate and rugged country to the city of Los Angeles has set a new standard of public service for American municipalities. No other public work at all comparable in magnitude to the aqueduct has been accomplished within the limits of cost and time fixed by the engineers in their first estimates. It is not an exaggeration to say that the builders of the aqueduct have established a world's record of efficiency and economy. They promised that the work should be done in five years and water delivered at the San Fernando reservoir at a cost of \$23,000,000. They began work in 1908, and they brought the water to San Fernando in 1913 at a cost within the original estimate.

For several years the men upon whom rested the responsibility of providing the city of Los Angeles with sufficient water for her people sought in vain for sources of permanent supply equal to prospective demands. The necessity for additional supply was made plain to the Water Commissioners in 1904, when for ten days in July the daily consumption of water exceeded the inflow into the reservoirs by nearly 4,000,000 gallons. Excessive consumption was checked by the use of meters, and some small additions to the supply were obtained from wells, but the rapid increase of the city's population made such relief only temporary, and the board was confronted by a problem of serious proportions. The board imposed upon Engineers William Mulholland and J. B. Lippincott and O. K. Parker the task of gathering data and finding a solution of the problem, and their report in 1905 showed the hopelessness of seeking relief in any watershed south of the Tehachepi.

There is water under the ground of all the coastal plain in which the city stands, but it is not an inexhaustible reservoir, and the drafts made upon the underflow by the pumps of thousands of farms and orchards were found to be steadily lowering the plane of saturation. To take more water for the city from the underground reservoir would stop the development of the surrounding country and set a limit to the growth of Los Angeles. The engineers were forced to the conclusion that nowhere in the basin south of the Tehachepi range and west of the San Bernardino could Los Angeles obtain any considerable flow of water without taking it from the lands which produce the wealth of Southern California.

In estimating the future needs of the city, the engineers assumed a rate of growth based upon the average for the ten preceding years, and predicted an increase from 200,000 in 1905 to 250,000 in 1912, and 390,000 in 1925. Assuming a reduction of average consumption of water, by the use of meters to 150 gallons a day for each inhabitant, the city would require in 1925 a supply of ninety second-feet, or more than 58,000,000 gallons a day, which is more than double the minimum flow of the Los Angeles River and ten second-feet in excess of the recorded maximum flow at The Narrows.

The city, however, failed to keep within the limits of the growth diagram drawn by the engineers, and by 1910 as shown by the Federal census, its population had reached the figure set by them for 1913, viz: 319,000. According to the diagram in the report of the engineers, the city would have a population of half a million in the year 1936. As a matter of fact, it reached that stage of growth in 1913. Fortunately a seven-year period of abundant rain brought

*FOOTNOTE.—This article was compiled by Mr. Frederick Hayden of the Los Angeles Times and checked by the Aqueduct Engineering Department.



William Mulholland, Chief Engineer of the Los Angeles Aqueduct.



Owens River, 100 Feet above Aqueduct Diversion. Photo taken 1904.

the flow of the Los Angeles River up from the forty second-feet of 1905 to seventy second-feet in 1911, nearly doubling the city's supply from that source.

Heavy draughts were made by pumps upon the ground waters, lowering the water plane from six to nine feet, and the per capita consumption was decreased by the extended use of meters to 138 gallons a day. Because of the series of wet seasons and the resort to the temporary expedient of robbing the agricultural lands of the coastal plain of their ground waters, the city escaped a water famine during the period of its wonderful growth, but

there was no margin of safety, and the lowering of the ground water plane confirmed the judgment of the Water Board and its engineers in seeking other sources of supply.

Early in 1905 a solution of the water problem was suggested to Water Superintendent Mulholland by Fred Eaton, who had been City Engineer and Mayor of Los Angeles. Mr. Eaton had interests in Inyo county, and for many years had been making extended trips through the valley of Owens River, which lies between the Sierra Nevada and ranges of desert mountains on the eastern state line. In the valley Mr. Eaton had seen vast floods of water pouring



Foothills, with the Sierras and Mt. Whitney in the back ground.



Mt. Whitney (elevation 14,502 feet) and the main range of the Sierra Nevada.

wastefully from the Sierra snowfields into Owens Lake, a dead sea of the Inyo desert, where hundreds of thousands of years of evaporation and condensation had produced a saturated solution of soda salts, and he had wished that those floods could be made available to the great city which he saw growing in the Southland.

On his journeys to and from the valley, Mr. Eaton studied the country with the eye of an engineer, and he saw that in some past geological period the river flowing for 100 miles along the eastern foot of the Sierra had been a great torrent, swinging around the end of the range and pouring into the basin of the Mojave desert. Volcanic action had cut off the flow by throwing a barrier across the south end of Owens Valley and forming the enclosed basin in which the lake lies. But the barrier was low, and below it the old stream route was still open to within a few miles of the Southern California plain, the only obstacle being the range of mountains north of Los Angeles.

Confident that a constantly descending route for the

river could be found, Mr. Eaton made surveys from Owens Valley to the mountains north of the city, and proved the practicability of his dream.

Mr. Mulholland studied the problem in detail, going over the line alone and making a rough survey with an aneroid and a pocket level, keeping the purpose of his frequent trips into the desert a secret from all but the Water Board, until he had satisfied himself that he had found a feasible route for an aqueduct. He plotted an approximate line upon the detailed topographic maps of the United States Geological Survey and determined the lengths of open canal and tunnels and siphons that would be required, located reservoirs and calculated quantities of materials to be moved and placed, and made an estimate of cost that was confirmed later by thorough instrumental surveys and minute calculations. He then made a report to the Water Board and outlined an aqueduct and reservoir system, which he estimated would cost, including the purchase of land and water rights, about \$25,000,000.



Rugged country of Jawbone Division; 23 miles of Tunnel.



Owens River at point of diversion. Concrete Diversion Dam shown in place.



View of Mt. Williamson and the upper watershed of the Owens River.

Mr. Mulholland realized that the board would rely upon his judgment as an engineer, and that upon him would rest the responsibility of committing the city to a stupendous enterprise. If he should make a serious error in his judgment of the engineering practicability of the project or in his estimate of cost, professional ruin would befall him. It required sure knowledge of conditions, genius in design-



Gates letting Owens River water into the Aqueduct.

ing plans and great courage in accepting responsibility. Mulholland "made good" in all.

In August, 1905, on his return from the Owens River Valley, Mr. Mulholland took into his confidence Mr. J. O.



Steam shovel at work; huge boulders made progress slow.



Steam shovel on open conduit near Owens Lake.



Concreting open conduit of Aqueduct.



Putting cover on the Aqueduct in the heart of the Mojave Desert.

Koepfli, president of the Chamber of Commerce, and stated to him that he had found in the Owens River Valley a source of supply that would furnish Los Angeles with all the water it would ever need. President Koepfli immediately took the matter up with the board of directors of the Chamber, and in conjunction with other commercial bodies sent a special committee, consisting of H. C. Witmer, M. Lissner and Fred A. Hines to the Owens River Valley to make a personal investigation, especially with reference to the quality of the water. The committee obtained samples of the water and had them analyzed both at the State University and in Los Angeles.

As soon as this investigation was completed an election was called to vote \$1,500,000 in bonds for the purchase of land and water rights in the Owens River valley, the Chamber of Commerce strongly urging the people to vote the bonds.

The Owens River project was made known to the people

of Los Angeles in July, 1905, and was received with enthusiastic approval as the only practicable and adequate answer to the most vital question confronting the city. The Water Board asked the city to issue bonds for \$1,500,000 for the purchase of lands and water and the inauguration of work on the aqueduct, and on September 7, 1905, by a vote of 10,787 to 755 the citizens of Los Angeles approved the bonds and indorsed the Owens River project.

In November, 1906, the city employed three of the most eminent hydraulic engineers in the United States to examine and report on the project. The consulting engineers were Frederick P. Stearns, president of the American Society of Civil Engineers, and member of the Isthmian Canal Commission; John R. Freeman, the greatest specialist in hydraulics in the country, and James D. Schuyler, builder of the largest dams in the West, and an engineer of wide experience.

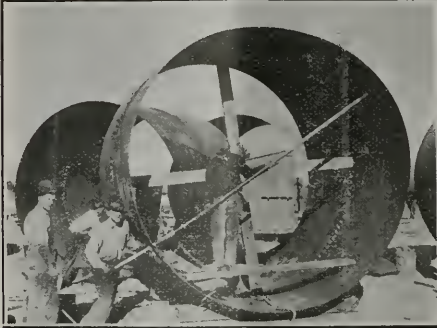
The Consulting Board made its report on December 25, 1906, showing that supply of 20,000 miners' inches of water could be obtained from Owens Valley, and that the cost of building an aqueduct to bring it to San Fernando, in-



View showing mountainous topography on Aqueduct line.

cluding purchases of land and water rights, would be \$24,485,600.

In 1907, the question of issuing bonds for \$23,000,000 for the construction of the Owens River Aqueduct was submitted to the people by the City Council and a campaign of education was carried on by the civic and commercial



Sections of steel pipe for siphon.

bodies and the press. The Chamber of Commerce, the Merchants' and Manufacturers' Association and other organizations investigated the project thoroughly, the Mayor and Council scrutinized it in detail, engineers studied it and reported their conclusions, and on June 13, 1907, the people of Los Angeles indorsed the project by voting in

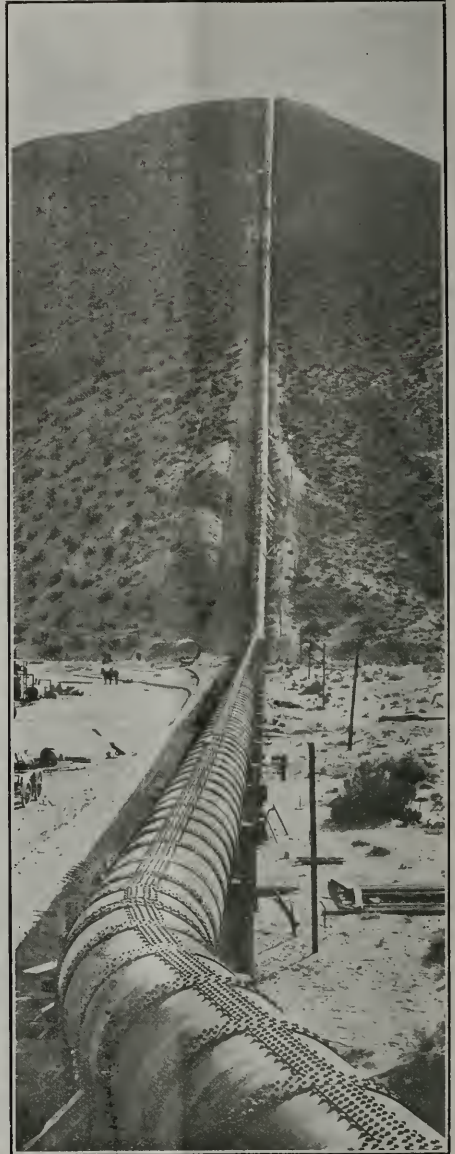


Completed Aqueduct—Owens Lake in the background.

favor of the bond issue. The vote was in the ratio of ten to one.

The general plan of the aqueduct, as outlined by Mulholland and approved by the Advisory Board of Engineers, subject to such modifications and changes of location as might be found advisable during the progress of the work, was as follows: An intake on Owens River about thirty-five miles north of the point where the river empties into Owens Lake; an open canal of 900 second-foot capacity through Owens Valley, twenty-three miles unlined and thirty-seven miles lined with concrete, to Haiwee reservoir, at an elevation of 260 feet above the level of Owens Lake; Haiwee reservoir to accumulate and store the waters of the river and of intercepted streams flowing down the east

side of the Sierra Nevada, having a capacity of 63,800 acre-feet, or 20,000,000,000 gallons; from Haiwee to Little Lake, fifteen miles of lined and covered conduit of 410 second-foot capacity; Little Lake to Indian Wells, twenty-four miles of conduit, tunnels and siphon pipes; Indian Wells to Red Rock summit, twenty miles of conduit, flumes and siphon; Red Rock through the "bad lands" of Jawbone Can-



Jawbone Siphon.

yon to the Mojave desert nearly nineteen miles of tunnels, siphons and conduit; through the Mojave desert to the west end of Antelope Valley, sixty-eight miles mostly of concrete conduit; reservoir at Fairmont to regulate delivery of water through pressure tunnel; Elizabeth Lake



The 800,000 Dollar Municipal Cement Plant at Monolith.

tunnel, 25,000 feet; power drops in San Francisquito Canyon; tunnels, siphons, flumes and conduit to San Fernando reservoir, fifteen miles; total, 225.87 miles, exclusive of reservoirs and power water ways.

A vast amount of preparatory work had to precede aqueduct construction and that was begun in the fall of 1907. It was believed by the engineers that the time of completion of the aqueduct would be controlled by the driving of the longest tunnel, and therefore, the portals of the Elizabeth tunnel were opened simultaneously with the beginning of preparatory work along the line; but

with that exception no permanent work was begun until October, 1908. Crews were organized and camps established in September, but construction dates from October 1, 1908.

In the first eleven months twenty-two miles of tunnel were driven, sixteen miles of cement conduit completed, four miles of open canal in Owens Valley dug, and a rate of progress established that would have brought the water into the San Fernando reservoirs in the fall of 1912 had there been no delay in providing funds.

Before work could be begun on the aqueduct, it was



Concreting open conduit of Aqueduct, showing method of progress.

necessary to build roads and trails, power plants, telegraph and telephone lines, and provide water supply for the camps established along 150 miles of waterless desert.

Included in this work were 215 miles of road, 230 miles of pipe line, 218 miles of power transmission line, and 377 miles of telegraph and telephone line. Fifty-seven camps were established along the line of work, most of them in the mountains, and good roads made to reach them. Some of the roads challenge comparison with the finest mountain roads in California, and all of them are better than the stage roads existing in the desert before the city began its work.

In the acquisition of water rights and for operation, maintenance and protection of the aqueduct, the Board of Public Works bought 124,929 acres of land in the drainage basin of the Owens River, 4,300 acres near Tehachepi, sixty-nine acres for yards at Mojave and 5,818 acres for reservoir sites; total, 135,116 acres, exclusive of canal rights of way. This is an area three times the size of the island

per day with three eight-hour shifts, and a bonus schedule was adopted by the Board of Public Works which provided that each man working in the tunnel would receive a bonus of 40 cents for each foot that this schedule was exceeded. This bonus was paid in addition to the regular wages, the men receiving these wages whether the bonus schedule was exceeded or not, and the bonus being distinctly a reward for extra exertion. The effect of the bonus was to increase the daily wage of the men about 30 per cent, and to decrease the cost of driving per foot from 10 to 15 per cent. There was a further saving to the city in expedition of the work and in early release of equipment for use elsewhere.

From the south portal, 13,500 feet of tunnel were driven, and from the north portal, 13,370 feet. The average rate of progress at the south portal was 11.11 feet per day; at the north portal, after the connection was made through to the shaft, the average progress was 13.65 feet per day. From the portal to the end of the section driven from



Completed Aqueduct, from Intake to Haiwee Reservoir, 68 miles—the Aqueduct is not covered.

of Catalina and double the total area of the city of Los Angeles.

World's records for speed, efficiency and economy were made by the tunnel drivers on the aqueduct. The American record for hard rock tunnel driving—604 feet in one month—is blazoned above the south portal of the Elizabeth Lake tunnel. This bore through the mountain, 25,870 feet in length, 10x12 feet in diameter, and having a capacity of 1000 cubic feet of water per second, or 27,000,000 gallons an hour, was driven and lined for two-thirds of the estimated cost and in two-thirds of the time allotted by the board of consulting engineers. The excavation work was in charge of John Gray at the north end of the tunnel and W. C. Austin at the south end. The average progress for the two headings was 22.1 feet, or a little better than eleven feet per day for each end.

When this tunnel work was started it was estimated that a reasonable progress for each end would be eight feet

the north end, including delays on account of shaft and cave-ins the average progress was eleven feet per day. The average progress for the two headings for the 1215 days' work was 22.1 feet, or a little better than eleven feet per day for each end. The connection was made of the two headings on February 28, 1911; after the expiration of forty months of work.

A noteworthy record was made in driving the Red Rock tunnel. This tunnel is in an indurated sand or soft sandstone, and is 10,596 feet in length. Excavation was started on May 27, 1909, and was completed January 24, 1910.

The Red Rock tunnel crew raced with the Swiss drivers of the Loetschberg tunnel for the world's record, and won it. In August, 1909, the Swiss broke their own previous record by driving 1013 feet, working with four air drills in one heading. Tom Flannigan's crew at Red Rock working with hand drills in one heading, drove 1061 feet. The hard-rock men in the Elizabeth tunnel raced with the

government crew on the Gunnison tunnel and beat them. There are 155 tunnels, aggregating 51.92 miles in length, in the aqueduct.

The aqueduct passes through the mountains of Jawbone division in a series of tunnels of varying length, connected by short stretches of conduit, and crossing the deeper and wider canyons in inverted steel siphon. The Jawbone division consists of 12.07 miles of tunnel, 7.17 miles of conduit, .91 of a mile of flume, and 2.2 miles of steel siphon. The Jawbone siphon is the most imposing piece of work on the aqueduct. Its total length is 8,136 feet, and it varies from 7 feet 6 inches to 10 feet in diameter. The steel plate of which this pipe is built is $1\frac{1}{4}$ inches thick in the heaviest section. The maximum head on the pipe is 850 feet, and its total weight is 3,243 tons. It is the most noteworthy pipe in the United States.

The longest siphon on the aqueduct is the pipe crossing Antelope Valley. It is 21,767 feet in length, and up to heads of eighty feet is built of concrete, the remaining 15,597 feet being steel pipe. The concrete and steel pipes are both ten feet in diameter. The maximum head on this siphon is 200 feet, and the weight of the steel is 3324 tons.

There are ninety-eight miles of covered conduit south of the Haiwee reservoir. The covering was not included in the original estimate of the board of engineers, but it was a part of Mulholland's plan. Mulholland never had any idea of leaving the conduit through the desert uncovered. He said he would save enough on the tunnels to pay for the cover, and he did. The covering cost more than a million dollars.

The first reservoir on the line is at Haiwee, seven miles south of Owens Lake. It is located in a pass and is formed by two dams seven and a half miles apart. The elevation of the high water in the Haiwee reservoir is 3,764 feet. The area of the water surface is 2,100 acres, and the capacity of the reservoir is 63,800 acre-feet, or enough water to run the full capacity of the aqueduct for eighty days.

The length of the North Haiwee dam is 1890 feet, the maximum height forty-six feet, and width on top twenty feet, and it contains more than 200,000 cubic yards of earth. The maximum depth of water against this north dam is thirty-six feet.

The South Haiwee dam is 1523 feet long and 91 feet high, and contains 559,750 yards of earth. The dam has slopes of $2\frac{1}{2}$ horizontal to 1 vertical on each side, with a top width of 20 feet, and a maximum width at its base of 450 feet. At this point, on account of the depth of the water, a core-wall was put down to bedrock, a maximum depth of 120 feet, at a cost of \$70,000.

The outlet from the reservoir is through a tunnel 1193 feet long and 10 feet in diameter in the clear, which has been driven through the west abutment. There is a submerged canal in the reservoir site 700 feet in length from the north portal of this tunnel to the lowest point in the reservoir. The gate-tower is a concrete structure 80 feet in height, and 21 feet outside diameter. It contains large gates placed at different elevations to regulate the outflow of water.

The Fairmont reservoir is intended not only as a safeguard in the shape of a storage supply 200 miles from the intake, but also as a means of regulating the hourly fluctuations of water through the power plants located below, to meet peak load conditions. The capacity of the conduit into this reservoir is 420 cubic feet per second, but the outlet tunnel from the reservoir to the power plant has a capacity of 1000 cubic feet per second. This will permit the discharge of this large volume of water in the few hours in the day during which the maximum demand exists for electric energy, and the decrease of the flow of water to a minimum amount during the night hours, when the demand for power is relatively small. The capacity of the Fairmont reservoir at the 3035-foot elevation is 7620 acre-feet. The dam has a maximum center height of 115 feet, and contains 607,111 cubic yards. It is built of earth with a concrete core wall.

The Dry Canyon dam on the Saugus division is 523 feet long, has a center height of 61 feet and containing 140,000 cubic yards of earth. The Dry Canyon reservoir has a storage capacity of 1225 acre-feet, and its province is to regulate back to uniformity the irregular flow that may be discharged through the power plants.

The San Fernando reservoirs, into which the water is delivered from the aqueduct for distribution to the city and contiguous territory, have a storage capacity of 36,600 acre-feet, or enough to furnish a full supply for a

month and a half in case of breaks in the line above.

The city also owns a reservoir site in Long Valley, in the northerly portion of the drainage basin of Owens River, having a tributary watershed of 391 square miles. If this reservoir should be constructed, the flow line would be at an elevation of 6810 feet, the area of its water surface would be 5686 acres, and its storage capacity would be 340,980 acre-feet. This would call for a dam 520 feet long on top and 160 feet in height. A structure of this character would make this one of the most notable storage reservoirs in the United States. It may be found desirable to build this Long River reservoir when the complete flow of the aqueduct has been utilized. In this event its province would be to hold over a water supply from years of excessive flow for such years of drouth as may occur in a generation.

A second great reservoir site is controlled by the city at a point about six miles north of the intake of the canal. This is known as the Tinemaha reservoir site. Its flow-line would be at an elevation of 3887 feet. The area of its water surface would be 7074 acres, and its storage capacity would be 127,125 acre-feet, with an earthen dam 40 feet high. This reservoir site has the advantage of being situated near the intake of the canal, and the city owns continuously both sides of the river from the dam site to the intake, thus offering protection from trespass any waters which might be discharged from it.

The capacity of the Long Valley reservoir would be sufficient to furnish a continuous flow of the full aqueduct for a period of 127 days, and the Tinemaha reservoir, with the height of dam given, for a period of 159 days.

In addition to this, eleven wells have been put down in the bottom lands of Owens Valley along the line of the canal, and ten of these have struck artesian water. This body of underground and artesian water in Owens Valley is about fifty miles in length controlled by the city.

More than six million pounds of blasting powder was used by the builders of the aqueduct and yet only five men were killed in accidents in underground work.

Electric power to drive dredges, excavators, drills, machinery in shops and cement mills, and to light the camps and tunnels was developed in plants installed on Division Creek near the intake, and on Cottonwood Creek near the lower end of Owens Valley. High voltage lines transmitted the power along the line to the mill at Monolith. Power for work in San Francisco Canyon was taken from the Kern River line, which passes through the canyon.

In San Francisco Canyon two drops aggregating 1500 feet are to be used to develop about 112,000 horse power of electrical energy from the sale and use of which the city may derive a large revenue.

In April, 1910, the city voted three and a half million dollars for the construction of power plants in the San Francisco Canyon and elsewhere and for the building of related electric works. The validity of the bonds was questioned, and the courts appealed to. This involved a delay in the building of hydraulic works in the San Francisco Canyon until the State Supreme Court should pass on the matter. A decision of the Supreme Court was rendered in June, 1911, sustaining the contentions of the city and establishing the validity of the bonds and the work was begun under the direction of the Board of Public Works and not as a part of the aqueduct, although the conduit used for the generation of power will also be essential for the conveyance of the water to the city of Los Angeles as a portion of the aqueduct.

The maximum capacity of the power plants that have been and may be installed along the line is as follows:

	II, P.
Division Creek	800
Cottonwood Creek	8,500
Haiwee	6,150
San Francisco	112,800
San Fernando	9,655
Total	138,035

Water was turned into the Los Angeles mains July 22, of last year, 1911, and ever since the Owens Valley supply has been used here to augment that of the Los Angeles River.

Last month the city purchased and took over the system of the Union Hollywood Water Company, by far the largest of the eighteen systems formerly operated independently. Prior to that time the Water Department furnished a large quantity of water to prevent a shortage in the Hollywood district.

ADVANCE NEWS

Classified according to Character of Work

APARTMENT HOUSES

SAN FRANCISCO.—Apartment house 4 story and base. Class C. \$65,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Girard Investment Co. The building will be erected at the southwest corner of Bush and Jones streets having a frontage of 77½ feet on each street. There will be a total of thirty suites, arranged in two, three and four room apartments, with private baths and wall beds. Interior finish will be of pine, hardwood and white enamel. Hardwood floors will be used in the living and dining rooms. Plans provide for steam heat, an automatic elevator, oil burning plant and vacuum cleaning. Bath rooms will have tile floors and wainscot. Marble and tile will be used in the entrance. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are now being prepared.

SAN FRANCISCO.—Apartment house 2 story and base, frame, \$25,000. Architect, Edward E. Young, 251 Kearny street, S. F. The building will be erected at the northeast corner of Geary and Palm avenue, covering an area of 89 by 86 feet and has been designed to contain ten large suites. Interiors will be finished in pine and hardwood. Hardwood floors will be used in the living rooms, dining rooms and reception halls. Plans provide for steam heat a hot water system and vacuum cleaning. All bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Apartment house, 1 story and base, \$50,000. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner's name withheld. The building will be erected on Grand avenue covering an area of 88 by 78 feet and will contain a total of twenty-six suites of three, four and six rooms. Interiors are to be finished in pine, hardwood and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for steam heat, an automatic elevator, hot water system, vacuum cleaning and oil burning plant. All bath rooms will have tile floors and wainscot. Wall beds are specified. Marble wainscot will be used in the entrance. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are being prepared.

OAKLAND, CAL.—Apartment house, 3 story and base, frame, \$12,000. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner, William Kerrigan. The building will be erected at the corner of 40th and Webster street and has been designed to contain six

suites of three and four rooms with private baths and wall beds. Interior finish will be of pine and hardwood. Some oak floors will be used. Bath rooms will be finished in tile. A hot water system and steam heat are specified. Exterior of the building will be covered with cement plaster on metal lath. Plans are now being prepared.

MARTINEZ, CONTRA COSTA CO., CAL.—Apartments and stores, 3 story and base, brick. Cost not stated. Architect, Henry Shermund, Mills Bldg., S. F. Owner, Gus Weist. The building will be erected at the northeast corner of Ward and Union streets, covering an area of 70 by 100 feet. Plans provide for four modern stores on the first floor and a total of 14 suites of three and four rooms on the upper floors. Interior will be finished in pine. There will be steam heat, oil burning furnace, and a hot water system. All suites will have wall beds and private bath rooms. Tile floors and wainscot will be used in the bath rooms. Patent store fronts are specified. Exterior will be faced with pressed brick. Plans are now being prepared.

SAN FRANCISCO.—Apartment house, 3 story and base, frame \$23,000. Architect, Arthur J. Leib, Russ Bldg., S. F. Owner's name withheld. The building will be erected on the north side of Sacramento street west of Taylor and has been designed to contain five apartments of four rooms and one large six room suite. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the living rooms and dining rooms and private entrance halls. There will be steam heat, an oil burning furnace and hot water system. All suites will have wall beds and private baths. Bath rooms will be furnished in tile. Marble and tile wainscot is specified for the entrance vestibule. Exterior of the building will be covered with rustic and cement plaster. Plans are complete and a contract will be awarded this week.

Contracts Awarded

SEATTLE, WASH.—Apartment house 3 story and base, reinforced concrete, \$32,215. Architects, W. R. B. Wilcox & Julian Everett, Boston Bldg. Seattle. Owner, L. Smith. Contractors, MacRea Bros., Empire Bldg., Seattle. Contract price, \$32,215.

SAN FRANCISCO.—Apartment house and store, 3 story and base, frame, \$3,500. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, H. D. Junck. Contractor, Ludwig Koenig, 3525 19th street, S. F. Contract price, \$3,500.

BONDS.

TERRA BELLA, TULARE CO., CAL.—Without a dissenting vote, the electors of Terra Belle voted solid for the organization of the Terra Bella Irriga-



Devoted to the Architectural, Engineering, Building and Industrial Activities of the Pacific Coast.

Circulates among the leading Architects, Engineers, Surveyors, Contractors and Municipal Authorities on the Pacific Coast.

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gation District. A bond election will be called in the future to develop the proposed district.

SACRAMENTO, CAL.—According to advice given out by the state engineering office at Sacramento, the organization of the boards of supervisors of fifty counties in this state will fight the proposed bond issue of \$12,500,000 which is planned to complete the various highways contemplated by the state highway commission. It is said that when the many highways and trunks and laterals planned are completed that it will take out of the hands of the supervisors the political patronage which has been an important item to the various supervisors.

MARYSVILLE, YUBA CO., CAL.—The Medical Society of Yuba and Sutter Counties has passed resolutions approving the calling of a bond issue to raise sufficient funds for the extension of the sewers from their present outlet to a point beyond Fourteenth street.

ABERDEEN, WASH.—A special election held to vote bonds of \$500,000 to build a gravity water system to the falls of Wishkah, 23 miles north, carried by a large majority.

HILLSBOROUGH, SAN MATEO CO., CAL.—The first batch of school bonds of \$23,301 have been sold by the County Supervisors to E. H. Rollins of San Francisco. Plans for the improvements proposed will be ordered shortly.

STOCKTON, SAN JOAQUIN CO., CAL.—In response to the petition of residents in the vicinity of Tracy, the supervisors have called an election for October 12th to decide whether the West Side Irrigation project of 11,500 acres shall be formed.

SAUSALITO, MARIN CO., CAL.—An election will be held in the Sausalito School District on September 11th, to vote bonds of \$20,000 with which to build a new school building. Further information relative to the election may be had from P. J. Elliott, Caroline L. Fiedler or F. D. Linsley, Trustees of the Sausalito School District.

RODEO, CONTRA COSTA CO., CAL.—Owing to the extremely low rate of interest, the \$17,000 issue of Rodeo sanitary District bonds failed to be sold when the time for opening bids arrived. The Board will issue another call for bids.

MODESTO, STANISLAUS CO., CAL.—The good roads petitions asking the Supervisors to appoint a commission and proceed with the work of calling a bond election in Stanislaus county are now being circulated.

AUBURN, PLACER CO., CAL.—An election for Tuesday, September 14th, to vote \$22,000 bonds has been called by the City Trustees. Of this amount \$15,000 will be for sewer purposes, in building a septic tank, and increasing the size of some of the main sewer pipes. \$5000 will be voted for the purchase of three fire auto trucks, and \$2,000 for the erection of a fire alarm system.

TAFT, KERN CO., CAL.—A \$60,000 bond issue of the city of Taft and an issue of \$2500 for the Rosamond grammar school have been sold by the Kern County Board of Supervisors. The Taft issue, which was pur-

chased by a San Francisco firm, brought a premium of \$1,311. The Rosamond issue was purchased by the Security Trust Company of Bakersfield.

SAN BERNARDINO, SAN BERNARDINO, CAL.—September 20 is the date fixed by San Bernardino City Council when the voters of that city will pass upon a proposed bond issue of \$210,600 for the building of a city hall and municipal auditorium.

MOHAVE CO., ARIZ.—The voters of the county have approved a bond issue of \$100,000 for improving the roads of the county.

FLORIN, SACRAMENTO CO., CAL.—Four bids were received by the Supervisors for the purchase of the \$10,000 bond issue of the Florin School District. The bids, which were referred to the Contract Committee, were as follows: Sacramento Valley Bank and Trust Company, \$196.72; Lumberman's Trust Company of San Francisco, \$155; Blythe-Witter Company, San Francisco, \$211, and the Capital National Bank, Sacramento, \$161.

WESTMINSTER, ORANGE CO., CAL.—The directors of the Westminster Drainage District, have called an election to be held on September 10th for the purpose of voting bonds of \$25,000 for the construction of a drainage system. This is a new organized district and includes a large area around Westminster.

CIENEGA SCHOOL DISTRICT, CAL.—A special election will be held in the Cienega school district on September 7, 1915, for the purpose of voting bonds in the sum of \$40,000 for the erection of a school building.

OROVILLE, BUTTE CO., CAL.—Petitions asking for the formation of an irrigation district near Paradise, Butte County, will be presented to the Board of Supervisors at its October meeting. The project will include about 20,000 acres, and it is reported that about 60 per cent of the affected property holders have already signed the petition.

BRIDGES AND DAMS

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, Co. Surveyor, San Luis Obispo. Owners, San Luis Obispo County. At the last meeting of the Supervisors plans and specifications for the construction of the San Miguel bridge across the Salinas river on the San Miguel and Vineyard Canyon road were presented, but failed to be adopted as the Board decided that the time was inopportune and action could be taken at some future date.

MODESTO, STANISLAUS CO., CAL.—Bridges reinforced concrete, steel and timber. Cost not stated. Engineer, E. H. Annear, Modesto. Owners, Stanislaus County. The plans and specifications prepared by County Surveyor E. H. Annear for a concrete bridge over the drainage canal, on the McHenry Road, for a bridge over the M. I. D. main canal on the Sonoma lateral at Sta. 369+86 C. 11, C. for a bridge over the Ceres main Canal on the Hughson Road for a bridge over lateral No. 1 on the McHenry road at the northern limits of

the city of Modesto for a bridge over lateral No. 3 on the McHenry road at the northern limit of the city of Modesto; for a bridge over lateral No. 6 on the McHenry road near Bang's house, and for a bridge over lateral No. 2 on the Claus road, were adopted by the County Supervisors at their last meeting and the Clerk was instructed to advertise for bids to be received on September 14th, 10 a. m. Plans and full information may be had from the County Engineer at Modesto.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo Co. At the last meeting of the County Supervisors plans and specifications for the Paso Robles creek bridge on the state highway near Templeton were accepted and ordered that bids be called for to be opened on the 3th of September.

STOCKTON, SAN JOAQUIN CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineers, Givan & Pearce, Sacramento. Owners, San Joaquin Co. Plans have been prepared by Engineers Givan & Pearce of Sacramento for reinforced concrete bridge over Mormon channel at San Joaquin street. The structure will be 200 feet long and will be built in six 33 1-3 foot spans. **SANTA ROSA, SONOMA CO., CAL.**—Retaining wall and bridges reinforced concrete. Cost not stated. Engineer, County Surveyor, Santa Rosa. Owners, Sonoma county. Plans have been completed and bids will be opened on September 16th by the Board of Supervisors for the construction of a reinforced concrete retaining wall located on the county road near Glen Ellen, and for two reinforced concrete bridges, located respectively on the county road near Grippi, and on the county road near Two Rock. Plans and specifications can be secured from the County Clerk.

CRESCENT CITY, DEL NORTE CO., CAL.—Bridge steel and concrete. Cost not stated. Engineer, County Surveyor H. Malpas, Crescent City. Owners, Del Norte county. Plans and figures will be opened on September 13th by the Board of Supervisors for the construction of a Pratt Combination type bridge of 120 foot span, 14 foot clear roadway, and a 90 foot approach and all grading necessary to reach approaches. Bents and piers to be of driven piling. Plans and specifications together with complete information may be had by addressing the County Surveyor at Crescent City.

SACRAMENTO, CAL.—Trestle, timber and steel, \$34,000. Engineer, County Surveyor, Sacramento. Owners Sacramento County. The Board of Supervisors of Sacramento county has entered into an agreement with the Natomas Consolidated, whereby a trestle will be constructed from the 12th street bridge to Reclamation District No. 1000. The county will pay one-half of the \$17,000 and the Natomas Consolidated will pay the other half.

SAN JOSE, SANTA CLARA CO., CAL.—By-pass, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The county Supervisors have approved plans and specifications for the improvement of the Canoas by-pass, and will receive bids on the work until September 7th, at 11 a. m. Plans

and specifications, together with full information may be had from the county surveyor at San Jose.

OAKLAND, CAL.—Timber trestle. Cost not stated. Engineer, County Surveyor, Oakland. Owner, Alameda County. Plans and specifications have been completed and approved and bids will be opened on August 30th by the Board of Supervisors for constructing a timber trestle and the necessary grading for the waterway and for footings, on the main county road from Alvarado to Centerville or County Road No. 544 all in Washington Road District, Washington Township. Plans and specifications can be secured from the Clerk of the Board of Supervisors.

VENTURA, VENTURA CO., CAL.—Bridge, steel and timber. Cost not stated. Engineer, County Surveyor Ventura. Owners, Ventura county. The Supervisors have instructed the county surveyor to prepare plans and specifications for the construction of a wood and steel bridge across the Ventura river at Foster Park, giving entrance to the Park and to the Casitas and Santa Ana sections. On completion of plans bids will be called.

JANATDUR

MARTINEZ, CONTRA COSTA CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. The County Supervisors have approved plans and specifications for the construction of a reinforced concrete culvert across the gulch on Bay Point to Richmond road, and the clerk has been instructed to advertise for bids which will be opened September 12th, 11 a. m. Further information can be had from the county surveyor.

SALINAS, MONTEREY CO., CAL.—Bridge and protection work. \$75,000 and \$15,000. Engineer, County Surveyor, Salinas. Owners, Monterey county. At the next meeting of the Supervisors the County Engineer will present plans and specifications for the new steel highway bridge and protection work near King City. The highway Commission has already approved the plans for the bridge which will be the longest and most expensive in the county of Monterey. If constructed in accordance with the present plans, the structure will cost \$75,000, and will be 2,800 feet in length. The protection work will cost in the neighborhood of \$15,000. Further particulars will be given when the plans have been approved by the County Supervisors.

OROVILLE, BUTTE CO., CAL.—Bridges, 16 steel, reinforced concrete and timber. \$22,000. Engineer, County Surveyor, Oroville. Owners, Butte County. The Board of Supervisors has ordered the construction of 16 bridges in Butte County, the total cost to be about \$22,000. Bids will be opened on September 1st. Ten of the bridges will be on the State highway between Nelson and Butte Creek. Eight of the ten bridges will range from 20 to 120 feet in length the total cost to be \$12,000, and one bid will cover the work on all of the eight. Of the remaining two, one will be 100 feet long across the North Channel of Butte creek, and the other, 40 feet in length, will be built across Burham Slough. The two structures will cost \$4,500.

Of the remaining six structures, five will be small bridges in different road districts, the total cost to be \$2,500. The other will be a large structure to cost \$3,000, across Pine Creek near the Cana road. Plans and specifications can be secured from the County Surveyor.

Contracts Awarded.

SANTA BARBARA, SANTA BARBARA CO. CAL.—Bridge, timber construction, \$1,480. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara county. Contractor, E. F. Edwards, Santa Barbara. Contract price \$1,480.

PLACERVILLE, EL DORADO CO. CAL.—Bridge, steel and concrete. \$11,470. Engineer, County Surveyor Placerville. Owners El Dorado county. Contractors, Bluxome & Co., San Francisco. Contract price, \$11,470.

MARTINEZ, CONTRA COSTA CO., CAL.—Bridge, reinforced concrete, \$6,932. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractors, Healy-Tibbitts Construction Co., 9 Main street, S. F. Contract price \$6,932.

MARTINEZ, CONTRA COSTA CO., CAL.—Bridge, timber construction, \$8,778. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractors, Hyde-Harjes Co., S. F. Contract price, \$8,778.

COURT HOUSES.

CRESCENT CITY, DEL NORTE CO., CAL.—Court house repairs. Cost not stated. Architect none. Owners, Del Norte County. Plans have been completed and figures are being taken for repairs to the front entrance of the County Court House. Bids will be opened on September 12th.

Contracts Awarded.

SUSANVILLE, LASSEN CO., CAL.—Court house, 2 story and base, reinforced concrete and steel. Architect, George R. Sellen, 1005 K street, Sacramento. Owners, Lassen County. Contractor James L. McLaughlin, 244 Kearny street, S. F. Contract price, \$77,797. Plumbing, Lattourett & Fical Co., Sacramento. Contract price not stated.

MODESTO, STANISLAUS CO., CAL.—Court house repairs, \$1,349. Architect, none. Owners, Stanislaus County. Contractor, W. J. Kerry, Modesto. Contract price, \$1,349.

FACTORIES AND WAREHOUSES.

EUGENE, ORE.—Warehouse, 2 story and base, reinforced concrete, \$25,000. Architects, none. Owners, Allen & Lewis, Portland. The building will cover an area of 88 by 150 feet and will be of fireproof construction. Exterior will be faced with cement plaster. H. O. Bowen is the local manager and will let all contracts. Plans are complete.

Contracts Awarded

OAKLAND, CAL.—Factory, 4 story and base, reinforced concrete, \$25,000. Architect, Louis P. Hobart, Crocker Bldg., S. F. Owners, Shredded Wheat Biscuit Co. The following contracts have been awarded: Concrete, Clinton Fireproofing Co., S. F.; Car-

penry, Lester Stock, S. F.; Plastering, William Makin, S. F.; Painting, J. H. Keefe & Co., S. F.; Plumbing, Robert Dalziel, Jr., Oakland; Roofing and Sheet Metal, De Luchi-Shufelt Co.; Ornamental Iron, California Iron Wks. Oakland; Plate Glass, California Plate & Window Glass Co. S. F.; Heating, Atlas Heating & Ventilating Co., S. F.; Structural Glass, Vitrolite Const., Co., Oakland; Elevators, Otis Elevator Co. S. F.

FIRE HOUSES AND JAILS.

PORTLAND, ORE.—Detention home, 2 story and base, brick, \$25,000. Architects, Doyle & Patterson, Worcester Bldg. Portland, Ore. Owners, City of Portland. Plans are complete and figures for the general construction are now being taken. Plans can be secured from the architects.

FLATS

SAN FRANCISCO—Flats 2 story and base, frame, \$5,000. Architect, none. Owner Emil Nelson, 244 Rivoli St. S. F. Location Grove, east of Clayton. Will contain two flats finished in pine and elm panels, hardwood floors, open fire places, and tile mantels are specified. Automatic water heaters will be installed. Exterior covered with rustic and cement plaster. Owner will do the work by Day Labor.

OAKLAND CAL.—Flats 2 story and base, frame. Cost not stated. Architect, Charles W. McCall, Central Bank Bldg., Oakland, Owner Edgar Ormsby. Location Terrace near 43rd street. Will contain four flats of four rooms and bath. Interior finish pine with elm panels and hardwood floors in principal rooms. Open fire places, tile mantels and automatic water heaters are included. Exterior covered with cement plaster. Plans are being figured.

GARAGES

Contracts Awarded.

MARTINEZ, CONTRA COSTA CO., CAL.—Garage, 1 story and base, reinforced concrete and galvanized iron. Cost not stated. Architect, none. Owner, Dr. Charles L. Morey, Oakland. Contractor, S. W. Holmes, Oakland. Contract price not stated.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Garage, 2 story and base, steel and concrete. \$15,000. Architect, none. Owners, Ford Co. Contractor, J. A. Clary, Santa Barbara. Contract price, \$15,000.

LOS ANGELES, CAL.—Garage, 1 story and base. Class C. Cost not stated. Architects, Kemple & Erkes, Henne Bldg., L. A. Owner, Dr. Carl Kurtz. Contractors, C. J. Kuhach Co., Merchants National Bank Bldg., L. A. Contract price not stated.

GOVERNMENT WORK & SUPPLIES

Panama Canal Circular No. 961.

The purchasing officer of the Panama Canal will open bids September 2, under Canal Circular No. 961, for furnishing the following supplies and materials:

Class 1. 200 tons, approximately transverse anchors.

Class 2, 20,000 lbs unslaked lime.
 Class 3, 12,000 lbs rock salt.
 Class 4, 5,000 gals liquid coal tar.
 Class 5, 8,000 lbs sal soda.
 Class 6, 200 lbs sal ammoniac.
 Class 7, 200 gals carbon bisulphide.
 Class 8, 200 gals muriatic acid.
 Class 9, 300 gals lard oil.
 Class 10, 5 gals neat's foot oil.
 Class 11, 8,000 gals raw linseed oil.
 Class 13, 5,000 gals hulled linseed

oil.
 Class 13, 100 gals liquid paint and varnish remover.

Class 14, 200 gals liquid white shellac.

Class 15, 500 gals liquid orange shellac.

Class 16, 2,000 lbs orange gum shellac.

Class 17, 200 gals imitation damar varnish.

Class 18, 500 gals engine truck black enamel.

Class 19, 25,000 lbs dry red lead.

Class 20, 2,000 lbs dry lampblack.

Class 21, 15,000 lbs lampblack in oil.

Class 22, 400 gals locomotive black.

Class 23, 15,000 lbs metallic brown in oil.

Class 25, 100 lbs Prussian blue, in japan.

Class 26, 2,000 lbs Venetian red in oil.

Class 27, 3,000 lbs burnt sienna, in oil.

Class 28, 500 lbs raw sienna, in oil.

Class 29, 10,000 lbs chrome green, in oil.

Class 30, 2000 lbs burnt umbre, in oil.

Class 31, 200 lbs dry burnt umber.

Class 32, 500 lbs raw burnt umber, in oil.

Class 33, 150 wicker waste baskets.

Class 34, 10,000 sheets index Bristol bond.

Class 35, 15,000 sheets desk blotting paper.

Class 36, 1,000 reams white bond paper.

Class 37, 1000 reams white onion skin paper.

Canal Requisitions.

The purchasing officer of the Panama Canal will soon call for bids for furnishing the following material and supplies:

250 boiler tubes.

2 solid cast iron propellers.

For furnishing ready for erection by the Panama Canal for dry dock No. 1 at the Balboa terminals:

11 capstans with bed plate, pit covers, motors, starting and controlling devices.

1 switchboard for south side of dry dock.

1 switchboard for north side of dry dock.

11 power, 1 lighting switchboard for mounting in capstan pits.

1 10-circuit lighting panel board.

1 16-circuit lighting panel board.

A quantity of cable.

588 flat-end hells.

Major Boggs Seeks Transfer.

Major Frank C. Boggs, corps of engineers, in charge of the Panama Canal offices in Washington, D. C., has asked for a transfer to other duties after seven and a half years of service at his present post. During that period

he has awarded contracts for canal purposes amounting to about a quarter of a billion dollars. Gen. Goethals, governor of the Canal Zone, will confer with War Department officials over a successor to Major Boggs. The selection will be some officer of the corps of Engineers acceptable to Gen. Goethals' successor as governor of the Panama Canal Zone.

PORT TOWNSEND, WASH., ELEVATOR.

The contract for the installation of an electric passenger elevator in the U. S. Marine Hospital, Port Townsend, Wash., has been awarded to the Otis Elevator Co., Washington, D. C., at \$3,538; time to complete, November 29. **Denver, Colo., Paintings.**

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for mural paintings in the post office at Denver, Colo.:

Taber Sears, New York City, \$3,000; time 520 working days.

H. T. Schladermundt, Bronxville, N. Y., \$3,000; 5 months.

Elmer E. Garnsey, White Plains, N. Y., \$3,000; 150 working days.

Honolulu, H. T., Repairs, Etc.

The contract for repairs, etc., at the U. S. custom house, Honolulu, H. T., has been awarded to H. E. Quine, Honolulu, H. T., at \$2,239.

HALLS AND SOCIETY BUILDINGS.

VALLEJO, SOLANO CO., CAL.—Dance Hall, 1 story frame, \$5,000. Architect, none. Owner Lewis Guetche, Marysville. Location, York between Marin and Sonoma streets. Maple floor will be laid. Exterior will be covered with rustic and cement plaster. Plans are being prepared and work will be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Lodge hall, 2 story and base, brick, cost not stated. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owners, Berkeley Eagles Hall Association. Location, University and San Pablo avenues. Contain stores on first floor and lodge rooms above which will be furnished in pine and hardwood with some maple floors. Patent store fronts and steam heat specified. Exterior will be faced with pressed brick. Bids being taken on revised plans.

HOTELS

SAN FRANCISCO.—Hotel and store, 3 story and base, frame, \$10,000. Architect, Charles E. J. Rogers, Kohl Bldg., S. F. Owner, Frank M. Scoonover, 5 Montgomery St. Location, Mission between 17th and 18th, covering an area of 25 by 90 feet. Interior finish pine, bath imitation tile. Patent store fronts and steam heat will be installed. Exterior covered with rustic and shingles. Plans complete and contract to be let at once.

SAN FRANCISCO.—Hotel and store, 3 story and base, frame, \$10,000. Architect, Charles E. J. Rogers, Kohl Bldg., S. F. Owner's name withheld. Loca-

tion, Mission, between 17th and 18th, covering an area of 25 by 90 feet. Interior finish will be pine with imitation tile in baths. Plans provide hot water system and patent store fronts. Exterior covered with rustic and ship-lap. Plans complete.

HOSPITALS

WOODSIDE, SAN MATEO CO., CAL.—Children's home, 1 and 2 story and base, Class A construction. Cost not stated. Architect, Houghton Sawyer, Shreve Bldg., S. F. Owners, Drexler Hall. Building has been designed for a home for crippled children and will have complete steel frame. Interior finish hardwood and pine with tile floors. Steam heat, vacuum cleaning, hot water system are specified. Exterior faced with cement plaster or pressed brick. Plans are being prepared.

CRESCENT CITY, DEL NORTE CO., CAL.—Hospital, 1 and 2 story, frame, cost not stated. Architects, Ackerman & Reese, Eureka. Owners, Del Norte County. Plans complete and bids will be opened on September 13th. Central heating system, vacuum cleaning and hot water system specified. Interior finished in pine. Exterior covered with cement plaster.

Contracts Awarded.

WALLA WALLA, WASH.—Hospital, 4 story and base, reinforced concrete, \$225,000. Architects Beezer Bros. Seattle. Owners, St. Mary's Hospital. Contractor, Robert F. Tegen, Morgan Bldg., Portland, Ore. Contract price, \$225,000.

IRRIGATION PROJECTS

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Reclamation work. Cost not stated. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. At a recent meeting of the Supervisors plans and specifications for the reclamation work on the north bank of the Santa Maria river above the Santa Barbara county bridge on the Nipomo and Santa Maria roads were received. The River Current Control Co. of San Francisco submitted plans that were accepted and which will, it is believed, stop the encroaching of the waters on the San Luis Obispo side of the stream. Bids are now being taken, and will close on September 8th. Further information with plans may be had from the County Engineer at San Luis Obispo.

TERRA BELLE, TULARE CO., CAL.—Irrigation work, \$1,000,000. Engineer, Chief Engineer Terra Belle Irrigation Project, Terra Belle. Owners, Terra Belle Irrigation District. Bonds in the amount of \$1,000,000 have been voted by the residents of the Terra Belle Irrigation which assures the speedy construction of a large irrigation project. A new irrigation district is to be laid out and construction work costing nearly \$1,000,000 will be undertaken.

LIBRARIES.

WALNUT CREEK, CONTRA COSTA CO., CAL.—Library, 1 story and base, brick, \$10,000. Architect, Randolph Hook, Walnut creek. Owners, Town of Walnut Creek. Designed in classic style, and will contain reading room,

stack room and office. Interior finish will be pine with maple floor. No heating. Exterior will be faced with pressed brick. Plans being prepared.

CONCORD, CONTRA COSTA CO. CAL.—Library 1 story and base, brick, \$10,000. Architect, J. B. Ogborn, 611 Macdonald avenue, Richmond. Owners, Town of Concord. Building will contain one large reading room, office and stack room. Interior finish, pine with maple floor. No heating system. Exterior faced with pressed brick. Plans being prepared.

POST OFFICES

Contracts Awarded

OAK PARK, SACRAMENTO CO. CAL.—Post office, 1 story brick, \$4,794. Architect, none. Owner's name not given. Contractor, C. J. Guth, Oak Park. Contract price, \$4,794.

RAILROAD CONSTRUCTION AND EQUIPMENT.

CERES, STANISLAUS CO., CAL.—Railroad construction. Cost not stated. Engineer's name not given. Owners, Ceres Street Railroad Co. Applications for a franchise to erect, maintain and operate, by means of electricity or other motive power, except steam, a single track railroad with all necessary turnouts, switches, stations, apparatus and appliances, over and along the route lying and being in the Town of Ceres, in the county of Stanislaus as follows: "Commencing at a point at the north line of the limits of said Town of Ceres, at the intersection of Railroad avenue, with said north line of said limits of the said Town of Ceres, thence over, along and upon said Railroad ave. to the southerly limits of the said Town of Ceres." "That said Board of Supervisors intends to grant said franchise, right, privilege and permission and notice of the time and place of the receipt of bids therefor, and in the terms and conditions thereof."

PATTERSON, STANISLAUS CO. CAL.—Railroad construction, cost not stated. Engineer's name not given. Owners, Mr. Hoffman and Honolulu capitalists. According to word sent from Honolulu by Mr. Hoffman, editor of the Patterson Irrigator, work on the proposed railroad from Patterson up De Norte Canyon to the magnesite and manganese mines near Red Mountain names of those backing the movement will be started shortly. Although the are not mentioned it is known that business men of Honolulu are making preparations to have the road constructed.

RESIDENCES.

SAN FRANCISCO. — Residence, 2 story and base, frame, \$2,500. Architect, none. Owners, Oscar Heyman & Bro., 712 Market street, S. F. The dwelling will be erected on the east side of 18th avenue north of Balboa and has been designed for a six room

house with bath. Interior will be finished in pine and elm panels with white enamel in the bed rooms. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place and tile mantel. Imitation tile wainscot and floors will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners who will do the work by Day Labor. Materials are now being purchased.

SAN FRANCISCO — Residences, 4 2 story and base, frame, \$5,000 each. Architect, none. Owner, P. D. Tyler, 1921 Oak street, S. F. These dwellings will be erected on the east side of 11th avenue south of Geary and each has been designed to contain eight rooms, bath and sleeping porch. Interior will be finished in pine, elm panels and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception halls. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, Paul E. Woodburn, 3965 Greenwood avenue, Oakland. The dwelling will be erected on West Park Boulevard, and has been designed for a six room house with bath and sleeping porch. Interior finish will be in pine with some hardwood veneer. Hardwood floors will be used in the living room, dining room and reception hall. There will be a large open fire place in the living room with tile or brick mantel. Tile wainscot and floor will be used in the bath room. Automatic water heater has been specified. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, E. L. Higgins, 5250 Miles avenue, Oakland. The dwelling will be erected on the east side of Thomas street, north of Napa and has been designed for a seven room house with bath and sleeping porch. Interior finish will be of pine. White enamel will be used in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. Plans provide for an automatic water heater. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

BERKELEY, ALAMEDA CO., CAL.—Residence 1½ story and base, frame, \$1,500. Architect, H. E. Guttererson, Fox-

croft Bldg., S. F. Owner, J. A. Cross. The dwelling has been designed for a seven room house with bath and sleeping porch and will be erected in Northbrae. Interior finish will be of pine, hardwood and white enamel. Hardwood floors will be used in the living room dining room and reception hall. There will be furnace heat, with open fire places and an automatic water heater. Mantels will be of brick. Bath room will have tile floor and wainscot. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken by the architect

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, C. E. Carlson, 1512 Broadway, Oakland. The dwelling will be erected on the east side of Thomas street north of Napa and has been designed for a seven room house with bath and sleeping porch. Interior trim will be of pine, southern gum and white enamel. Hardwood floors will be used in the living room, dining room and reception room. Plans provide for furnace heat and open fire places. Mantels will be of tile. Tile wainscot and floors will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

OAKLAND, CAL.—Residences, 3 1 story and base, frame, \$3,000 each. Architect, none. Owner, C. M. MacGregor, 470 13th street Oakland. These dwellings will be erected at the corner of Woodruff and East 35th street, and each has been designed to contain five rooms and bath. Interior finish will be of pine, redwood and elm. Hardwood floors will be used in the living and dining rooms. Each living room will have a large open fire place and tile or brick mantel. Imitation tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

BERKELEY, ALAMEDA CO. CAL.—Residence, 2 story and base, frame, \$8,000. Architect, H. H. Guttererson, Foxcroft Bldg., S. F. Owner, Dr. F. R. Frenzel. The dwelling has been designed to contain ten rooms, two baths, sleeping porch and basement garage, and will be erected in Hawthorne Terrace. Interior finish will be pine, hardwood and white enamel. Hardwood floors will be used in the living room, dining room, library and reception hall. There will be furnace heat and open fire places. Mantels will be of brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$2,500. Architects,

Tru & Sprague, MacDonough Bldg., Oakland. Owner, Charles Mau, Jr. The dwelling will be erected on Grand avenue near Sunnyside and has been designed for a six room house with bath and sleeping porch. Interior will be finished in pine and hardwood veneer with white enamel in the bedrooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are now being prepared.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$4,500. Architect, C. W. McCall, Central Bank Bldg., Oakland. Owner's name withheld. The dwelling will be erected in Fourth Avenue Terrace and has been designed for an eight room house with two baths and sleeping porch. Interior finish will be of pine and hardwood, with white enamel in the bed rooms. Hardwood floors will be used in the living and dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior will be covered with cement plaster on metal lath. Plans are now being prepared.

OAKLAND, CAL.—Residence, 2 story and base frame, \$6,500. Architect, C. W. McCall, Central Bank Bldg., Oakland. Owner's name withheld. The dwelling will be erected in Crocker Highlands and has been designed for an eight room house with two baths, sleeping porches and a separate garage. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living room, library and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will be finished in tile and equipped with high class fixtures, including showers. A hot water circulating system will be installed. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, L. W. Button, 347 63rd street, Oakland. The dwelling will be erected on Illinois avenue, south of 2nd street and has been designed to contain seven rooms, bath and sleeping porch. Interior will be finished in pine and southern gum. White enamel will be used in the bed rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

MURLINGAME, SAN MATEO CO., CAL.—Residences, 2 1 story and base, frame, \$2,500. Architects, Fabre & Bearwald, Merchants National Bank Bldg., S. F. Owner's name withheld. These dwellings will each contain five rooms and bath. Interior finish will be

of pine with some oak panels. Hardwood floors will be used in the two principal rooms. Each living room will have a large open fire place and tile or brick mantel. Imitation tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior will be covered with rustic and shingles. Plans are now being prepared.

SAN MATEO, SAN MATEO CO., CAL.—Residence, 2 story and base, frame, \$15,000. Architect, Sylvain Schmittacher, 233 Post street, S. F. Owner, Edward Livingston. The dwelling will be erected on El Cerrito and has been designed to contain twelve rooms, three baths and sleeping porches. A separate garage will also be erected on the property. Interior of the dwelling will be finished in pine, hardwoods and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot and will be equipped with showers. A hot water circulating system will be installed. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

STOCKTON, SAN JOAQUIN CO., CAL.—Residence, 2 story and base, frame, cost not stated. Architect, F. Holberg Reimers, 2125 Shattuck avenue, Berkeley. Owner, Dr. F. Goodman. The dwelling will be erected in Tuxedo Park and has been designed to contain seven rooms, two baths and sleeping porches. Interior will be finished in pine and hardwood, with white enamel in the doctor's office and in the bed rooms. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor under the supervision of Mr. Melville of Stockton.

LODI, SAN JOAQUIN CO., CAL.—Residence, 2 story and base, frame, \$6,000. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owner, Dr. J. E. Nelson. The dwelling has been designed for a ten room house with baths and sleeping porches. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile. Tile wainscot will be used in the bath rooms. Automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are now being prepared.

UKIAH, MENDOCINO CO., CAL.—Residence, 1 story and base, frame, \$3,000. Architect, C. W. McCall, Central Bank Bldg., Oakland. Owner's name withheld. The dwelling has been designed for a six room house with bath and sleeping porch. Interior finish will be of pine and redwood. Some hardwood floors will be used. Plans provide for furnace heat and open fire place. Mantel will be of brick. Bath room will have tile floor. An auto-

matic water heater is specified. Exterior of the house will be covered with check siding. Plans are now being prepared.

PORTLAND, ORE.—Country estate. Frame construction, \$150,000. Architects, Suter & Madsen, Spokane, Owner, T. B. Wilcox, Portland. The building, which will include an 18 or 20 room house, barns green-houses and garage will be erected on a large tract some mile outside the city of Portland. Details as to interior finish and mechanical equipment have not been reached and will be given later when plans are more nearly complete. All construction will be of frame.

SAN FRANCISCO.—Residence, 3 story and base, frame, cost not stated. Architect, Alfred Henry Jacobs, 110 Sutter street, S. F. Owner's name withheld. The dwelling has been designed for a nine room house with three baths, sleeping porch and basement garage, and will be erected on Washington street near Maple. Interior finish will be of pine, hardwood and white enamel. Hardwood floors are specified in all the principal rooms. Plans provide for furnace heat and open fire places. An automatic water heater will be installed. Bath rooms will have tile floors and wainscot and will be equipped with showers. Exterior of the house will be covered with cement plaster. Plans are complete and figures are being taken.

SAN FRANCISCO.—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, C. A. Hall, 1318 5th avenue, S. F. The dwelling will be erected on the west side of 11th avenue south of Balboa and has been designed to contain six rooms bath and sleeping porch. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire place. Mantel will be of brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are being purchased.

SAN FRANCISCO.—Residence 2 story and base, frame, \$2,700. Architect, Chester H. Miller, Dalziel Bldg., Oakland. Owner, Benedict Hedrett. The dwelling will be erected in the Bay Shore Tract and has been designed for a seven room house with bath. Interior finish will be of pine throughout. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place and a tile or brick mantel. Imitation tile will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic. Plans are now being prepared.

SAN FRANCISCO.—Residence, 2 story and base, frame, \$5,000. Architects, Milwan Bros., Dolger Bldg., Oakland. Owner, J. W. Marshall. The dwelling will be erected in Forest Hill and has been designed to contain eight rooms, bath and sleeping porch. Interior will be finished in pine and hardwood veneer with white enamel in the bed rooms. Plans provide for furnace heat and open fire places. Man-

els will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

STOCKTON, SAN JOAQUIN CO. CAL.
—Bungalow, 1 story and base, frame, \$2,500. Architect, Joseph Losekann, San Joaquin Bldg., Stockton. Owner, Charles De Young, 336 East Anderson street. The dwelling has been designed for a six room house with bath and sleeping porch. Interior will be finished in pine and redwood with some elm panels and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and figures are being taken.

STOCKTON, SAN JOAQUIN CO. CAL.
—Bungalow 1½ story and base, frame, \$2,500. Architect, Franklyn Warner, San Joaquin Bldg., Stockton. Owner, Harry McIsaacs, 231 South East street. The dwelling will be erected on Magnolia and has been designed to contain six rooms and bath, with a large sleeping porch. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are now being prepared.

STOCKTON, SAN JOAQUIN CO. CAL.
—Bungalow 1½ story and base, frame, \$2,500. Architect, Franklyn Warner, San Joaquin Bldg., Stockton. Owner, J. Edward Madden. The dwelling will be erected in Yosemite Terrace, and has been designed for a six room house with bath and sleeping porch. Interior finish will be of pine and white enamel. Hardwood floors will be used in the living and dining rooms. An open fire place and tile or brick mantel will be used in the living room. Plans provide for an automatic water heater. Tile wainscot will be used in the bathroom. Exterior of the house will be covered with rustic. Plans are complete and a contract will be awarded shortly.

SAN FRANCISCO.—Residence and store 2 and 4 story frame, \$15,000. Architect, H. C. Bauman, Chronicle Bldg., S. F. Owner, S. F. Lehrke. The building will be erected at the corner of Connecticut and 18th streets and will contain a store on the first floor and a large residence above. The rear portion will be virtually a four story structure owing to the grade of the lot. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Patent store fronts are specified. Exterior will be covered with cement plaster on metal lath. Plans are complete and a contract will be awarded this week.

SAN FRANCISCO.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, James P. Fletcher, Russ Bldg., S. F. The dwelling has been designed for a six room house with bath and sleeping porch and will be erected on 35th avenue near Fulton. Interior will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place with brick mantel. Bath room will be finished in tile. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, H. A. Pleitner, 954 Fruitvale avenue, Oakland. The dwelling has been designed for a six room house and will be erected on the north side of Kansas street west of Laurel. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place and tile mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner who will do the work by Day Labor.

FRESNO, CAL.—Residence, 1 story and base, frame \$2,000. Architect none. Owner, W. H. Ackerman, Fresno. The dwelling will be erected in the Alta Vista Tract and has been designed for a six room house with bath and sleeping porch. Interior will be finished in pine with elm panels. Some oak floors will be used. There will be an open fire place and tile or brick mantel. Bath room will have imitation tile wainscot. Exterior of the house will be covered with rustic and shingles. Plans are complete and in the hands of the owner who will do the work by Day Labor.

LOS ANGELES, CAL.—Residence 2 story and base, frame, Cost not stated. Architect, J. C. Austin, Baker-Detwiler Bldg., L. A. Owner R. D. Collins. The dwelling will be erected on a fifteen acre tract on Washington street near the city limits. There will be ten rooms, three baths, sleeping porch and a separate garage. Interior will be finished in hardwood and white enamel. Hardwood floors will be used in the living rooms, dining rooms and reception hall. Plans provide for furnace heat, a hot water circulating system and vacuum cleaning. Bath rooms will be finished in tile. Exterior of the dwelling will be covered with cement plaster on metal lath. A clay tile roof will be used. Plans are complete and figures are being taken.

LOS ANGELES, CAL.—Residence 2 story and base, hollow tile, \$20,000. Architect, A. C. Martin, Higgins Bldg., L. A. Owner, J. M. Trumbel. The dwelling has been designed to contain 11 rooms, three baths and sleeping porch. A separate garage will also be erected on the property. Interior of the dwelling will be finished in

pine, hardwood and white enamel. Hardwood floors will be used throughout. There will be a central heating system, open fire places, a hot water circulating system and vacuum cleaning. Bath rooms will be finished in tile. Brick mantels are specified. Exterior of the house will be faced with cement plaster. Plans are complete and figures are now being taken.

Contracts Awarded.

WOODSIDE, SAN MATEO CO., CAL.—Residence, 2 story and base, frame, \$15,000. Architects, Bliss & Faville, Balboa Bldg., S. F. Owner, A. W. Johnson. Contractor, Ira W. Coburn, 547 Brannan street S. F. Contract price, \$15,000.

OAKLAND, CAL.—Residences, two 1 story and base, frame, \$2,250 and \$1,000. Architect, Chester H. Miller, Balzeli Bldg., Oakland. Owners, Misses Elizabeth and Frieda Gutleben. Contractors, Gutleben Bros., New Call Bldg., S. F. Contract prices \$2,250 and \$1,000.

PORTLAND ORE.—Residence, 2½ story and base, frame, \$15,000. Architect, C. C. Rich, Portland. Owner, Dr. C. L. Smith. Contractor, J. L. Quinn, 1127 East Broadway, Portland. Contract price, \$15,000.

SCHOOLS.

SAN FRANCISCO.—School repairs and addition, frame, \$10,000. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Plans have been completed and work will be started by Day Labor at once for extensive alterations to the State Normal School located on Waller street near Laguna. Complete information can be had by addressing the State Architect.

BERKELEY, ALAMEDA CO., CAL.—Industrial home completion. Cost not stated. Architect, State Architect, Geo. B. McDougall, Sacramento. Owners, State of California. Bids will be opened on September 5th for completing walls and walks around the gymnasium building and on September 16 for a tower and tank. Proposals appear in another column of this issue.

STOCKTON, SAN JOAQUIN CO., CAL.—School, 1 story and base, concrete and brick, \$25,000. Architects, Stone & Wright, San Joaquin Valley Bank Bldg., Stockton. Owners, City of Stockton. Bids are now being taken for a seven room school to be erected at Lincoln and Jefferson streets. Interior finish pine with maple floors in class room. Steam heat, oil burning furnace. Exterior faced with pressed brick. Plans from architect.

LOS ANGELES, CAL.—School 2 story and base, frame and brick. Cost not stated. Architect Julius W. Krause, Higgins Bldg., L. A. Owner, Lomita School District. Bids will be opened on September 2nd for a six class room building with gymnasium and elementary class rooms on first floor. Interior finish pine with maple floors. A central heating system. Exterior covered with cement plaster.

SAN PEDRO, LOS ANGELES CO., CAL.—School, 2 story and base, brick, \$13,000. Architect Lyman Farwell, Story Bldg., L. A. Owners, City of San Pedro. Bids will be opened on September 2 for repairs to an old building and construction of a new

building 91 by 102 feet. Interior pine with maple floors. Central heating, program clocks and vacuum cleaning. Exterior pressed brick.

SAN PEDRO, LOS ANGELES CO., CAL.—School, 2 and 3 story and base, brick, cost not stated. Architect, Joseph Bell de Remer, Tile and Insurance Bldg., L. A. Owners, City of San Pedro. Bids are now being taken on revised plans for 12 class rooms, auditorium and departments of domestic science and manual training. Interior finish, pine with maple floors. Steam heat, program clocks and vacuum cleaning. Exterior pressed brick.

LOS ANGELES, CAL.—School, 3 story and base, brick and concrete. Cost not stated. Architect, W. J. Bleisner, Van Nuys Bldg., L. A. Owners, Polytechnic High School District. Building will cover an area of 104 by 113 feet. Interior pine and hardwood with maple floors. Work includes steam heat, program clocks, vacuum cleaning and plunge, 40 by 50 feet. Exterior faced with pressed brick, and cement plaster. Working drawings nearly complete.

GRAND MOUND, ORE.—School administration building 2 story and base, brick, \$60,000. Architect, Watson Vernon, Aberdeen. Owners State of Washington. Bids will be opened on August 31st for building 119 by 37 feet, with two wings 51 by 25 feet. Interior finish pine and hardwood. Work includes steam heat, vacuum cleaning and modern electric work. Exterior faced with pressed brick.

PRAIRIE CITY, ORE.—School, 1 story and base, brick and stone, \$15,000. Architect, E. E. McLaren, Lumber Exchange Bldg., Portland. Owners, Town of Prairie City. Bids are being taken for a six class room building finished in pine with maple floors. The work includes steam heat. Exterior faced with pressed brick.

HUBBARD, ORE.—School, 2 story and base, brick, \$15,000. Architects, Brown & Forbes, Mohawk Bldg., Portland. Owners, Town of Hubbard. Building will contain six class rooms and will be finished in pine and maple floors. There will be steam heat and slate blackboards. Exterior will be faced with pressed brick. Plans are being prepared.

Contracts Awarded.

PIRU, VENTURA CO., CAL.—School, 1 story and base, frame \$8,619. Architect, C. H. Russell, Story Bldg., L. A. Owners, Piru School District. Contractors, Mill and Lumber Co., Fillmore. Contract price, \$8,649.

SAN GABRIEL, LOS ANGELES CO., CAL.—School, 1 story and base, concrete, \$21,145. Architects, Dennis & Hewitt, Fay Bldg., L. A. Owners, Garvey School District. Contractor, B. H. Paul 2015 West 28th street, L. A. general construction. Foss & Jones, Pasadena, heating and ventilating. P. S. Newberry, L. A., electric work. H. T. Miles & Son, San Gabriel, painting. Cooney & Winterbottom, Alhambra, plumbing.

CIESCENTA, LOS ANGELES CO., CAL.—School, 1 story and base, frame, cost not stated. Architects Tuttle & Angel, Delta Bldg., L. A. Owner, Ciescenta School District. Contractor, Thomas H. Addison, 316 Belmont St., Glendale. Contract price not stated.

SEWERS, STREET WORK & WATER SYSTEMS.

CROCKETT, CONTRA COSTA CO., CAL.—Auxiliary water system. Cost not stated. Engineer, home Owners, Town of Crockett. The Board of Supervisors has granted permission to the commissioners of the Crockett-Coloma fire district to lay a system of water mains along various streets in that town, which mains will comprise a part of the auxiliary fire-fighting system.

SAUSALITO, MARIN CO., CAL.—Electroliner system. Cost not stated. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Bids are now being taken by the City Trustees for the installation and construction of an electroliner system for street lighting, in the Town of Sausalito, composed of (65) stand-lamps together with the necessary lamps, globes, and wiring and other appurtenances, the connection thereof with the Power Co.'s system at proper and convenient points. Bids will be opened on August 30th. Plans can be secured from the Town Engineer.

SAUSALITO, MARIN CO., CAL.—Street grading and retaining wall. Cost not stated. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Bids will be received by the Board of Trustees until August 30th, 7:30 p. m. for the grading of West street from Main to Valley and on Valley from 4th to West street, and for the construction of a retaining wall at the intersection of West and Valley streets, for the construction of a timber highway bridge on West street from the southerly line of Main street to a point 100 feet south from Main street and for the construction of 40 feet of 30 inch vitrified, salt glazed, ironstone pipe in and across West street between Valley and Main streets. Plans and further information may be had from the City Engineer.

FAIRFIELD, SOLANO CO., CAL.—Road improvement, cost not stated. Engineer, County Surveyor, Fairfield. Owners, Solano County. Plans have been completed and are now out for figures for graveling about two miles of highway in Road District No. 1. Bids will be opened on September 7th. Plans and complete information can be had from G. G. Halliday, County Clerk, at Fairfield.

EUREKA, HUMBOLDT CO., CAL.—Street grading and furnishing rock. Cost not stated. Engineer, City Engineer Eureka. Owners, City of Eureka. The City Council has approved plans and specifications for the grading of Fairfield street and a resolution ordering the work done and advertising for bids was ordered. Specifications for street rock were also adopted and bids were ordered called for to be opened on September 7th.

WOODLAND, YOLO CO., CAL.—Street paving and curbs. Cost not stated. Engineer, City Engineer, Woodland. Owners, City of Woodland. Plans and specifications have been completed by the City Engineer for extensive paving improvements to be made in this city. The plans which have proven satisfactory to the trustees, provide for the payment of the

entire width of east and west Main street and the laying of a 12 foot strip on North College and East street and for the construction of concrete curbs and gutters along the same thoroughfares. It is proposed that the new highways have a hydraulic concrete foundation 5 inches in thickness and in asphaltic wearing surface one half inch thick. Bids will be called for this kind of work. It is estimated that the cost will not exceed 12½ cents per square foot. All of the work will be done in pursuance of an act of the legislature of the State of California known as the Improvement Act of 1911, approved April 7th, 1911. A resolution of intention will be passed by the Trustees at their next meeting and bids will be called.

COLUSA, COLUSA CO., CAL.—Street lights and system. Cost not stated. Engineer, City Engineer, Colusa. Owners, City of Colusa. Plans and specifications have been adopted and the Supervisors have directed the clerk to advertise for bids for installing caving for, and maintaining lights in the Arbuckle Lighting District of Colusa County. Bids on the work close September 7th. Plans can be secured upon may be had from the County Clerk.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Comfort station, paving and curbs. Cost not stated. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Plans are complete and bids will be opened on September 2nd for the construction of a comfort station of brick construction, resurfacing 72,000 square feet in Pedrocosa street and constructing concrete curbs and gutters. Plans can be secured from the City Clerk.

FILLMORE, VENTURA CO., CAL.—Pipe line. Cost not stated. Engineer's name not given. Owner, H. R. Edwards, Fillmore. The city Trustees have granted a franchise to H. R. Edwards for laying and maintaining a pipe line system within the city of Fillmore, connecting the Montebello lease with the new refinery building, now under construction.

TURLOCK, STANISLAUS CO., CAL.—Sewer extension. Cost not stated. Engineer, City Engineer, Turlock. Owners, City of Turlock. Plans have been completed for the construction of a sewer extension system. Bids are being taken and will be opened on September 7th. Plans can be secured from the office of the city clerk.

Contracts Awarded.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving, \$30,000. Engineer, City Engineer, Stockton. Owner City of Stockton. At the last meeting of the City Council plans for paving Market street from Oak Oaks avenue to Edgett street were adopted and bids will be called for shortly. At the same meeting a contract was awarded to the Federal Construction Co., Stockton, for paving East street, from Poplar to North street. The contract price is \$9,318.17.

TRUST, ORANGE CO., CAL.—Highway construction, \$9,220. Engineer, County Surveyor, Orange. Owner, Orange County. Contractors, Hart & Dancy, Pasadena. Contract price, \$9,220.

ANAHEIM, ORANGE CO., CAL.—Road construction, \$10,695.78. Engineer, County Surveyor, Orange. Owners, Orange County. Contractor, Max L. Huberman, Anaheim. Contract price, \$10,695.78.

EUREKA, HUMBOLDT CO., CAL.—Road construction, \$11,574. and \$1,500. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractor, H. H. Barry & McNaughton, Eureka. Main Valley Road, \$11,574. J. S. Johnson, Eureka. Eureka Road, \$1,500.

MARTINEZ, CONTRA COSTA CO., CAL.—Road construction, \$35,625.75. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractor, Irish Improvement Co. Crocker-Hid., S. F., \$35,625.75.

STORES AND OFFICES.

EXETERVILLE, ALAMEDA CO., CAL.—Stores and lodge hall, 2 story and base, brick. Cost not stated. Architect, A. F. Heide, 46 Kearny St., S. F. Owners, Lernhart & Hansen. Building arranged for stores on first floor and lodge hall above. Maple floor. Exterior pressed brick. Plans out for figures.

MARTINEZ, CONTRA COSTA CO., CAL.—Office, 1 story and base, brick. Cost not stated. Architect, James T. Narbett, 701 Macdonald Bldg., Richmond. Owners Pacific Gas & Electric Co. Lids will be opened on September 6th for building 25 by 70 feet. Interior finish pine and hardwood. Exterior faced with pressed brick.

PORTLAND, ORE.—Stores and lofts, 2 story and base, brick, \$30,000. Architects, Cump & Du Put, 126 East Adler street, Portland. Owners, W. B. Gafke Products Co. Location, East 3rd and Adler street, covering an area of 50 by 100 feet. First floor, stores and second lofts. Interior finish pine. Put out store fronts. Exterior pressed brick. Plans being prepared.

Contracts Awarded

FRESNO, FRESNO CO., CAL.—Stores 2 story and base, brick and steel, \$52,000. Architect's name not given. Owners, Glendon Bros. Contractors, Riggs & Palmer, Fresno. Contract price \$52,000.

PALO ALTO, SANTA CLARA CO., CAL.—Store fixtures. Cost not stated. Architect, Harry Shumard, Mills Bldg., S. F. Owner James Frazier, Palo Alto. Contractors, Pacific Manufacturing Co., Santa Clara. Contract price not stated.

SEALED PROPOSALS

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 O'clock, noon, "Thursday September 16th, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required to complete the "Tank Tower" at the Industrial Home for Adult Blind, Oakland, California, in accordance with the plans and specifications therefore, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified

check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of five (\$5.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope, "Proposal for Tank Tower," Industrial Home for Adult Blind, Oakland, California.

(Signed) W. F. McCLURE,
State Engineer. (5)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to day, September 15th, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required to complete the Walls and Walks around Gymnasium Building, California Institution for Deaf and Blind, Berkeley, California, in accordance with the plans and specifications therefore, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of five (\$5.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope, "Proposal for Walls and Walks around Gymnasium Building," California Institution for Deaf and Blind, Berkeley, California.

(Signed) W. F. McCLURE,
State Engineer. (5)

PROPOSALS FOR STEEL GATES.

STEEL GATES.—Department of the Interior, U. S. Reclamation Service, Washington, D. C. until September 2, 1915, for furnishing four steel cylinder gates and accessories for the spillway at Elephant Butte Dam, Rio Grande Project, New Mexico-Texas. For particulars address the United States Reclamation Service, Washington, D. C. Denver, Colo., or El Paso, Texas. A. P. DAVIS, chief Engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 960. Proposals for Metal Louvers, Wooden Cargo Handling Booms with fittings, Railroad Truck Seales, Twist Tills, Taps, Files, Picks, Chisels, Copper Tubing, Sheet Zinc, Chain Blocks, Varnish Brushes, Scrub Brushes, Lantern Globes, Section Hose, Manila Rope, Towels and White Oak Lumber.—Sealed proposals will be received at the office of the general purchasing officer, The Panama Canal, Washington, D. C. until 10:30 a. m., August 31, 1915, at which time they will be opened in public, for furnishing the above-mentioned articles. Bids and general information relating to this Circular (No. 960) may be obtained from this office or the office of the assistant purchasing agent, Port Mason, San Francisco, Cal., also from the U. S. Engineer offices in the following cities: Seattle, Washington, Los Angeles, Cal., E. C. HOGGINS, Major, Corps of Engineers, U. S. A., general purchasing agent.

PROPOSALS FOR EARTH WORK.

EARTH WORK.—Department of the Interior, U. S. Reclamation Service, Washington, D. C. sealed proposals will be received at the office of the United States Reclamation Service, Framway Building, Denver, Col., until 2 p. m., September 8, 1915, for earthwork on about ten miles of main canal, Ft. Laramie Unit, North Platte Project, Nebraska-Wyoming, involving the excavation of approximately 1,206,000 cubic yards of material. This work is situated near the Bridgeport-Chester line of the Chicago, Burlington and Quincy Railway in the vicinity of Ft. Laramie, Wyoming. For particulars address the United States Reclamation Service, Washington, D. C., Denver, Col., or Ft. Laramie, Wyoming. A. P. DAVIS, chief engineer.

Resolved, That the Clerk of this Board give notice in accordance with the provisions of law of said work by publishing the same in the Oakland Equivator and that said notice fix the day for the presentation of bids or proposals for said work as Tuesday, September 7, 1915 at 10 o'clock a. m., at the office of the Clerk of said Board of Supervisors, and that said notice also require that a certified check on some responsible bank accompany said bid for an amount equal to 10 per cent of the amount of the respective bids or proposals, said check to be payable to the Clerk of this Board and to be forfeited to the County of Alameda as agreed and liquidated damages should the party or parties to whom the contract for said work is awarded fail to enter into the contract for the performance of said work or fail to give bond required by this Board.

On motion by Supervisor Foss, seconded by Supervisor Heyer, the resolution was adopted by the following vote:

Ayes—Supervisors Foss, Heyer, Kelley, Mullins and Chairman Murphy—5.
TO CONSTRUCT TRESTLES.

The following resolution was introduced in the Alameda County Board of Supervisors:

Whereas, in the judgment of this Board, it is for the best interest of the County that an addition be made to the County Court House; now, therefore, be it
Resolved, That an addition be made to the County Court House; that the plans and specifications filed August 9, 1915, be and the same are hereby approved and adopted. Be it further resolved, That the Clerk of this Board give notice in accordance with the provisions of law of said work by publishing the same in the Oakland Equivator and that said notice fix the day for the presentation of bids or proposals for said work as Tuesday, September 7, 1915 at 10 o'clock a. m., at the office of the Clerk of said Board of Supervisors, and that said notice also require that a certified check on some responsible bank accompany said bid for an amount equal to 10 per cent of the amount of the respective bids or proposals, said check to be payable to the Clerk of this Board and to be forfeited to the County of Alameda as agreed and liquidated damages should the party or parties to whom the contract for said work is awarded fail to enter into the contract for the performance of said work or fail to give bond required by this Board.

On motion by Supervisor Foss, seconded by Supervisor Heyer, the resolution was adopted by the following vote:

Ayes—Supervisors Foss, Heyer, Kelley, Mullins and Chairman Murphy—5.
TO CONSTRUCT TRESTLES.

The following resolution was introduced in the Alameda County Board of Supervisors:

Whereas, in the judgment of this Board it is for the best judgment of the County that a timber trestle be constructed and the necessary grading be done for the waterway and for footings on the main county road from Alvarado to Centerville, or County Road No. 544, all in Washington Road District, Washington Township, Alameda County, California. Now, therefore, be it

Resolved, That the plans and specifications filed August 2, 1915, be and the same are hereby approved and adopted. Be it further

Resolved, That the Clerk of this Board give notice in accordance with the provisions of law of said work by publishing the same in the Township Register and that said notice fix the day for the presentation of bids or proposals for said work as Monday, August 30, 1915, at 10 o'clock a. m., at the office of the Clerk of said Board of Supervisors, and that said notice require that a certified check on some responsible bank accompany said bid for an amount equal to 10 per cent of the amount of the respective bids or proposals, said check to be payable to the Clerk of this Board and to be forfeited to the County of Alameda as agreed and liquidated damages, should the party or parties to whom the contract for the performance of said work is awarded fail to enter into the contract for the performance of said work or fail to give the bond required by this Board.

On motion by Supervisor Kelley, seconded by Supervisor Heyer, the resolution was adopted by the following

tion was adopted by the following:

Ayes: Supervisors Poss, Meyer, Kelley, Mullins and Chairman Murphy.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 951—Proposals for Steel Transverse Anchors for Pier No. 18, Lime, Rock Salt, Coal Tar, Sal Soda, Sal Ammoniac, Carbon Biscuit, Muriatic Acid, Lard Oil, Neat's Foot Oil, Linseed Oil, Paint and Varnish Remover, Shellac, Varnish, Enamel, Red Lead, Lumber, Locomotive Black, Paints, Waste, Blanks, Bristol Board and Paper. Sealed proposals will be received at the office of the general purchasing officer, The Panama Canal, Washington, D. C., until 10:30 a. m., September 2, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this Circular (No. 951) may be obtained from this office or the office of the assistant purchasing agents, Port Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; F. C. BOGGS, Major, Corps of Engineers, U. S. A., general purchasing officer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 959—Proposals for Engine Tires and Springs, Malleable Iron Castings, Steel Castings, Car Repair Parts, Manganese Steel Tumblers, Cold Shuts, Steel Boiler Tubes, Bolts, Rivets, Stovepipe, Cable Clips, Cable Thimbles, Twist Drills, Drill Blades, Bits, Taps, Electrical Sockets and Fuses, Electrical Pictures, Electric Switches, Copper Wire Cloth, Hooks and Eyes, Cabin Door Hooks, Locks, Foot Bolts, Valves, Cocks, Cock-Hole Covers, Pipe Fittings, Anchors, Band Saws, Scythe Blades, Butchers' Blocks, Water Coolers, Copper Funnels, Window Glass, Tarpapers, Sandpaper, Emery Cloth, Bond Paper, Beeswax and Lump Lard. Sealed proposals will be received at the office of the general purchasing officer, The Panama Canal, Washington, D. C., until 10:30 a. m., August 27, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 959) may be obtained from this office or the office of the assistant purchasing agents, Port Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; F. C. BOGGS, Major, Corps of Engineers, U. S. Army, general purchasing officer.

PROPOSALS FOR DREDGING.

DREDGING—U. S. Engineer Office, 401 Custom House, San Francisco, Cal.—Sealed proposals will be received here until 11 a. m., August 31, 1915, and then opened. Information on application.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Magazine Building" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., September 11, 1915, and then and there publicly opened, for constructing one steel frame shell house with plaster walls and two brick magazines with steel roof trusses at the naval magazine, Puget Sound, Wash. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard, Bremerton, Wash. W. M. SMITH, acting chief of bureau.

PROPOSALS FOR BUILDING.

OFFICE of the Clerk of the Board of Supervisors, Oakland, California. Bids will be received by the Board of Supervisors of Alameda County, California, at the office of the County Clerk and ex-officio Clerk of the Board of Supervisors, at the Hall of Records, Oakland, California, until 6 o'clock a. m., on Tuesday, the 7th day of September, A. D. 1915, for the construction and completion of a two-story addition to the Alameda County Court House, located on Alameda street between Fourth and Fifth streets, in the City of Oakland, County of Alameda, State of California.

Plans and specifications are on file in the office of the Clerk of the Board of Supervisors and copies may be obtained upon the deposit of Ten (10) dollars, which said deposit will be returned upon the return of said plans and specifications. No contract will be made for a period exceeding ten (10) days. If any contractor retains said plans and specifications for a period exceeding ten (10) days, then said deposit of Ten (10) Dollars shall be forfeited to the County of Alameda.

No bid will be considered unless accompanied by a certified check payable to the order of the Board of Supervisors, certified to by some responsible bank for an amount not less than ten (10) per cent of the aggregate amount of the bid or proposal which it accompanies. Said check to be forfeited to the County of Alameda, as agreed and liquidated damages should the party or parties to whom the contract is awarded fail to enter into the contract within ten (10) days after the award or fail to give a bond or bonds for the faithful performance of the contract. Bidders shall make their bids on the blank form furnished with the plans and specifications. All blanks in the bid forms shall be completely filled in, giving all proposals asked.

All bids to be enclosed in sealed envelopes, addressed to the Board of Supervisors, Alameda County, and be endorsed on the envelope, "Bid for the Construction and Completion of the Addition to the Alameda County Court House."

All bids that do not comply with the above provisions in this notice shall be thrown out as informal. The Board of Supervisors reserves the right to reject any bid and all bids or proposals.

Dated August 9, 1915.
Chairman of the Board of Supervisors
of Alameda County,
GEO. E. GROSS,
Clerk of the Board of Supervisors of Alameda County.

PROPOSALS FOR BRIDGE.

BRIDGE—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Washington, D. C., until 2 o'clock p. m., September 5, 1915, for furnishing and erecting a steel bridge of three 100-foot spans and a structural steel movable trestle with operating machinery for the Vandallia dam of the Milk River project, Montana. For particulars address the United States Reclamation Service, Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR ELEVATORS.

ELEVATORS—Sealed proposals indorsed "Proposals for Freight Elevators" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., August 18, 1915, and then and there publicly opened, for three hydro-pneumatic freight elevators, installed complete, at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named, W. M. SMITH, acting chief of bureau.

PROPOSALS FOR BUILDING.

BUILDING—Fort Rosecrans, Cal.—Sealed proposals will be received here until 2 p. m., August 26, 1915, for constructing concrete storehouse. Further information on application to constructing quartermaster.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 956—Office of the General Purchasing Officer, Panama Canal, Washington, D. C.—Sealed proposals will be received here until August 10, 1915, under circular 956 for furnishing the following: 50 brackets, 50 100 lb. iron y wire, 39 1/2 manila paper, 40 cast iron posts, 1,200 feet vulcanized rubber strips, 50 spring plates, 12 machinists' vice, 50 lengths corrugated tender hose, 3 lengths steel rails, 108 hand saws, 2 water gauges, 500 handles, 72 hatchets, 24 vises, 288 wheels for Barnea pipe cutters, 12 air whistles, 24 adzes, 4 blacksmiths' saws, 144 blacksmiths' chisels, 3,600 hacksaw blades, 24 breast drills, 72 saw frames, 12 buckets for ladder dredge and 24 manganese steel lips, 300,000 feet ceiling, 275,000 feet flooring, 300 feet sliding, 2,200,000 feet service and rough lumber; also a quantity of files, bits, augers, cape and machine chisels, monkey and Stilson wrenches, machinists' hand taps, pipe cutters, drills, dies, claw machinists' and sledge hammers, stocks and dies and condulets. For further information address F. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

PROPOSALS FOR SUBMARINES.

SUBMARINES—The date for the opening of proposals for building submarine boats Nos. 62-77, as fixed by the department's advertisement of May 20, 1915, is hereby changed from August 2 to September 29, 1915. JOSEPHUS DANIELS, Secretary of the Navy.

PROPOSALS FOR WHARF CONSTRUCTION.

WHARF—Sealed proposals indorsed "Proposals for Reinforced Concrete Wharf" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., September 18, 1915, and then and there publicly opened, for constructing three reinforced concrete wharf at the United States naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named, H. R. STANFORD, chief of bureau.

PROPOSALS FOR CONCRETE PIERS.

CONCRETE PIERS—Sealed proposals indorsed "Proposals for Torsion Boat Piers" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., September 18, 1915, and then and there publicly opened, for constructing reinforced concrete torpedo boat piers at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named, H. R. STANFORD, chief of bureau.

PROPOSALS FOR RAILROAD.

MARINE RAILWAY—Sealed proposals indorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., September 18, 1915, and then and there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named, H. R. STANFORD, chief of bureau.

PRODUCTION OF FLUORSAP.

According to the annual report of the U. S. Geological Survey on the production of fluorspar, now available for distribution, 95,116 short tons of fluorspar, valued at \$570,041, was marketed in the United States during 1911.

SONOMA COUNTY SCHOOLS.

Sonoma County has 147 grammar and six high schools. For educational work in the fiscal year 1914-15 there was expended in the county one million dollars.

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

RESIDENCE.—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owners, Oscar Heyman & Bro., 712 Market street S. F. The dwelling will be erected on the east side of 18th avenue north of Balboa and has been designed for a six room house with bath. Interior will be furnished in pine and elm panels with white enamel in the bed rooms. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place and tile mantel. Imitation tile wainscot and floors will be used on the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners who will do the work by Day Labor. Materials are now being purchased.

RESIDENCES.—4 2 story and base, frame, \$5,000 each. San Francisco. Architect, none. Owner, P. D. Tyler, 1921 Oak street, S. F. These dwellings will be erected on the east side of 11th avenue south of Geary and each has been designed to contain eight rooms, bath and sleeping porch. Interior will be finished in pine, elm panels and white enamel. Hardwood floors will be used in the living rooms, dining rooms, and reception halls. There will be furnace heat and open fire places. Mantels will be of tile or brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exteriors will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owners, who will do the work by Day Labor.

APARTMENT HOUSE.—4 story and base, Class C. \$65,000. San Francisco. Architects, Rosseau & Rosseau, 110 Sutter street, S. F. Owners, Girard Investment Co. The building will be erected at the southwest corner of Bush and Jones streets, having a frontage of 77½ feet on each street. There will be a total of thirty suites arranged in two, three and four room apartments with private baths and wall beds. Interior finish will be of pine, hardwood, and white enamel. Hardwood floors will be used in the living and dining room. Plans provide for steam heat, an automatic elevator, oil burning plant and vacuum cleaning. Bath rooms will have tile floors and wainscot. Marble and tile will be used in the entrance. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are now being prepared.

APARTMENT HOUSE.—2 story and base, frame, \$25,000. San Francisco. Architect, Edward E. Young, 251 Kearny street, S. F. Owner, Thomas Scobie, 363 14th avenue, S. F. The building will be erected at the northeast corner of Geary and Palm avenue, cover-

ing an area of 89 by 86 feet and has been designed to contain ten large suites. Interiors will be finished in pine and hardwood. Hardwood floors will be used in the living rooms, dining rooms and reception halls. Plans provide for steam heat, a hot water system and vacuum cleaning. All bath rooms will be finished in tile. Marble and tile wainscot will be used in the entrance. Exterior of the building will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE.—3 story and base, frame. Cost not stated. San Francisco. Architect, Alfred Henry Jacobs, 110 Sutter street, S. F. Owner's name is withheld. The dwelling has been designed for a nine room house with three baths, sleeping porch and basement garage and will be erected on Washington street near Maple. Interior finish will be of pine, hardwood and white enamel. Hardwood floors are specified in all the principal rooms. Plans provide for furnace heat and open fire places. An automatic water heater will be installed. Bath rooms will have tile floors and wainscot and will be equipped with showers. Exterior of the house will be covered with cement plaster. Plans are complete, and figures are being taken.

RESIDENCE.—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, C. A. Hall, 1318 5th avenue, S. F. The dwelling will be erected on the west side of 11th avenue south of Balboa and has been designed to contain six rooms, bath and sleeping porch. Interior will be finished in pine and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat and open fire place. Mantel will be of brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the building will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner, who will do the work by Day Labor. The materials are now being purchased.

RESIDENCE AND STORE.—2 and 4 story, frame, \$15,000. San Francisco. Architect, H. C. Braumann, Chronicle Bldg., S. F. Owner, S. F. Lehrke. The building will be erected on the corner of Connecticut and 18th streets, and will contain a store on the first floor and a large residence above. The rear portion will be virtually a four story structure owing to the grade of the lot. Interior will be finished in pine and hardwood and with some white enamel. Hardwood floors will be used in the principal rooms. There will be open fire places and tile or brick mantels. Patent store fronts are

specified. Exterior will be covered with cement plaster on metal lath. Plans are complete and a contract will be awarded this week.

RESIDENCE.—2 story and base, frame, \$3,500. San Francisco. Architect, none. Owner, James P. Fletcher, Russ Bldg., S. F. The dwelling has been designed for six rooms with bath and sleeping porch and will be erected on 35th avenue near Fulton. Interior will be finished in pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. There will be open fire place with brick mantel. Bath room will be finished in tile. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner, who will do the work by Day Labor. Materials are now being purchased.

APARTMENT HOUSE.—3 story and base, frame, \$23,000. San Francisco. Architect, Arthur J. Laib, Russ Bldg., S. F. Owner's name withheld. The building will be erected on the north side of Sacramento street west of Taylor and has been designed to contain five apartments of four rooms and one large six room suite. Interior will be finished in pine and hardwood veneer. Hardwood floors will be used in the living and dining rooms and private entrance halls. There will be steam heat, an oil burning furnace and hot water system. All suites will have wall beds and private baths. Bath rooms will be finished in tile. Marble and tile wainscot is specified for the entrance vestibule. Exterior of the buildings will be covered with rustic and cement plaster. Plans are complete and a contract will be awarded this week.

FLATS.—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, Emil Nelson, 244 Rivoli street, S. F. Location, Grove, east of Clayton. Will construct two flats finished in pine and elm panels. Hardwood floors, open fire places and tile mantels are specified. Automatic water heaters will be installed. Exterior covered with rustic and cement plaster. Owner will do the work by Day Labor.

SCHOOL.—Repairs and addition, frame \$10,000. San Francisco. Architect, State Architect George B. McDougall, Sacramento. Owner, State of California. Plans have been completed and work will be started by Day Labor at once for extensive alterations to the State Normal School located at Waller street, near Laguna. Complete information can be had by addressing the State Architect.

HOTEL AND STORE. 3 story and base, frame, \$10,000. San Francisco. Architect, Charles E. J. Rogers, Kohl Bldg., S. F. Owner, Frank M. Seconover, 5 Montgomery street. Location

Mission, between 17th and 18th, covering an area 25 by 90 feet. Interior finish pine, bath room, imitation tile. Patent store fronts and steam heat to be installed. Exterior covered with rustic and shiplap. Plans complete and contract to be let at once.

HOTEL AND STORE.—3 story and base, frame, \$10,000, San Francisco. Architect, Charles E. J. Rogers, Kohl Bldg., S. F. Owner's name withheld. Location, Mission between 17th and 18th, covering an area of 25 by 90 feet. Interior finish pine with imitation tile in baths. Plans provide hot water system and patent store fronts. Exterior covered with rustic and shiplap. Plans complete

RESIDENCE.—2 story and base, frame, \$2,700, San Francisco. Architect, Charles H. Miller, Dalziel Bldg., Oakland. Owner, Benedict Pedrett. The dwelling will be erected in the Bay Shore tract and has been designed for a seven room house and bath. Interior finish will be of pine throughout. Hardwood floors will be used in the living and dining rooms. There will be a large open fire place and tile or brick mantel. Imitation tile will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic. Plans are now being prepared.

RESIDENCE.—2 story and base, frame, \$5,000, San Francisco. Architects, Milwain Bros., Delger Bldg., Oakland. Owner, J. W. Marshall. The dwelling will be erected in Forest Hill and has been designed to contain eight rooms, bath and sleeping porch. Interior will be finished in pine and hardwood veneer with white enamel in the bed rooms. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

Contracts Awarded.

APARTMENT HOUSE AND STORE.—3 story and base, frame, \$3,500, San Francisco. Architect, C. C. Clausen. Hearst Bldg., S. F. Owner, H. D. Junck. Contractor, Ludwig Koenig 3325 19th street, S. F. Contract price, \$3,500.

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Amt.
2364	Van Bergen	Stjorgen	400
2365	Tamo	Tamo	400
2366	Gunst	Serguson	1000
2367	Emol	Demarais	400
2368	Olsen	Olse	500
2369	Stiefel	Stiefel	2000
2370	Glunz	Glunz	4300
2371	Hobart	Cavanaugh	850
2372	Vetran	Shirley	750
2373	Calegari	Scrihante	960
2374	Schlessinger	Urfer	1550
2375	Outley	Gillespie	1000
2376	Ansha Sfar	Sockolov	5000
2377	Landthom	Warden	2900
2378	Mensor	Melend	145
2379	Mensor	Saenger	4175
2380	Sirbu	Singacoma	1200
2381	Pac. Gas & Elec.	Pac. Gas & Elec.	7695
2382	Cerruti	Trevia	36500
2383	Almondo	Veripont	4155
2384	Warren	Cavaglieri	2000
2385	Gump	Petersen	1050
2386	Towne	Gas & Elec	2566

2387	Ballinger	Sauer	800
2388	McPhee	McPhee	1000
2389	Carney	Smith	400
2390	Johns	Johns	2750
2391	Gruenig	Mager	4650
2392	Pac. Gas & Elec.	Scott	3311
2393	Spring Val.	O'Brien & Bos	3250
2394	McHugh	Ratto	9300
2395	Ryan	Keenan	13155
2396	Fopplano	Farnocchia	13355
2397	Tyler	Tyler	5000
2398	Tyler	Tyler	5000
2399	Tyler	Tyler	5000
2400	Tyler	Tyler	5000
2401	Scoble	Scoble	25000
2402	Heyman	Heyman	2500
2403	Black	Glannini	6200
2404	State Normal	Owner	10000
2405	Hall	Hall	3000
2406	Bothin	Burrett	3300
2407	Ravani	Trevia	3500
2408	Scalafani	Brisa	1250

ALTERATIONS

(2364) NO. 1118 MISSION. Erect balcony in store.
Owner.....N. Van Bergen & Co., 449 Battery, San Francisco.
Architect...None.
Contractor...Stjorgen Bros., 3058 Army San Francisco.

COST, \$400

REPAIRS

(2365) NO. 1443 VALENCIA. Underpin and repair stable.
Owner.....D. Tamo, Premises.
Architect...None.
Day's work.

COST, \$400

(2366) NOS. 1032-39 OAK. Move and make general repairs to dwelling.
Owner.....H. Gunst, 337 Oak, S. F.
Architect...None.
Contractor...Serguson Bros., 308 Guerrero, San Francisco.

COST, \$1000

ALTERATIONS

(2367) NO. 550 BROADWAY. Alter interior of store.
Owner.....A. Emol.
Architect...None.
Contractor...B. W. Demarais, 732 Page, San Francisco.

COST, \$400

FRAME DWELLING

(2368) NO. 262 BEVERLY. One-story and basement frame dwelling.
Owner.....Olaf Olsen, Premises.
Architect...None.
Day's work.

COST, \$500

ADDITION

(2418) NO. 5 CHARLTON COURT. Add to dwelling.
Owner.....G. Morri Premises.
Architect...None.
Day's work.

COST, \$800

SUPPLY STATION

(2419) SE GEARY and Cook. One-story steel supply station.
Owner.....Standard Oil Co., Standard Oil Bldg., S. F.

Architect...None.
Day's work.

COST, \$750

FRAME DWELLING

(2569) E TWENTY-THIRD AVE 25 N California. Two-story and basement frame dwelling.
Owner.....John V. Stiefel, 739 11th Ave., San Francisco.
Architect...None.
Day's work.

COST, \$2000

FRAME FLATS

(2370) W SIXTH AVE 175 S Balboa. Two-story and basement frame (2) flats.

Owner.....Margaret A. Glunz, 527 Balboa, San Francisco.
Architect...None.
Day's work.

COST, \$4300

RUNWAY

(2371) S SUTTER 87-6 E Montgomery Construct runway.
Owner.....Hobart Estate Co., Merchants' Exchange Bldg., San Francisco.
Architect...Willis Polk, Hobart Bldg., San Francisco.
Contractor...T. A. Cavanaugh, 180 Jessie, San Francisco.

COST, \$850

FRAME DWELLING

(2372) SE HARKNESS 90 NE Berlin. One-story and basement frame dwlg.
Owner.....Mrs. Laura Vetran, 1155 Goettingen, San Francisco.
Architect...None.
Contractor...R. M. Shirley, 1155 Goettingen, San Francisco.

COST, \$750

ALTERATIONS

(2373) COR. UNION & LAFAYETTE Place. Moving, alterations and additions to one-story frame store.
Owner.....Francisco Calegari, 463 Union, San Francisco.
Architect...None.
Contractor...Q. Scrihante, 2029 Taylor, San Francisco.

Filed Aug. 14, '15. Dated Aug 5, '15.
Excavation made and dirt removed\$240
Cement work completed and accepted240
All work completed and accepted 240
Usual 35 days.....240

TOTAL COST, \$960

Bond, Deposit of \$500 to be made by contractor with Bank of Italy until 35 days after completion. Limit, 40 days. Forfeit, none. Plans and specifications filed.

REPAIRS

(2374) NO. 315 HOWARD. Minor repairs for factory building.
Owner.....Chas. Schlessinger, 449 Mills Bldg., San Francisco.
Architect...None.
Contractor...Chas. E. Urfer, 555 Pine, San Francisco.

COST, \$1850

ALTERATIONS

(2375) NO. 1354 DIVISADERO. Alter shop.
Owner.....E. C. Dudley, Premises.
Architect...None.
Contractor...G. G. Gillespie, 2214 Divisadero, San Francisco.

COST, \$1000

FRAME SYNAGOGUE

(2376) N GOLDEN GATE AVE 137-6 W Buchanan. Two-story frame synagogue.
Owner.....Congregation Ansha Sfar and Roumanian, 1112-14 Golden Gate Ave., S. F.

Architect...N. W. Mohr, 45 Kearny, San Francisco.
Contractor...J. Sockolov, 2558 Clay, San Francisco.

COST, \$5000

FRAME RESIDENCE

(2377) W FORTY-FIFTH AVE 225 S Irving S 25xW 120. All work for two-story frame residence.

Owner.....Arthur J. Landtborn, 1331
45th Ave., San Francisco.
Architect...David C. Coleman, 625
Market, San Francisco.
Contractor...Fred Warden.

Filed Aug. 14, '15. Dated Aug. 10, '15.
Frame up\$725
Brown coated 725
Completed and accepted 725
Usual 35 days..... 725

TOTAL COST, \$2900

Bond, \$1450. Surety, O. Monson. Limit,
70 days. Forfeit, \$250. Plans and
specifications filed.

FRAME APARTMENTS

(2378) S WASHINGTON, 131-8 E
Steiner, E 25xS 127-8 1/2. All work of
plumbing and gas fitting for three-
story and basement frame building
(apartments).

Owner.....Geo. W. Mensor.
Architect...Chas. J. Rousseau, 46
Kearny, S. F.

Contractor...J. J. McLeod, 1143 Golden
Gate Ave., S. F.

Filed Aug. 16, '15. Dated Aug. 12, '15.
Work roughed in\$446
Completed and accepted 446
Usual 35 days 298

TOTAL COST, \$1190

Bond, \$395. Sureties, Hartford Accident
and Indemnity Co. Forfeit, none. Lim-
it, as soon as possible. Plans and
specifications filed.

(2379) MILL WORK ON ABOVE.

Contractor...Spencer Street Planning
Mill, 50 Spencer, S. F.

Filed Aug. 16, '15. Dated Aug. 10, '15.
Mill work for exterior of build-
ing delivered except vestibule
trim\$300

Mill work for standing finish
delivered 300
Completed and accepted 506
Usual 35 days 369

TOTAL COST, \$1475

Bond, Forfeit, none. Limit, without
delay. Plans and specifications filed.

STORE AND FLATS

(2380) S CALIFORNIA, 83-4 W 17th
avenue, W 25xS96-1. All work for a
two-story frame building (store and
flats), and a two-story frame stable
on rear.

Owner.....Meyer & Esther Sirbu,
5521 California, S. F.

Architect...P. H. Bosworth.

Contractor...G. Sangiacomo.

Filed Aug. 16, '15. Dated Aug. 13, '15.
Frame up and roof on.....\$1050
Brown coated 1050
Completed and accepted 1050
Usual 35 days 1050

TOTAL COST, \$4200

Bond, \$2100. Sureties, Longeno Genotti
and Giuseppe Affranchino. Forfeit, \$5.
Limit, 60 days. Plans and specifica-
tions filed.

PURIFIER

(2381) N W DELAWARE and Hum-
boldt, W 166-3 SW to Humboldt, W
to Maryland N 279 more or less E 200
S 246, P N 489. All work of
erection of purifier at Potrero gas
works.

Owner.....Pacific Gas and Electric
Co., 445 Sutter, S. F.

Architect...None

Contractor...Pacific Tank and Pipe Co.,
318 Market, S. F.

Filed Aug. 16, '15. Dated Aug. 9, '15.
On completion 75%

Usual 35 days 25%
TOTAL COST, \$3695
Bond, \$1850. Surety, Royal Indemnity
Co. Forfeit, none. Limit, 30 days.
Plans and specifications filed.

CONCRETE & BRICK & FRAME.

(2382) N W COLUMBUS AVE. and
Lombard, N 147-11 1/2 N 72-6 1/2 S 113-
8 1/2 E 167-2 1/2. All work for a two-
story and basement concrete and
brick building and a two-story and
basement frame building.

Owner.....Edward Cerutti, 537 Front,
San Francisco.

Architect...Perseo Righetti, Phelan
Bldg., S. F.

Contractor...G. Trevia and G. B. Pas-
qualetti, 32 Harwood
Place, S. F.

Filed Aug. 16, '15 Dated Aug. 12, '15.
Grading and foundation done
and 1st story joists set\$5475

Roof boarded ready for roof-
ing 5475
Both buildings brown coated. 5475

Standing finish on both bldgs. 5475

Completed and accepted 5475

Usual 35 days 9125

TOTAL COST, \$36,500

Bond, \$20,000. Sureties, G. Garassino
and D. Trevia. Forfeit, \$10. Bonus,
\$10. Limit, 110 days. Plans and spec-
ifications filed.

STORE AND FLATS

(2383) S PACIFIC, 91-9 W Powell,
22-8x60. All work except gas fix-
tures, window shades and finish
hardware for a three-story frame
building (store and flats).

Owner.....G. Almondo, 526 Green,
San Francisco.

Architect...None.

Contractor...G. Moriconi and G. Pas-
sarino, 2123 Pok, S. F.

Filed Aug. 16, '15. Dated Aug. 4, '15.
Frame up\$112,500
Brown coated\$112,500

Completed and accepted ... 112,500

Usual 35 days 112,500

TOTAL COST, \$4450

Bond, \$2225 Surety, Y. Berti. Forfeit,
\$5. Limit, 90 days after Aug. 9, '15.
Plans and specifications filed.

FRAME COTTAGE

(2384) S TWENTY-THIRD, 100 E
Rhode Island, 25x100. All work for
a one-story and basement frame cot-
tage.

Owner.....Mrs. Nellie Warren, 623
7th, S. F.

Architect...None.

Contractor...H. G. Cavaglieri, 593 Potrero
avenue, S. F.

Filed Aug. 16, '15. Dated July 30, '15.
Roof on\$500
Brown coated 500

Completed and accepted 500

Usual 35 days 500

TOTAL COST, \$2000

Bond, Sureties, Forfeit none. Limit, 60
days. Plans and specifications filed.

GAIRAGE

(2385) S GREEN between Scott and
Devisadero, 2559 Green. All work
for reinforced concrete garage.

Owner.....A. L. Gump 268 Post, San
Francisco.

Architect...Milton Lichtenstein, 111
Ellis S. F.

Contractor...H. L. Petersen, 62 Post,
San Francisco.

Filed Aug. 16, '15. Dated Aug. 16, '15.
Excavation completed and forms

set in place\$225
Concrete for walls and roof
poured 265
Completed and accepted 265
Usual 35 days 265

TOTAL COST, \$1050

Bond, \$525. Sureties, Aetna Accident
and Liability Co. Forfeit, none. Limit,
25 days. Plans and specifications filed.

BRICK APARTMENTS

(2386) S CALIFORNIA, 137-6 W Tay-
lor, W 137-6x137-6. Electric work
for five-story and basement steel
steel frame brick apartments.

Owner.....Towne Realty Co.

Architect...None.

Contractor...Gas and Electric Appli-
ance Co., 441 Sutter, S. F.

Filed Aug. 16, '15. Dated Aug. 14, '15.
On list of each month..... 75%

Usual 35 days 25%

TOTAL COST, \$2566

Bond, \$2566. Sureties, U. S. Fidelity
and Guaranty Co. Forfeit, none. Limit
without delay. Plans and specifications
filed.

WAREHOUSE

(2387) W SHOTWELL 74 N 15th. One-
story frame warehouse.

Owner.....W. Ballinger.

Architect...None.

Contractor...F. Sauer, 1950 15th street,
San Francisco.

COST \$800

DWELLING

(2388) SCENIC BOULEVARD, end of
32nd avenue. One story and base-
ment frame dwelling.

Owner.....Anna McPhee 1275 25th
avenue, S. F.

Architect...None.

Day's work. COST \$1000

DWELLING

(2389) E TWENTY-FIRST, 225 S
Noriega. One-story and basement
frame dwelling.

Owner.....John B. Carney, 2955 22nd
street, S. F.

Architect...None.

Contractor...Albert Smith, 672 Eddy
street, S. F.

COST, \$400

DWELLING

(2390) W EIGHTEENTH AVE, 200 N
Balboa. Two-story and basement
frame dwelling.

Owner.....Johns Bros., 1903 Baker
San Francisco.

Architect...None.

Day's work. COST, \$2,750

FRAME FLATS

(2391) N BRYANT, 67 E 25th 37x50.
All work except wall beds, light fix-
tures and heaters for two-story and
basement frame flats.

Owner.....Geo. D. Gruenig, 399 5th,
San Francisco.

Architect...Charles C. Frye and O. R.
Thayer, 20 Montgomery,
San Francisco.

Contractor...Mager Bros., 110 Jessie,
San Francisco.

Filed Aug. 17, '15. Dated Aug. 17, '15.
Frame complete and roof on...\$1162

Brown coated 1162

Completed 1164

Usual 35 days 1162

TOTAL COST, \$4650

Bond, Sureties, Forfeit, none. Limit,
75 days from date. Plans and specifi-
cations filed.

HEATING

(2392) S SUTTER, 115-9 E Powell S 137-6x E 45-6. All work for low pressure 1 pipe direct radiation steam heating system, eight-story class A building.

Owner.....Pacific Gas and Electric Co., 415 Sutter, S. F.

Architect....Edgar A. Mathews, 251 Post, S. F.

Contractor....Scott Company, 213 Minna street, S. F.

Filed Aug. 17 '15. Dated Aug. 9, '15.

Thorough in\$1300

Completed 1176

Usual 35 days 835

TOTAL COST, \$3311

Bond, \$1700. Sureties, Pacific Coast Casualty Co. Forfeit, none. Limit, with reasonable diligence. Plans and specifications filed.

RETAINING WALL

(2393) VICINITY OF SEVENTH AV. Ortega and Laguna Honda Road. All work for concrete retaining wall around Lake Honda.

Owner.....Spring Valley Water Co., 375 Sutter, S. F.

Architect.....None.

Contractor....James H. O'Brien and George A. Bos, Hearst Bldg., S. F.

Filed Aug. 17, '15. Dated Aug. 7, '15.

Semi-monthly of 75%

Usual 35 days 25%

TOTAL COST, \$5250

Bond, \$2650. Sureties, Massachusetts Bonding and Insurance Co. Forfeit, none. Limit, Sept. 20, 1915. Plans and specifications filed.

FRAME APARTMENTS

(2391) N EIGHTEENTH, 95 E Valencia E 25xN 80. All work for a three-story and basement frame apartment house.

Owner.....P. M. McHugh.

Architect....Frank T. Shea and John O. Lofquist, 742 Market street, S. F.

Contractor....Ratto & Ratto, 232 Hartford S. F.

Filed Aug. 18, '15. Dated Aug. 16, '15.

When building is enclosed.....\$2450

When brown coat is on 2450

When building is accepted 2450

Usual 35 days 2450

TOTAL COST, \$9500

Bond, Sureties, Forfeit, none. Limit, 80 days. Plans and specifications filed.

FRAME APARTMENTS

(2395) N CARL AND SE ARGUELLO Boulevard E 101-6 N 25 W 38-10 SW 25-1 1/2. All work for three-story and basement frame apartments.

Owner.....Mary C. Ryan, 1236 Arguello Boulevard, S. F.

Architect.....None.

Contractor....C. J. and W. J. Keenan, 1713 Cole, S. F.

Filed Aug. 18, '15. Dated Aug. 14, '15.

Frame up and roof boards on.....\$3289

Brown coated 3289

Completed and accepted 3290

Usual 35 days 3290

TOTAL COST, \$13,158

Bond, \$6,600. Sureties, Hugh and H. C. Keenan. Forfeit, none. Limit, 100 days. Plans and specifications filed.

FRAME APARTMENTS

(2396) N UNION, 65 W Leavenworth W 48-6xN 137-6. All work except

marquis glass for a three-story and basement building (apartments).

Owner.....S. Fopplano, 622 Broadway, S. F.

Architect....L. Traverso, 351 Union, San Francisco.

Contractor....Farnocchia-Petri & Co., 1651 San Jose Avenue, S. F.

Filed Aug. 19, '15. Dated Aug. 15, '15.

Frame up\$2007.75

Enclosed 2007.75

Brown coated 2007.75

Plaster is complete 2007.75

Completed 2007.75

Usual 35 days 3346.25

TOTAL COST, \$13,385

Bond, \$6692.50. Sureties, G. Masca and L. Lombardi. Forfeit, none. Limit, 110 working days. Plans and specifications filed.

DWELLING

(2397) E ELEVENTH AVE, 125 S Geary. Two-story and basement frame dwelling.

Owner.....P. D. Tyler, 1921 Oak, San Francisco.

Architect.....None.

Day's work. COST, \$5000

DWELLING

(2398) E ELEVENTH AVE, 150 S Geary. Two-story and basement frame dwelling.

Owner.....P. D. Tyler, 1921 Oak, San Francisco.

Architect.....None.

Day's work. COST, \$5000

DWELLING

(2399) E ELEVENTH AVE, 175 S Geary. Two-story and basement frame dwelling.

Owner.....P. D. Tyler, 1921 Oak, San Francisco.

Architect.....None.

Day's work. COST, \$5000

DWELLING

(2400) E ELEVENTH AVE, 200 S Geary. Two-story and basement frame dwelling.

Owner.....P. D. Tyler, 1921 Oak, San Francisco.

Architect.....None.

Day's work. COST, \$5000

APARTMENTS

(2401) NE GEARY and Palm. Two-story and basement frame (10) apartments 89x56.

Owner.....Thomas Scoble, 363 14th Avenue, S. F.

Architect....E. E. Young, 251 Kearny, San Francisco.

Day's work. COST, \$25,000

DWELLING

(2402) E EIGHTEENTH AVE, 250 N Balboa. Two-story and basement dwelling.

Owner.....Oscar Heyman & Bro., 742 Market, S. F.

Architect.....None.

Day's work. COST, \$2500

FRAME APARTMENTS

(2403) S ELM AVE, 137-6 E Gough E 27-6xS 52. All work for three-story and basement frame apartment.

Owner.....Katherine Black.

Architect....Earl B. Scott, Humboldt Bank Bldg., S. F.

Contractor....Giannini & Son.

Filed Aug. 20, '15. Dated Aug. 9, '15.

Frame up\$1550

Brown coated 1550

Completed and accepted 1550

Usual 35 days 1550

TOTAL COST, \$6200

Two bonds, \$3100 and \$6200. Sureties, A. Ratto and A. Ratto & K. McLelland. Forfeit, \$5. Limit, 60 days. Plans and specifications filed.

ALTERATIONS

(2404) WALLER, between Buchanan and Laguna. Alterations for Normal School.

Owner.....State Normal School.

Architect....State Architect George B. McDougall, Forum Bldg., Sacramento.

Day's work. COST, \$10,000

DWELLING

(2405) W ELEVENTH AVE, 25 S Balboa. Two-story and basement frame dwelling.

Owner.....C. A. Hall, 1315 5th Avenue, San Francisco.

Architect.....None.

Day's work. COST, \$3000

STORES

(2406) W VALENCIA, 40 S 15th. One-story class "C" stores (50x60).

Owner.....Bothin Real Estate Co., 604 Mission, S. F.

Architect....A. Ettler, 604 Mission, San Francisco.

Contractor....Barrett & Hilp, 124 Sharon Bldg., S. F.

Day's work. COST, \$3300

FLATS

(2407) E AUBURN, 91-9 S Pacific. All work for three-story flats.

Owner.....Ellie and Leonardo J. Rovani, 50 Auburn, S. F.

Architect.....None.

Contractor....G. Trevia and G. B. Pasqualetti, 32 Harvard Place, San Francisco.

Filed Aug. 20, '15. Dated Aug. 16, '15.

Frame up\$875

Brown coated 875

Completed 875

Usual 35 days 875

TOTAL COST, \$3500

Bond, \$1800. Sureties Angelo V. Garassino and D. Trevia. Forfeit, none. Limit, 90 working days. Plans and specifications filed.

Note: Paul F. De Martini, 2123 Powell street, drew the plans.

ALTERATIONS AND ADDITIONS

(2408) NO. 1329 COLUMBUS AVE, between Bay and North Point. Alterations and additions except painting, gas fixtures mantel and shades to a one-story frame cottage.

Owner.....Pasquale Scalafani.

Architect.....None.

Contractor....A. Brisa & Co., 525 Valero, S. F.

Filed Aug. 20, '15. Dated Aug. 19, '15.

Frame up\$312.50

Brown coated 312.50

Completed and accepted 312.50

Usual 35 days 312.50

TOTAL COST, \$1250

Bond, Sureties, Forfeit, none. Limit, 60 days from recording. Plans and specifications filed.

LEASE.

Aug. 16, 1915-N HAIGHT E of Buchanan, 30 on Haight x137-6, 226-226 1/2 and 228 Haight Annie Nath-

wood floors will be used in the living room, dining room and reception hall. There will be a large open fire place in the living room with brick or tile mantel. The wainscot and floor will be used in the bath room. An automatic water heater has been specified. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner, who will do the work by Day Labor.

RESIDENCE.—2 story and base, frame, \$3,500, Oakland, Cal. Architect, none. Owner, E. L. Higgins, 3250 Miles avenue, Oakland. The dwelling will be erected on the east side of Thomas street north of Napa and has been designed for a seven room house with bath and sleeping porch. Interior finish will be open pine. White enamel will be used in the bedrooms. Hardwood floor will be used in the living room, dining room and reception hall. There will be furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. Plans provide for an automatic water heater. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner, who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE.—1½ story and base, frame, \$4,500, Berkeley, Alameda Co. Cal. Architect, H. H. Gutterson, Foxcroft Bldg., S. F. Owner, J. A. Cross. The dwelling has been designed for a seven room house with bath and sleeping porch, and will be erected in Northbrae. Interior finish will be of pine, hardwood and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be furnace heat, open fire places and an automatic water heater. Mantels will be of brick. Bath room will have tile floor and wainscot. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken by the architect.

RESIDENCE.—2 story and base, frame, \$3,500, Oakland, Cal. Architect, none. Owner, C. E. Carlson, 1512 Broadway, Oakland. The dwelling will be erected on the east side of Thomas street north of Napa and has been designed for a seven room house with bath and sleeping porch. Interior trim will be of pine southern gum and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile. Tile wainscot and floors will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCES.—3 1 story and base, frame, \$3,000 each. Oakland, Cal. Architect, none. Owner, C. M. MacGregor, 470 13th street Oakland. These dwellings will be erected at the corner of Woodruff and East 38th street and each has been designed to contain 5 rooms and bath. Interior finish will be of pine, redwood and elm. Hardwood floors will be used in the living and dining rooms. Each living room

will have a large open fire place, and tile or brick mantel. Imitation tile wainscot will be used in the bath rooms. Automatic water heaters will be installed. Exterior will be covered with rustic and cement plaster on metal lath. Plans are complete and in the hands of the owner who will do the work by Day Labor. Materials are now being purchased.

RESIDENCE.—2 story and 2 base, frame, \$8,000, Berkeley, Alameda Co. Cal. Architect, H. H. Gutterson Foxcroft Bldg., S. F. Owner, Dr. F. H. Frenzel. The dwelling has been designed to contain ten rooms, two baths, sleeping porch and basement garage, and will be erected in Hawthorne Terrace. Interior finish will be of pine, hardwood and white enamel. Hardwood floors will be used in the living room, dining room, library and reception hall. There will be furnace heat and open fire places. Mantels will be of brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior of the house will be covered with cement plaster on metal lath. Plans are complete and figures are now being taken.

RESIDENCE.—2 story and base, frame, \$3,500, Oakland, Cal. Architects Mau & Sprague, MacDonough Bldg., Oakland. Owner, Charles Mau, Jr. The dwelling will be erected on Grand avenue near Sunnyside and has been designed for a six room house with bath and sleeping porch. Interior will be finished in pine and hardwood veneer with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are now being prepared.

RESIDENCE.—1 story and base, frame, \$1,500, Oakland, Cal. Architect, C. W. McCall, Central Bank Bldg., Oakland. Owner's name withheld. The dwelling will be erected in Fourth Avenue Terrace and has been designed for an eight room house with two baths and sleeping porch. Interior finish will be of pine and hardwood with white enamel in the bed rooms. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of tile and brick. Bath rooms will have tile floors and wainscot. An automatic water heater will be installed. Exterior will be covered with cement plaster on metal lath. Plans are now being prepared.

RESIDENCE.—2 story and base, frame, \$6,500, Oakland, Cal. Architect, C. W. McCall, Central Bank Bldg., Oakland. Owner's name withheld. The dwelling will be erected in Crocker Highlands and has been designed for an eight room house with two baths, sleeping porches and a separate garage. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the living room, dining room, library and reception hall. Plans provide for furnace heat and open fire places. Mantels

will be of tile and brick. Bath rooms will be finished in tile and equipped with high class fixtures including showers. A hot water circulating system will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and figures are being taken.

RESIDENCE.—2 story and base, frame, \$3,500, Architect, none. Owner, L. W. Button, 347 63rd street, Oakland. The dwelling will be erected on Hillebrand avenue south of 62nd street and has been designed to contain seven rooms, bath and sleeping porch. Interior will be finished in pine and southern gum. White enamel will be used in the bed rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile. Bath room will have tile floor and wainscot. An automatic water heater will be installed. Plans are complete and in the hands of the owner, who will do the work by Day Labor.

TIMBER TREESTLE.—Cost not stated. Oakland, Cal. Engineer, County Surveyor, Oakland. Owners Alameda County. Plans and specifications have been completed and approved and bids will be opened on August 30th by the Board of Supervisors for constructing a timber trestle and the necessary grading for the waterway and for footings, on the main county road from Alvarado to Centerville or County Road No. 544 all in Washington Road District, Washington Township. Plans and specifications can be secured from the Clerk of the Board of Supervisors.

APARTMENT HOUSE.—4 story and base, brick and steel, \$50,000, Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner's name withheld. The building will be erected on Grand avenue, covering an area of 88 by 78 feet and will contain a total of twenty-six suites of three, four and six rooms. Interiors will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the principal rooms. Plans provide for steam heat, an automatic elevator, hot water system, vacuum cleaning and oil burning plant. All bath rooms will have tile floors and wainscot. Wall beds are specified. Marble wainscot will be used in the entrance. Exterior of the building will be faced with pressed brick trimmed with terra cotta. Plans are being prepared.

APARTMENT HOUSE.—3 story and base, frame, \$12,000, Oakland, Cal. Architect, Merrill Newson, 1518 Broadway, Oakland. Owner, William Kerrigan. The building will be erected at the corner of 10th and Webster street and has been designed to contain six suites of three and four rooms with private bathes and wall beds. Interior finish will be of pine and hardwood. Some oak floors will be used. Bath rooms will be finished in tile and a hot water system and steam heat are specified. Exterior of the building will be covered with cement plaster on metal lath. Plans are now being prepared.

RESIDENCE.—1 story and base, frame, \$2,000, Oakland, Cal. Architect, none. Owner H. A. Pleitner, 954 Fruitvale avenue, Oakland. The dwelling has been designed for a six room house and will be erected on the north side

of Kansas street west of Laurel. Interior will be finished in pine with some elm panels. Hardwood floors will be used in the living and dining rooms. There will be a large open fireplace and tile mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are complete and in the hands of the owner, who will do the work by Day Labor.

FACTORY—1 story and base, reinforced concrete, \$250,000. Oakland, Cal. Architect, Louis Hobart, Crocker Bldg., S. F. Owners, Shredded Wheat Biscuit Co. The following contracts have been awarded: Concrete, Clinton Fireproofing Co., S. F.; Carpentry, Lester Stock, S. F.; Plastering, William Makin, S. F.; Painting, J. H. Kelle & Co., S. F.; Plumbing, Robert Dalziel, Jr., Oakland; Roofing and Sheet Metal, De Luchi-Schultz Co., Oakland; Ornamental Iron, California Iron Works, Oakland; Plate Glass, California Plate & Window Glass Co., S. F.; Heating, Atlas Heating & Ventilating Co., S. F.; Structural Glass, Vitrolite Const. Co., Oakland; Elevators, Otis Elevator Co., S. F.

FLATS—2 story and base, grame. Cost not stated. Oakland, Cal. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, Edgar Ormsby, Location, Terrace near 43rd St. Will contain 4 flats of 4 rooms and bath. Interior finish pine with elm panels and hardwood floors in principal rooms. Open fire places, tile mantels and automatic water heaters are included. Exterior covered with cement plaster. Plans are being figured.

LODGE HALL—2 story and base, brick. Cost not stated. Berkeley, Alameda Co., Cal. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owners, Berkeley Eagles Association. Location, University and San Pablo avenues. Contain stores on first floor and lodge rooms above which will be finished in pine and hardwood with some maple floors. Patent store fronts and steam heat specified. Exterior faced with pressed brick. Bids being taken on revised plans.

INDUSTRIAL HOME COMPLETION. Cost not stated. Berkeley, Alameda Co., Cal. Architect, State Architect, George R. McDougall Sacramento. Owners, State of California. Bids will be opened on September 15th for completing walls and walks around gymnasium building and on September 16 for a tower and tank. Proposals in another column of this issue.

STORES AND LODGE HALL—2 story and base, brick, cost not stated. Centerville, Alameda Co., Cal. Architect, A. F. Heide, 15 Kearny St., S. F. Owners, Lernhart & Hansen. Building arranged for stores on first floor and lodge hall above. Maple floor. Exterior pressed brick. Plans are out for figures.

Contracts Awarded

RESIDENCES. 2 1 story and base, frame, \$2,250 and \$1,000. Oakland, Cal. Architect, Chester H. Miller, Dalziel Bldg., Oakland. Owners, Misses Elizabeth and Frieda Gutleben. Contractors, Gutleben Bros., New Call Bldg., S. F. Contract price, \$2,250 and \$1,000.

Building Contracts Awarded

Oakland

No.	Owner	Contractor	Amt.
1599	Oakland	Faulkes	500
1600	Same	Same	500
1601	Same	Same	500
1602	Same	Same	500
1603	Black	Harris	1500
1604	Higgins	Higgins	3500
1605	Woodburn	Woodburn	2500
1606	Allampres	Geary	400
1607	Depaloi	Cavaglia	3600
1608	Dorsch	Button	3710
1615	Wardlow	Wardlow	1500
1616	Pac. Gas & Elec. W. Pipe	Wardlow	1500
1617	Pac. Gas & Elec. W. Pipe	Wardlow	2725
1618	Depaloi	Cavaglia	3565
1619	MacGregor	MacGregor	2000
1620	MacGregor	MacGregor	2000
1621	Carlson	Carlson	2500
1622	Ramos	Kopf	2290
1624	MacGregor	MacGregor	2000
1625	Gilmour	Turner	3050
1627	Andrews	Carlson	30000
1632	Schnoor	Bradford	3500
1633	Armas	Lima	3000
1634	Dorsch	Button	3792
1635	Button	Button	3200
1636	Martin	Elbel	3686
1637	Futs	Moribat	400
1638	Broadhead	Owner	1450
1639	St. Anthony	Brockhage	450
1640	Ench	Makin	800
1641	Clemes	Andersen	600
1642	Woodward	McPhee	400
1644	Corson	Delanoy	1500
1645	McGurrin	Kunders	700
1646	Hahn	Hopper	1900
1647	Robinson	Peppin	1500
1648	Waisner	Tupper	1900
1649	Manning	Dahnke	500
1650	Price	Price	700
1651	Bernstein	Corbett	1600
1652	El Graglia	Valente	500
1653	Pleitner	Pleitner	2000
1656	Cal. Cotton	Jones	5096

SCHOOL

(1599) YGNACIO AND CONGRESS Aves., Oakland. One-story 1-room school.
Owner.....City of Oakland.
Architect...None.
Contractor..John R. Faulkes, 9828 E-14th, Oakland.
COST, \$500

SCHOOL

(1600) FIFTY-SECOND AND -14TH, Oakland. One-story 1-room school.
Owner.....City of Oakland.
Architect...None.
Contractor..John R. Faulkes, 9828 E-14th, Oakland.
COST, \$500

SCHOOL

(1601) TWENTY-FOURTH AND E-26th, Oakland. One-story 1-room school.
Owner.....City of Oakland.
Architect...None.
Contractor..John R. Faulkes, 9828 E-14th, Oakland.
COST, \$500

SCHOOL

(1602) E MARKET bet. 39th and Appar, Oakland. One-story 1-room school.
Owner.....City of Oakland.
Architect...None.
Contractor..John R. Faulkes, 9828 E-14th, Oakland.
COST, \$500

DWELLING

(1603) N DAMUTH 190 W Lincoln Ave., Oakland. One and one-half story 7-room dwelling.
Owner.....James F. Black, 3130 E-39th, Oakland.
Architect...None.

Contractor..Harris & Hudson, 1951 E-38th, Oakland.
COST, \$1800

DWELLING

(1604) E THOMAS 180 N Napa, Oakland. Two-story 7-room dwelling.
Owner.....E. L. Higgins, 5250 Miles Ave., Oakland.
Architect...None.
Day's work. COST, \$3500

DWELLING

(1605) W PARK BLVD at Wellington, Oakland. One-story seven-room dwelling.
Owner.....Paul E. Woodburn, 3965 Greenwood Ave., Oakland.
Architect...None.
Day's work. COST, \$2500

ALTERATIONS

(1606) NO. 828 FIFTH, Oakland. Alterations.
Owner.....D. Allampres.
Architect...None.
Contractor..L. G. Geary, 679 60th, Oakland.
COST, \$400

DWELLING

(1607) S CALMAR 217 W Paloma Ave., Oakland. Two-story 6-room dwlg.
Owner.....Annie Depaloi, 933 Vallejo, San Francisco.
Architect...Louis Mastropasqua, 550 Washington, S. F.
Contractor..N. Cavaglia, 946 Greenwich, San Francisco.
COST, \$3600

FRAME DWELLING

(1608) LOT 33 MAP A. J. Snyder's Terrace-by-the-Lake, Oakland. All work for two-story 8-room and basement frame dwelling.
Owner.....Louise and Charles Dorsch, Oakland.
Architect...None.
Contractor..I. W. Button, 347 63rd, Oakland.
Filed Aug. 14, '15. Dated Aug. 11, '15.

Frame up ¼
Plastered and roof on..... ¼
Completed ¼
Usual 35 days..... ¼
TOTAL COST, \$3710
Bond, none. Limit, 90 days after Aug. 16. Forfeit, none. Plans and specifications filed.

DWELLING

(1615) E TWENTY-THIRD AVE, 80 N E 30th street, Oakland. One-story five-room dwelling.
Owner.....C. E. Wardlow, 983 Park street, Alameda.
Architect...None.
Day's work. COST, \$1800

DWELLING

(1616) E TWENTY-THIRD AVE, 120 N E 30th street, Oakland. One-story five-room dwelling.
Owner.....C. E. Wardlow, 983 Park street, Alameda.
Architect...None.
Day's work. COST, \$1800

SCRUBBER SHELL

(1617) W CASTRO ST if extended S 80 S 1st street, W 456.03 S 300, Oakland. All work for steel scrubber shell.
Owner.....Pacific Gas and Electric Co., 12th and Clay, Ogd.
Architect...None.

Contractor...Western Pipe and Steel Co., 414 Market, S. F.
 Filed Aug. 16, '15. Dated Aug. 8, '15.
 Completed and accepted 75%
 Usual 35 days 25%
TOTAL COST, \$2725

ond, \$1450. Sureties Aetna Accident and Liability Co. Forfeit, none. Limit, 5 days. Plans filed. No specifications.
 (1615) S CALMAR AVE, being block D, lot 30, East Piedmont Heights, Oakland. All work for a two-story six-room dwelling.
 Owner.....Annie Depaoli, 933 Val-lejo, S. F.
 Architect.....L. Mastropasqua, 580 Washington, S. F.
 Contractor...Norio Cavaglia, 946 Green-wich, S. F.
 Filed Aug. 16, '15. Dated Aug. 12, '15.
 Frame up\$390
 Brown coated 890
 Completed and accepted 890
 Usual 35 days 395
TOTAL COST, \$3565
 ond, Sureties, Forfeit, none. Limit, 5 days. Plans and specifications filed.

WELLING
 (1619) W ELSTON AVE, 375 N E-38th street, Oakland. One-story 5-room dwelling.
 Owner.....C. M. MacGregor, 470 13th, Oak'and.
 Architect.....None.
 Day's work. **COST, \$2000**

WELLING
 (1620) W ELSTON AVE, 295 N E-38th street, Oakland. One-story 5-room dwelling.
 Owner.....C. M. MacGregor, 470 13th, Oakland.
 Architect.....None.
 Day's work. **COST, \$2,000**

WELLING
 (1621) W THOMAS, 95 N Napa, Oak-land. Two-story seven-room dwlg.
 Owner.....C. E. Carlson, 1512 Grove, Berkeley.
 Architect.....None.
 Day's work. **COST, \$3500**

WELLING
 (1622) E NINETY-SIXTH AVE, 235 S "A" street, Oakland. One-story, 7-room dwelling.
 Owner.....F. M. Ramos, 756 Kennedy, Oakland.
 Architect.....None.
 Contractor...B. P. Kopf, 1075 32nd ave-nue, Oakland.
COST, \$2290

WELLING
 (1623) NW WOODRUFF and E-35th streets, Oakland. One-story, 5-room dwelling.
 Owner.....C. M. MacGregor, 470 13th, Oakland.
 Architect.....None.
 Day's work. **COST, \$2000**

EATING SYSTEM
 (1625) E-THIRD AV, 110 N E-14th street N 140 E 150, Oakland. All work for steam heating system.
 Owner.....William G Gilmour.
 Architect.....Rousseau & Rousseau, 110 Sutter, S. F.
 Contractor...The Turner Co., 278 Na-toma, S. F.
 Filed Aug. 17, '15. Dated Aug. 2, '15.
 Roughed in\$1016
 Completed and accepted 1016

Completed and accepted as re-corded 1015
TOTAL COST, \$3050
 Bond, Sureties, Forfeit, none. Limit, 30 days after Aug. 2. Plans and specifications filed.

(1627) W ALICE 1926 N 12th street N 78 W 150, Oakland. All work for apartments.
 Owner.....Nana G. Andrews.
 Architect.....None.
 Contractor...John Carson, Bacon Bldg., Oakland.
 Filed Aug. 17, '15. Dated —.
 Contractor to receive 7½ per cent of cost of building; also to obtain loan of \$30,000 to be used in construction of building.
 No plans or specifications filed.
Note: C. W. McCall Central Bank Bldg., Oakland, is the architect.

DWELLING
 (1628) LOTS 153 AND 154, Map E. B. and A. L. Stone Co.'s lots, Elmhurst, Oakland. All work for one-story dwelling.
 Owner.....F. M. Ramos, 756 Kennedy, Oakland.
 Architect.....None.
 Contractor...B. F. Kopf, 1075 32nd ave-nue Oakland.
 Filed Aug. 17, '15. Dated —.
 Frame up ¼
 Plastered ¼
 Notice of completion filed ¼
 Usual 35 days ¼
TOTAL COST, \$2290
 Bond Sureties, Forfeit none. Limit, 90 days. Plans and specifications filed.
Note: First report Aug. 18, No. 1632.

DWELLING
 (1632) W CLAREMONT AVE, 100 N 59th street, Oakland. Two-story, 8-room dwelling.
 Owner.....P. Schnoor, 3905 Clare-mont avenue, Oakland.
 Architect.....None.
 Contractor...C. O. Bradhoff, 911 55th street, Oakland.
COST, \$3500

DWELLING
 (1632) S KEITH AVE, 563 E College avenue Oakland. One and one-half story six-room dwelling.
 Owner.....R. R. Armas, Olga Apart-ments, Oakland.
 Architect.....None.
 Contractor...Manuel Lima, 5132 Ygna-cio avenue, Oakland.
COST, \$3000

DWELLING
 (1634) E WALLA VISTA 200 N El-wood Oakland. Two-story eight-room dwelling.
 Owner.....Charles Dorsch, 528 Ho-hart street, Oakland.
 Architect.....None.
 Contractor...J. W. Button, 347 63rd street, Oakland.
COST, \$3792

DWELLING
 (1635) W HILLEGASS AVE, 80 S 62nd street, Oakland. Two-story, seven-room dwelling.
 Owner.....J. W. Button, 347 63rd street, Oakland.
 Architect.....None.
 Day's work. **COST, \$3200**

FRAME DWELLING
 (1636) SAN LORENZO. All work for

two-story frame dwelling, except plumbing fixtures, finish hardware.
 Owner...Mrs. J. P. Marlin, San Lo-renzo.

Architect...Charles F. Mau and Gil-berth Sprague MacDonough Bldg., Oakland.
 Contractor...A. P. Ethel, 1527 Broad-way, Oakland.

Filed Aug. 18, '15. Dated Aug. 17, '15.
 Frame up ¼
 Enclosed and roof on ¼
 Ready for painting ¼
 Completed and accepted ¼
TOTAL COST, \$3686.50
 Bond, \$3,000. Sureties, F. G. Beckert and George H. Hungerford. Forfeit, \$40. Limit, 90 days. Plans and specifications filed.

LAUNDRY
 (1637) S E-FOURTEENTH ST, 90 E 22nd avenue, Oakland. One-story brick laundry.
 Owner.....J. Puts, 2336 E-14th street, Oakland.
 Architect.....None.
 Contractor...P. Morilhat, 1333 E-18th street, Oakland.
COST, \$400

DWELLING
 (1638) W MARKET, 80 N 56th street, Oakland. One-story five-room dwlg.
 Owner.....Wishart and Broadhead, 864 55th street, Oakland.
 Architect.....None.
 Day's work. **COST, \$1450**

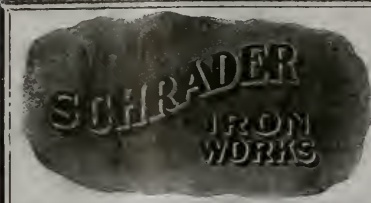
RESHINGLE
 (1639) NO. 1500 E-EIGHTEENTH ST., Oakland. Reshingle.
 Owner.....St. Anthony's Church, Premises.
 Architect.....None.
 Contractor...F. A. Brockhage, 1326 Na-toma, S. F.
COST, \$450

ALTERATION
 (1640) SE E-FOURTEENTH ST and 23rd avenue, Oakland. Alteration.
 Owner.....Mrs. Frank Ench, 2325 10th avenue, Oakland.
 Architect.....None.
 Contractor...Win. Makin, 1011 Franklin street Oakland.
COST, \$800

ALTERATION
 (1641) NO. 1208 BROADWAY, Oak-land. Alteration.
 Owner.....J. B. Clemes premises.
 Architect.....None.
 Contractor...John Andersen, 1424 Broadway, Oakland.
COST, \$600

MARQUEE
 (1642) SE THIRTEENTH and Clay, Oakland. Marquee.
 Owner.....F. J. Woodward, Oakland Bank of Savings Bldg., Oakland.
 Architect.....None.
 Contractor...A. J. McPhee, 2144 E-27th street, Oakland.
COST, \$100

DWELLING
 (1644) NO. 1824 CLINTON AV, Oak-land. One-story, four-room dwelling.
 Owner.....Mrs. M. Corson, 1824 Clin-ton Ave, Oakland.
 Architect.....None.



**Structural Steel
Contractors**

**Works at
HARRISON ST.,
bet. 8th & 9th
San Francisco**

Telephone Market 337

Contractor...Delaney & Randlett, 2303
Central Ave., Alameda.
COST, \$1500

OFFICE

(1615) W JONES AV, 600 from Sequoyah Country Club, Oakland. One-story office.
Owner.....F. E. McGurrian, Sequoyah Country Club, Oakland.
Architect...None.
Contractor...Frank Kunders, 2200 99th avenue, Oakland.
COST, \$700

DWELLING

(16161) W BROADWAY, 707 S Ada, Oakland. One-story five-room dwlg.
Owner.....Henry E. Hahn, 2617 San Pablo, Oakland.
Architect...None.
Contractor...M. E. Hopper & Sons, 90 Glen avenue, Oakland.
COST, \$1300

DWELLING

(1617) S LAVERNE AV, 70 E 57th avenue, Oakland. One-story five-room dwelling.
Owner.....Jas. R. Robinson, Oakland.
Architect...None.
Contractor...J. B. Peppin, San Leandro.
COST, \$1500

DWELLING

(16181) W WEST 60 S 18th street, Oakland. One-story, four room dwlg.
Owner.....H. and I. Waisanen, 1072 54th street, Oakland.
Architect...None.
Contractor...Thad M. Tupper, 2310 Russell street, Berkeley.
COST, \$1000

SERVICE STATION

(16120) SE THIRTY-FIFTH AV and E-11th street, Oakland. Service station.
Owner.....W. M. Manning, 3515 E-11th street, Oakland.
Architect...None.
Contractor...F. H. Dahnke, 2333 Fruitvale avenue, Oakland.
COST, \$300

DWELLING

(16150) E NINETY SIXTH AV 100 N Plymouth, Oakland. One story, four-room dwelling.
Owner.....T. Price, 1125 72nd avenue, Oakland.
Architect...None.
Day's work. COST, \$700

ALTERATIONS

(16151) NO. 432 THIRTEENTH ST., Oakland. Alterations.
Owner.....M. Bernstein, premises.
Architect...None.
Contractor...Corbett & Bayliss, 1110 Franklin street, Oakland.
COS, \$1000

BAKERY SHOP

(16521) E JONES AVE 30 S E street, Oakland. One-story bakery shop.
Owner.....P. Di Grazia, Oakland.
Architect...None.
Contractor...M. E. Valente, 5582 Valjejo, Oakland.
COST, \$600

DWELLING

(16555) N KANSAS, 150 W Laurel avenue, Oakland. One-story, five-room dwelling.
Owner.....H. A. Pleitner, 954 Fruitvale avenue, Oakland.
Architect...None.
Day's work. COST, \$2000

(16556) LOCATION NOT GIVEN. Job 1 brick veneer with 18-inch pilasters on face building known as "New Finishing Department"; job 2, erect two-story brick building known as "New Comforter Department."

Owner.....California Cotton Mills Co., Railroad avenue and Cotton, Oakland.
Architect...None.

Contractor...W. H. Jones, 190 40th, Oakland.

Filed Aug. 20, '15. Dated Aug. 11, '15.
One story high 1/2
Completed and accepted 1/2
Usual 35 days 1/2
COST, JOB NO 1, \$116; JOB NO 2, \$1650
Bond, Sureties, Forfeit, Limit, none.
Plans filed. No specifications.

**Building Contracts Awarded
Berkeley.**

No.	Owner	Contractor	Amt.
1609	Taylor	Taylor	1500
1610	Perez	Peterson	1000
1611	Eriasson	Eriasson	1500
1612	Stephens	Rice	1900
1613	Douglas	Franklin	706
1614	1st Nat'l	Kidder	750
1625	Swink	House	2000
1626	Anthony	Sairanen	7502
1628	Ramos	Kopf	2246
1615	Butler	Butler	1500
1653	Madsen	Hopper	1500
1651	Eriasson	Eriasson	1006

DWELLING

(16009) E CARLOTTA, 150 S Posen, Berkeley. One-story 5-room dwlg.
Owner.....G. Taylor, 428 Walsworth Ave., Oakland.
Architect...None.
Day's work. COST, \$1500

DWELLING

(1610) E NORTHSIDE AVE 200 N Hopkins, Berkeley. One-story 5-room dwelling.
Owner.....Joseph T. Perez, Jr., 909 Bristol street, Berkeley.
Architect...None.
Contractor...G. Peterson, Northside Ave., Berkeley.
COST, \$1000

DWELLING

(1611) S PARKER 200 W Mathews Berkeley. One and a half story, six-room dwelling.
Owner.....Carl Eriasson, 1200 Masonic Ave., Berkeley.
Architect...None.
Day's work. COST, \$1500

DWELLING

(1612) E JEFFERSON, 134 N Dwight Way, Berkeley. One-story, 5-room dwelling.
Owner.....S. D. Stephens, 1811 Blake street, Berkeley.
Architect...None.
Contractor...Geo. F. Rice.
COST, \$1900,

ALTERATIONS

(1613) NO. 1522 GROVE street, Berkeley. Alterations.
Owner.....Mrs. Douglas, 1709 Roosevelt Ave., Berkeley.
Architect...None.
Contractor...John Franklin, 2321 Roosevelt Ave., Berkeley.
COST, \$700

ALTERATION

(1614) SW CENTER ST and Shattuck Ave., Berkeley. Alteration to banking room.
Owner.....First Nat'l Bank, Prem.
Architect...None.
Contractor...Kidder & McCullough, 2075 Addison, Berkeley.
COST, \$750

DWELLING

(1623) N DELNORTE COURT off Delnorte street Berkeley. One-story, 6-room dwelling.
Owner.....Christena Swink, 804 San Mateo avenue, Berkeley.
Architect...Henry H. Gutterston, 68 Post, S. F.
Contractor...Jacob House, 1640 Allston Way, Berkeley.
COST, \$3000

FRAME DWELLING

(1626) LOT 4, BLK 3, North Cragsmont, Berkeley. All work for two-story and basement frame dwelling
Owner.....A. Gertrude Anthony, 1421 Euclid, Berkeley.
Contractor...Oscar Sairanen, 1142 Addison, Berkeley.

Architect...John Hudson Thomas, 1st Nat'l Bank Bldg, Berkeley
Frame up\$1950
Brown coated 1950
Completed and accepted 1950
Usual 35 days 1950
TOTAL COST, \$7800
Bond, \$3201. Sureties, Southwestern Surety Insurance Co. Forfeit, none
Filed Aug. 16, '15. Dated Aug. 11, '15.
Limit, 120 days. Plans and specifications filed.

DWELLING

(1643) E GRANT, 75 S Hearst avenue, Berkeley. One-story 5-room dwelling.
Owner.....B. F. Butler and George Aylworth, 333 49th street, Oakland.
Architect...None.
Contractor...B. F. Butler, 333 49th street, Oakland.
COST, \$1500

DWELLING

(1653) N JULIA, 200 E California, Berkeley. One-story, 5-room dwlg

Owner.....Mrs. E. Madsen, E Bonita,
50 S Rose, Berkeley.
Architect....None.
Contractor.....M. E. Hopper & Sons, 99
Glen avenue, Oakland.

DWELLING
(1654) E BRUCE, 66 1/2 S Baneroff,
Berkeley. One-story, 4-room dwlg.
Owner.....Carl Ericsson, 1200 Ma-
sonic avenue, Berkeley.
Architect....None.
Days work.....COST, \$1000

Building Contracts Awarded

Alameda.

No.	Owner.	Contractor	Am't.
1629	Noble	Noble	1800
1630	Noble	Noble	1800
1631	Noble	Noble	1800

DWELLING
(1629) NO. 2525 NOBLE AVE, Ala-
meda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central
avenue Alameda.
Architect....None.
Days work.....COST, \$1500

DWELLING
(1630) NO. 2516 NOBLE AVE, Ala-
meda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central
avenue Alameda.
Architect....None.
Days work.....COST, \$1800

DWELLING
(1631) NO. 2518 BUENA VISTA AVE,
Alameda. One-story 5-room dwlg.
Owner.....G. H. Noble, 2220 Central
avenue Alameda.
Architect....None.
Days work.....COST, \$1800

COMPLETION NOTICES.

ALAMEDA COUNTY

Aug. 11, 1915—BLK 12 Map Tract "P"
Berkeley L T I Ass'n, Bldy. Cali-
fornia Cured Fruit Exchange to
P A Palmer..... Aug. 7, 1915
Aug. 16, 1915—LOT 40, Block 9, Re-
gents Park No. 1, Oakland Tp.
John A. Kuivala to whom it may
concern.....August 13, 1915
Aug. 15, 1915—LOT 10, Block C Rella
Vista Park Tract, Oakland. P. R.
Bullock to whom it may concern
.....August 13, 1915
Aug. 16, 1915—LOT 47 except S 29.13
map Piedmont Manor, Piedmont.
Walter H. Creighton to whom it
may concern.....August 14, 1915
Aug. 16, 1915—LOT 6 map Boyd
Place, Berkeley. Sadie M. Hunter
to whom it may concern.....
.....August 16, 1915
Aug. 17, 1915—LOT 12 and port lot 13,
Marshall & Diggs Tract, Berkeley.
Lena M. and W. A. Clayton to G.
B. Hollenbeck.....Aug. 14, 1915
Aug. 17, 1915—E PERSIMMON, 225 S
Lynde avenue S 37.6 E 125, Oak-
land. E. L. Higgins to whom it
may concern.....Aug. 14, 1915
Aug. 17, 1915—LOT 37 Jeanette Van
Ah Tract, being 2016 64th avenue,
Oakland. Lucy N. Wingate to
whom it may concern.....July 15, 1915
Aug. 18, 1915—LOT 6 BLK 2, Hotel
Claremont Tract on E Alvarado
road Berkeley. W. A. Miller to
A. Cederborg and A. H. Anderson
..... Aug. 17, 1915

Aug. 18, 1915—LOT 10, BLK 13,
Lakeside Subdivision Adams Point,
being NE Belmont street, 115 SW
Staten 59x122, Oakland. Margaret
Dibert to G. A. Scott.....Aug. 17, 1915
Aug. 18, 1915—S 35 LOT 29, BLK G,
Map Mastick Park, Alameda. Mark
T. Cole to whom it may concern
.....Aug. 17, 1915
Aug. 19, 1915—CONTAINING 256.48
acres and being ptn Plot 28, de-
scribed deeded partition Augustine-
Bernal et al vs. Juan Pablo Bernal
et al. Ruby Hill Vineyard Co. to
Charles A. Bruce.....Aug. 17, 1915
Aug. 19, 1915—LOT 9, BLK 2, Brook-
dale Terrace, Oakland. P. H. Scott
to whom it may concern.....
.....Aug. 17, 1915
Aug. 21, 1915—LOTS 55 AND 56, Map
Crocker Highlands, Oakland. H.
W. and Madeline Clay Harrold to
Alfred Peterson.....Aug. 17, 1915
Aug. 21, 1915—LOT 17 AND SW 12 1/2
lot 18, BLK 2, Map Solano avenue
Terrace, Oakland Tp. H. Goranson
to whom it may concern.....Aug. 21, 1915

LIENS FILED

ALAMEDA COUNTY.

Aug. 14, 1915—LOT 1 BLK 1 Map
Oaklawn being resbdvn Blks "R" &
"S" and Lots 4 and 5 Blk "Q," Ver-
non Park. Okd. Pacifc Mfg Co.
\$239.20; W P Fuller & Co, \$80.30 vs
Rosa McCarthy, W J Fisher and
Panama Mill & Lumber Co.....
Aug. 14, 1915—LOT 3 Map Oakland
Highlands, Okd. I L Cavasso
(Cavasso Paint Co) vs C B Austin
and A B Chase.....\$75.75
Aug. 16, 1915—LOT 7, block U, Moss
Tract, Oakland. E. M. Johnson vs.
Josephine, Tim and Mrs. Tim Gar-
cia.....\$15
Aug. 16, 1915—LOT 7 block U, Moss
Tract, Oakland. Thomas Arada vs.
Josephine, Tim and Mrs. Tim, Gar-
cia.....\$101.70
Aug. 20, 1915—W EL CERRITO AVE,
110.15 S Magnolia avenue S 35 W
90, Piedmont. California Door Co. vs.
O. M. Bullock.....\$125.20
Aug. 23, 1915—W EL CERRITO AVE,
175.15 S Magnolia avenue S 35 W
90, Piedmont. California Door Co.
vs. O. M. Bullock.....\$123.60
Aug. 20, 1915—E COLLEGE AVE, 32
S Derby St., S 50 E 83. Raymos &
Coghlan vs. Lina Dabney, J. M.
Booth and C. L. Wold Co.....\$356.25

SAN JOSE AND THE SANTA CLARA VALLEY

RESIDENCES.—2 1 story and base,
frame, \$2,500. Burlingame, San Mateo
Co., Cal. Architects, Fabie and Bear-
wald, Merchants National Bank Bldg.,
S. F. Owner's name withheld. These
dwellings will each contain five rooms
and bath. Interior finish will be of
pine with some elm panels. Hardwood
floors will be used in the two principal
rooms. Each living room will have a
large open fire place and tile or brick
mantel. Imitation tile and wainscot
will be used in the bath rooms. Auto-
matic water heaters will be installed.
Exterior will be covered with rustic
and shingles. Plans are now being pre-
pared.

RESIDENCE.—2 story and base,
frame, \$15,000. San Mateo, San Mateo

Co., Cal. Architect Sylvain Schnalt-
tacher, 232 Post street, S. F. Owner,
Edward Livingston. The dwelling will
be erected on El Cerrito and has been
designed to contain twelve rooms, three
baths and sleeping porches. A separate
garage will also be erected on the
property. Interior of the dwelling will
be finished in pine, hardwood and white
enamel. Hardwood floors will be used
in the principal rooms. Plans provide
furnace heat and open fire places.
Mantels will be of tile and brick. Bath
rooms will have tile floors and wainscot
and will be equipped with showers. A
hot water circulating system will be
installed. Exterior will be covered with
cement plaster on metal lath. Plans
are complete and figures are being tak-
en.

BY-PASS.—Reinforced concrete. Cost
not stated. San Jose, Santa Clara Co.,
Cal. Engineer, county surveyor, San
Jose. Owners, Santa Clara County.
The County Supervisors have approved
plans and specifications for the im-
provement of the Canoas by-pass, and
will receive bids on the work until
September 1th, at 11 a. m. Plans and
specifications together with full in-
formation may be had from the county
surveyor, at San Jose.

BRIDGES AND PROTECTION WORK.
—\$75,000 and \$15,000. Salinas, Mon-
terey Co., Cal. Engineer, County Sur-
veyor, Salinas, Owners, Monterey
County. At the next meeting of the
Supervisors the County Engineer will
present plans and specifications for
the new steel highway bridge and
protection work near King City. The
Highway Commission has already ap-
proved the plans for the bridge which
will be the longest and most expensive
in the county of Monterey. If con-
structed in accordance with the pre-
sent plans, the structure will cost \$75,-
000, and will be 2,800 feet in length.
The protection work will cost in the
neighborhood of \$15,000. Further par-
ticulars will be given when the plans
have been approved by the County
Supervisors.

CHILDREN'S HOME.—1 story and
base, Class A construction. Cost not
stated. Woodside, San Mateo Co., Cal.
Architect, Houghton Sawyer, Sher-
er Bldg., S. F. Owners Drexler Hall.
building has been designed for a home
for crippled children and will have
complete steel frame. Interior finish
hardwood and pine with tile and hard
wood floors. Steam heat, vacuum
cleaning, hot water system are speci-
fied. Exterior faced with cement plas-
ter. Plans are being prepared.

Contracts Awarded

RESIDENCE.—2 story and base,
frame, \$15,000. Woodside, San Mateo
Co., Cal. Architects, Bliss & Paville,
Balboa Bldg., S. F. Owner, A. W.
Johnson. Contractor, Ira W. Coburn,
517 Brannan street, S. F. Contract
price, \$15,000.

STORE FIXTURES.—Cost not stat-
ed. Palo Alto, Santa Clara Co., Cal.
Architect, Henry Shermund, Mills
Bldg., S. F. Owner, James Frazer,
Palo Alto. Contractor, Pacific Manu-
facturing Co., Santa Clara. Contract
price not stated.

BUILDING CONTRACTS**SANTA CLARA COUNTY.****FRAME DWELLING**

LOT 16, BLOCK 3, Hester Park, near San Jose. One-story frame house. Owner.....F. H. Howorth, 496 N 2nd, San Jose.

Architect.....none.
Contractor..F. L. Hoyt, 58 W Santa Clara, San Jose.

Filed Aug. 2, '15. Dated Aug. 2, '15.
When sub-floor is laid.....\$750
When exterior is primed.....750
When work is completed750
Usual 35 days750

TOTAL COST, \$3000

Bond, Sureties, Forfeit, none. Limit, 60 days. Plans and specifications filed.

FRAME COTTAGE

LOT 31, LA PALOMA TERRACE, in town of Saratoga. Frame cottage. Owner.....E. D. Hooker, County of Santa Clara.

Architect...J. Radoni, Saratoga, Cal.
Contractor..John Radoni, Saratoga, Cal.

Filed Aug. 9, '15. Dated July 20, '15.
Roof on ¼
Plastered ¼
Completed ¼
Usual 35 days ¼

TOTAL COST, \$2750

Bond, \$1375. Sureties, Pacific Coast Casualty Co. Forfeit, none. Limit, 90 days. Plans and specifications filed.

FRAME COTTAGE

LOT 32, LA PALOMA TERRACE, Saratoga, Cal. Frame cottage.

Owner.....F. A. Hooker.
Architect.....John Radoni, Saratoga, Cal.

Contractor..John Radoni, Saratoga, Cal.

Filed Aug. 9, '15. Dated July 20, '15.
Roof on ¼
Plastered ¼
Completed ¼
Usual 35 days ¼

TOTAL COST, \$2850

Bond, \$1440. Sureties, Pacific Coast Casualty Co. Forfeit, none. Limit, 90 days. Plans and specifications filed.

FENCE

NO LOCATION GIVEN. Construction of a fence.

Owner.....San Jose Film Co., San Jose.

Architect...Ellis & Skillings, Garden City Bank Bldg., San Jose.
Contractor..Morrison Bros., Santa Clara.

Filed Aug. 2, '15. Dated July 13, '15.
When completed 75%
Usual 35 days 25%

TOTAL COST, \$1025

Bond, Sureties, Forfeit, none. Limit, September 1, 1915. Plans and specifications filed.

BUILDING CONTRACTS.**SAN MATEO COUNTY.****FRAME DWELLING**

NINTH AVE AND COUNTY ROAD, San Mateo. All work except glazing and electric work for two-story and basement frame dwelling.

Owner.....J. E. Fitzgerald, San Mateo, Cal.

Architect...A. A. Pyle and George J.

Adams, Room 20, Ferry Bldg., S. F.

Contractor..M. Eiberger, 745 5th avenue, S. F.

Filed Aug. 16, '15. Dated July 15, '15.
When brown coat of plaster is finished\$2133

Usual 35 days2000

TOTAL COST, \$4133

Bond, Sureties, Forfeit, none. Limit, 75 working days. Plans and specifications filed.

PLUMBING, ETC.

PORTION OF LOTS 11 and 12, Map No. 2 of Highland Park, Hillsborough. All the plumbing, sewerage and gas fitting for two-story frame dwelling.

Owner.....Edward Livingston, Geary and Grant avenue, S. F.

Architect...Slyvain Schnaittacher, 233 Post, S. F.

Contractor..Joseph Grimes.

Filed Aug. 16, '15. Dated Aug. 10, '15.
Roughing in completed\$500
Completed and accepted266

Usual 35 days267

TOTAL COST, \$1033

Bond, \$517. Sureties, W. C. Chidister and C. A. Buck, Forfeit, \$5. Limit, as fast as required and without delay. Plans and specifications filed.

COMPLETION NOTICES**SAN MATEO COUNTY.****RECORDED ACCEPTED**

Aug. 17, 1915—ON WEST SIDE OF road from Colma to Half Moon Bay at Princeton. S. H. Cowell, Isabella M. Cowell and Henel E. Cowell to Lawrence V. Perry.....

.....July 23, 1915
Aug. 18, 1915—LOT 4, BLK 7, Redwood Heights. Redwood Highlands Co. to whom it may concern.....

.....Aug. 14, 1915
Aug. 16, 1915—FAIROAKS, Cal. Jacob Stern to Charles Pedersen.....

.....Aug. 10, 1915

MARIN, CONTRA COSTA AND SONOMA COUNTIES**RETAINING WALL AND BRIDGES.**

—reinforced concrete. Cost not stated. Santa Rosa, Sonoma Co., Cal. Engineer, county surveyor, Santa Rosa. Owners, Sonoma County. Plans have been completed and bids will be opened on September 16th by the Board of Supervisors for the construction of a reinforced concrete retaining wall located on the county road near Glen Ellen, and for two reinforced concrete bridges located respectively on the county road near Grippi, and on the county road near Two Rock. Plans and specifications can be secured from the County Clerk.

APARTMENTS AND STORES. — 3

story and base, brick. Cost not stated. Martinez, Contra Costa Co., Cal. Architect, Henry Shermund, Mills Bldg., S. F. Owner, Gus Weist. The building will be erected at the northeast corner of Ward and Union streets covering an area of 70 by 100 feet. Plans provide for four modern stores on the first floor and a total of 14 suites of three and four rooms on the upper floors. Interior will be finished in pine. There will be steam heat, oil burning furnace, and a hot water system. All suites will have wall beds

and private bath rooms. Tile floors and wainscot will be used in the bath rooms. Patent store fronts are specified. Exterior will be faced with pressed brick. Plans are now being prepared.

AUXILIARY WATER SYSTEM.—

Cost not stated. Crockett, Contra Costa Co., Cal. Engineer, none. Owners, Town of Crockett. The Board of Supervisors has granted permission to the commissioners of Crockett-Croline fire district to lay a system of water mains along various streets in that town, which mains will comprise a part of the auxiliary fire-fighting system.

ELECTROLIER SYSTEM.—Cost not

stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owner, Town of Sausalito. Bids are now being taken by the City Trustees for the installation and construction of an electrolier system for street lighting, in the Town of Sausalito, composed of (65) standard lamps together with the necessary lamps, globes, and wiring and other appurtenances, the connection thereof with the Power Co's system at proper and convenient points. Bids will be opened August 30th. Plans can be secured from the Town Engineer.

STREET GRADING AND RETAIN-

ING WALL.—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Bids will be received by the Board of Trustees until Aug. 30th, 7:30 p. m., for the grading of West street from Main to Valley and on Valley from 4th to West, and for the construction of a retaining wall at the intersection of a timber highway bridge on West street from the southerly line of Main street, to a point 100 feet south from Main street, and for the construction of 40 feet of 30 inch vitrified, saltglazed, ironstone pipe in and across West street between Valley and Main streets. Plans and further information may be had from the City Engineer.

ROAD IMPROVEMENT.—Cost not

stated. Fairfield, Solano Co., Cal. Engineer, County Surveyor, Fairfield. Owners, Solano County. Plans have been completed and are now out for figures for graveling about two miles of Highway in Road District No. 4. Bids will be opened on September 7th. Plans and complete information can be had from G. G. Halliday, County Clerk., at Fairfield.

CULVERT. — Reinforced Concrete.

Cost not stated. Martinez, Contra Costa Co., Cal. Engineer County Surveyor, Martinez. Owners, Contra Costa County. The Supervisors have approved plans and specifications for the construction of a reinforced concrete culvert across the gulch on Bay Point to Pittsburg Road, and the Clerk has been instructed to advertise for bids which will be opened September 13th, 11 a. m. Further information may be had from the County Surveyor.

LIBRARY.—1 story and base, brick,

\$10,000. Concord, Contra Costa Co., Cal. Architect, J. E. Oghorn, Macdonald avenue, Richmond. Owners, Town of Concord. Building will contain one large reading room, office and stack room. Interior finish will be of pine with maple floor. No heating system. Exterior faced with pressed brick. The plans are being prepared.

LIBRARY.—1 story and base, brick, 0,000. Walnut Creek, Contra Costa Co., Cal. Architect, Randolph Hook, Walnut Creek, Owners, Town of Walnut Creek. Designed in classic style and will contain reading room, stack room and office. Interior finish pine with maple floor. No heating. Exterior faced with pressed brick. Plans being prepared.

DANCE HALL.—1 story frame, \$5,000. Vallejo, Solano Co., Cal. Architect, Owner, Lewis Guethe, Marysville. Location, York between Marin and Sonoma streets. Maple floor will be laid. Exterior of the building will be covered with rustic and cement plaster. Plans are being prepared and work will be done by Day Labor.

OFFICE.—1 story and base, brick, cost not stated. Martinez, Contra Costa Co., Cal. Architect, James T. Narrett, 704 Macdonald Ave., Richmond. Owners, Pacific Gas & Electric Co. Bids will be opened on September 6th for building 25 by 70 feet. Interior finish pine and hardwood. Exterior faced with pressed brick.

Contracts Awarded.

BRIDGE.—Reinforced concrete. \$6,312. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractors, Healy-Tibbitts Construction Co., 9 Main street, S. F. Contract price, \$6,932.

BRIDGE.—Timber construction \$3,758. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractors, Hyde-Harjes Co., S. F. Contract price, \$3,778.

ROAD CONSTRUCTION. — \$35,625. Martinez, Contra Costa County., Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractors, Ralsch Improvement Co., Crocker Bldg., S. F. \$35,625.75.

GARAGE.—1 story and base, reinforced concrete and galvanized iron. Cost not stated. Martinez, Contra Costa Co., Cal. Architect, none. Owner, Mr. Charles L. Morey, Oakland. Contractor, S. W. Holmes, Oakland. Contract price, not stated.

COMPLETION NOTICES

CONTRA COSTA COUNTY.

Aug. 11, 1915—PROPERTY OF ASSOCIATED OIL CO. AYON. Associated Oil Company to J. T. Thorpe & Son July 26, 1915
Aug. 12, 1915—CONTRA COSTA COUNTY. Valley Pipe Line Company to R. F. Ware, Los Angeles, Cal. August 12, 1915

RELEASE OF LIENS

MARIN COUNTY.

RECORDED AMOUNT
Aug. 14, 1915—SITUATE IN SAN ANSELMO, Marin County. R. Leonhart to King Chas. Laylander. \$52.50
Aug. 14, 1915—SITUATE IN SAN ANSELMO. J. T. Neale to K. Charles Laylander \$75
Aug. 13, 1915—SAN ANSELMO, Marin Co. E. K. Wood Lumber Co to King Charles Laylander \$227.74

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

RAILROAD CONSTRUCTION.— Cost not stated. Ceres, Stanislaus Co., Cal. Engineers name not given. Owners, Ceres Street Railroad Co. Application for a franchise to erect maintain and operate, by means of electricity or other motive power except steam, a single track railroad, with all necessary turnouts, switches, stations, apparatus and appliances, over and along the route lying and being in the town of Ceres, in the County of Stanislaus, as follows: "Commencing at a point at the north line of the limits of the said town of Ceres, at the intersection of Railroad ave. with said north line of said limits of the said town of Ceres, thence over, along and upon said Railroad avenue to the southern limits of the said town of Ceres." "That said Board of Supervisors intends to grant said franchise, right, privilege and permission and notice of the time and place of the receipt of bids therefor, and in the terms and conditions thereof."

RAILROAD CONSTRUCTION.— Cost not stated. Patterson, Stanislaus Co., Cal. Engineer's name not given. Owners, Mr. Hoffman and Honolulu capitalists. According to word sent from Honolulu by Mr. Hoffman, Editor of the Patterson Irrigator, work on proposed railroad from Patterson up Del Norte Canyon to the magnesite and manganese mines near Red Mountain will be started shortly. Although no names of those backing the movement are mentioned it is known that business men of Honolulu are making preparations to have the road constructed.

IRRIGATION WORK. — \$1,000,000. Terra Belle, Tulare Co., Cal. Engineer, chief engineer Terra Belle Irrigation Project, Terra Belle. Owner, Terra Belle Irrigation District. Bonds in the amount of \$1,000,000 have been voted by the residents of the Terra Belle Irrigation district which assures the speedy construction of a large irrigation project. A new irrigation district is to be laid out and construction work costing nearly \$1,000,000 will be undertaken.

BRIDGES.— Reinforced concrete, steel and timber. Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, E. H. Annear, Modesto. Owners, Stanislaus county. The plans and specifications prepared by County Surveyor E. H. Annear for a concrete bridge over the drainage canal on the McHenry road, for a bridge over the M. I. D. main canal on the Sonoma lateral at Star, 403 x 50 C. H. C., for a concrete bridge over the M. I. D. main canal on the Sonoma lateral at Star 369x86 C. H. C.; for a bridge over the Ceres Moin canal on the Hughson road, for a bridge over lateral No. 4 on the McHenry road at the northern limits of the city of Modesto; for a bridge over lateral No. 3 on the McHenry road near Snedigar's house; for a bridge over lateral No. 6 on the McHenry road near Bang's house; and for a bridge over lateral No. 3 on the Claus road, were adopted by the county Supervisors at their last meeting and the clerk was instructed to advertise for bids to be received on

September 14th, 10 a. m. Plans and full information may be had from the County Engineer at Modesto.

RESIDENCE.—1 story and base, frame, \$2,000. Fresno, Fresno Co., Cal. Architect, none. Owner, W. H. Ackerman, Fresno. The dwelling will be erected in the Alta Vista Tract and has been designed for a six room house with bath and sleeping porch. Interior will be finished in pine with elm panels. Some oak floors will be used. There will be an open fire place and tile or brick mantle. Bath room will have imitation tile wainscot. Exterior of the house will be covered with rustic and shingles. Plans are complete and in the hands of the owner, who will do the work by Day Labor.

SEWER EXTENSION.—Cost not stated. Turlock, Stanislaus Co., Cal. Engineer, City Engineer, Turlock. Owners, City of Turlock. Plans have been completed and approved for the construction of a sewer extension system. Bids are being taken and will be opened on September 7th. Plans can be secured from the office of the City Clerk.

Contracts Awarded

COURT HOUSE.—Repairs, \$1,219. Modesto Stanislaus Co., Cal. Architect, none. Owners, Stanislaus County. Contractor, W. J. Kerry, Modesto. Contract price, \$1,349.

STORES.—2 story and base, brick and steel. \$23,800. Fresno, Fresno Co., Cal. Architect's name not given. Owner, Glender Bros. Contractors, Riggins and Palmer, Fresno. Contract price, \$32,800.

BUILDING CONTRACTS.

FRESNO COUNTY.

DWELLING

LOTS 5, 6, BLK 19, ALTA VISTA TCT, Fresno. All work for dwelling. Owner.....H. B. Billings. Architect.....None. Contractor.....W. H. Ackerman.

COST, \$1750

DWELLING

LOT 8, BLK 31, ALTA VISTA TRACT, Fresno. All work for dwelling. Owner.....W. H. Ackerman. Architect.....None. Day's work.

COST, \$1950

LOTS 29 TO 32, BLK 60, FRESNO. All work for stores. Owner.....Glender Bros., 910 "S," Fresno. Architect.....None. Contractor.....Riggins & Palmer.

COST, \$53,800

LOTS 1, 2, Block 4, Winsor Terrace, Fresno. Dwelling. Owner.....J. E. Johnson. Architect.....None. Contractor.....Wm. Turner.

COST, \$2500

LIENS FILED

FRESNO COUNTY.

RECORDED AMOUNT
Aug. 13, 1915—LOTS 28, 29, BLK 74, Fresno. H. S. Stange vs. V. Jarmagian \$693

Aug. 18, 1915—LOTS 1 AND 2, BLK 2, Fenway Tract, Fresno. Fresno Lumber Co. vs. A. P. Gordon and E. E. Clark\$19
 Aug. 18, 1915—LOTS 11, 12 AND 10 feet lot 10 Blk 5, College Addition, Fresno. Fresno Lumber Co. vs. Geo. S. Smith and E. E. Clark.....\$37
 Aug. 18, 1915—LOTS 30, 21, BLK 15, North Park Terrace, Fresno, Fresno Lumber Co. vs. Roberta S. Evans, E. E. Clark and G. V. Smith\$74
 Aug. 18, 1915—LOT 11, BLK 17, Hazelwood Add, Fresno. C. S. Price Lumber Co. vs. David Wells\$123
 Aug. 16, 1915—LOT 11, BLK 17, Hazelwood Add, Fresno. M. E. Caschier vs. David Wells.....\$182

COMPLETION NOTICES

FRESNO COUNTY.

Aug. 14, 1915—LOT 33, BLOCK 21, Alta Vista Tract, Fresno. W. D. Enright to whom it may concern Aug. 14, 1915
 Aug. 18, 1915—LOTS 19, 20 BLK 1 Vernon Park, Fresno. O. B. Ellis to whom it may concern, Aug. 18, 1915
 Aug. 16, 1915—LOTS 51, 52, BLK 18, North Park Terrace Tract, Fresno. M. K. Wild to Squire Cooper and G. N. Lindquist.....Aug. 6, 1915

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA.

BRIDGES.—16, steel, reinforced concrete and timber, \$22,000. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. The Board of Supervisors has ordered the construction of 16 bridges in Butte County, the total cost to be about \$22,000. Bids will be opened on September 1st. Ten of the bridges will be on the State Highway, between Nelson and Butte Creek. Eight of the ten bridges will range from 20 to 120 feet in length the total cost to be \$12,000, and one bid will cover the work on all of the eight. Of the remaining two, one will be 100 feet in length across the North Channel of Butte Creek, and the other 40 feet in length, will be built across Burham Slough. The two structures will cost \$1,500. Of the remaining six structures five will be small bridges in different road districts, the total cost to be \$2,500. The other will be a large structure to cost \$3,000, across Pine Creek near the Sana Road. Plans and complete information can be secured from the County Surveyor.

STREET LIGHTS AND SYSTEM.—Cost not stated. Colusa, Colusa Co., Cal. Engineer City Engineer, Colusa Owners, City of Colusa. Plans and specifications have been adopted and the Supervisors have directed the clerk to advertise for bids for installing, caring for, and maintaining lights in the Arbuckle Lighting District of Colusa County. Bids on this work close September 8th 12 m. Further information may be had from the County Clerk.

RESIDENCE.—2 story and base, frame, cost not stated. Stockton, San Joaquin County, Cal. Architect, F. Holberg Reimers, 2125 Shattuck avenue,

Lerkeley. Owner, D. F. Goodman. The dwelling will be erected in Tuxedo Park and has been designed to contain seven rooms, two baths, and sleeping porches. Interior will be finished in pine and hardwood with white enamel in the doctor's office and in the bed rooms. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of brick. Bath rooms will have tile floors and wainscot. Automatic water heaters will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are complete and the work will be done by Day Labor under the supervision of Mr. Melville of Stockton.

RESIDENCE.—2 story and base, frame, \$6,000. Lodi San Joaquin Co., Cal. Architect, Ralph P. Morrell Odd Fellows Bldg., Stockton. Owner, Dr. J. E. Nelson. The dwelling has been designed for a ten room house with baths and sleeping porches. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the principal rooms. Plans provide for furnace heat and open fire places. Mantels will be of tile. Tile wainscot will be used in the bath rooms. Automatic water heater will be installed. Exterior of the dwelling will be covered with cement plaster on metal lath. Plans are now being prepared.

RESIDENCE.—1 story and base, frame, \$3,000. Ukiah, Mendocino Co., Cal. Architect, C. W. McCall, Central Bank Bldg. Oakland. Owner's name withheld. The dwelling has been designed for a six room house with bath and sleeping porch. Interior finish will be of pine and redwood. Some hardwood floors will be used. Plans provide for furnace heat and open fire place. Mantel will be of brick. Bath room will have tile floor. An automatic water heater is specified. Exterior of the house will be covered with shakes. Plans are now being prepared.

BRIDGE.—Steel and concrete. Cost not stated. Crescent City, Del Norte Co., Cal. Engineer, County Surveyor H. Malpas, Crescent City. Owners, Del Norte County. Plans have been completed and figures will be opened on September 13th by the Board of Supervisors for the construction of a Pratt Combination type bridge of 120 foot span, 14 foot clear roadway, and a 90 foot approach, and all grading necessary to reach approaches. Bents and piers to be of driven piling. Plans and specifications together with complete information may be had by addressing the county surveyor at Crescent City.

BRIDGE.—Reinforced concrete. Cost not stated. Stockton, San Joaquin Co., Cal. Engineers, Givan & Pearce, Sacramento. Owners, San Joaquin county. Plans have been prepared by Engineers Givan & Pearce of Sacramento, for reinforced concrete bridge over Norman channel at San Joaquin street. The structure will be 200 feet long and will be built in six 33 1-3 foot spans.

TRESTLE.—Timber and steel, \$34,000. Sacramento, Cal. Engineer, Co. Surveyor, Sacramento County. Owners, Sacramento County. The Board of Supervisors of Sacramento County

has entered into an agreement with the Natomas Consolidated whereby a trestle will be constructed from the 12th street bridge to Reclamation District No. 1000. The county will pay one-half of the \$17,000 and the Natomas Consolidated will pay the other half.

RUNGALOW.—1 story and base, frame, \$2,500. Stockton, San Joaquin Co., Cal. Architect, Joseph Losekann San Joaquin Bldg., Stockton. Owner, Charles De Young, 336 East Anderson street. The dwelling has been designed for six rooms with bath and sleeping porch. Interior will be finished in pine and redwood with some elm panels and white enamel. Hardwood floors will be used in the living room, dining room and reception hall. There will be an open fire place and tile mantel. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the house will be covered with rustic. Plans are complete and figures are being taken.

BUNGALOW.—1½ story and base, frame, \$3,500. Stockton, San Joaquin Co., Cal. Architect, Franklyn Warner, San Joaquin Bldg., Stockton. Owner, Harry McIsaacs, 331 South East st. The dwelling will be erected on Magnolia and has been designed to contain six rooms and bath with a large sleeping porch. Interior will be finished in pine and hardwood and with some white enamel. Hardwood floors will be used in the living room, dining room and reception hall. Plans provide for furnace heat and open fire places. Mantels will be of brick. Tile wainscot will be used in the bath room. An automatic water heater will be installed. Exterior of the dwelling will be covered with rustic and cement plaster. Plans are now being prepared.

BUNGALOW.—2 story and base, frame, \$2,500. Stockton, San Joaquin Co., Cal. Architect, Franklyn Warner, San Joaquin Bldg. Stockton. Owner, J. Edward Madden. The dwelling will be erected in Yosemite Terrace and has been designed for six rooms with bath and sleeping porch. Interior finish will be of pine and white enamel. Hardwood floors will be used in the living and dining rooms. An open fire place and tile or brick mantel will be used in the living room. Plans provide for an automatic water heater. Tile wainscot will be used in the bathroom. Exterior of the house will be covered with rustic. Plans are complete and a contract will be awarded shortly.

STREET GRADING AND FURNISHING ROCK.—Cost not stated. Eureka, Humboldt Co., Cal. Engineer, City Engineer, Eureka. Owners, City of Eureka. The City Council has approved plans and specifications for the grading of Fairfield street and a resolution ordering the work done and advertising for bids was ordered. Specifications for street rock were also adopted and bids were ordered called to be opened on September 7th.

STREET PAVING AND CURBS.—Cost not stated. Woodland, Yolo Co., Cal. Engineer, City Engineer Woodland. Owners, City of Portland. Woodland. Owners, City of Woodland. Plans and specifications have been completed by the City Engineer for

extensive paving improvements to be made in this city. The plans which have been approved by the Trustees provide for the pavement of the full width of east and west Main street, and the laying of 14 ft. strip curbs along the east and west Main street, and the construction of concrete curbs and gutters along the same thoroughfares. It is proposed that the new sidewalks will have a hydraulic concrete foundation 5 inches in thickness and an asphaltic wearing surface one inch thick. Bids will be called for this kind of work. It is estimated that the cost will not exceed 12½ cents per square foot. All the work will be done in pursuance of an act of the Legislature of the State of California, approved April 7th, 1911. A resolution of intention will be passed by the Trustees at their next meeting and bids will be called.

STREET PAVING.—\$30,000. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. At the last meeting of city council plans for paving Market street from Fair Oaks to Filbert street were adopted and bids will be called for shortly. At the same meeting a contract was awarded to the Central Construction Co., Stockton, for laying East street from Poplar to 14th street. The contract price is \$18,47.

COURT HOUSE REPAIRS.—Cost not estimated. Crescent City, Del Norte Co., Cal. Architect, none. Owners, Del Norte County. Plans complete and bids will be opened on September 13th. Central Contracting system, vacuum cleaning and water system specified. Interior shed in pine. Exterior covered with cement plaster.

HOSPITAL.—1 and 2 story frame, concrete and brick. \$25,000. Architects, none. J. Wright, San Joaquin Valley Bldg. Co., Stockton. Owners, City of Stockton. Bids are now being taken for a seven room school to be erected on Lincoln and Jefferson streets. Interior finish pine with maple floors in classrooms. Steam heat, oil burning furnace. Exterior faced with pressed brick. Plans from architect.

Contracts Awarded.

POST OFFICE.—1 story brick, \$4,794. K Park, Sacramento Co., Cal. Architect, none. Owner's name not given. Contractor, C. J. Guth, Oak Park, Contract price, \$4,794.

ROAD CONSTRUCTION.—\$11,974 and \$300. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractors, Hartney & McNaughton, Eureka. Sopa Valley Road, \$11,974. J. S. Johnson, Eureka. Pittsburg Road, \$300.

COURT HOUSE.—2 story and base, reinforced concrete and steel. \$77,797. Placerville, Lassen Co., Cal. Architect, George E. Sellen, 1005 K street, Sacramento. Owners, Lassen County. Contractor, James L. McLaughlin, 244

Kearny street, S. F. Contract price, \$77,797. Plumbing, Lattourette & Fical Co., Sacramento. Contract price not stated.

BRIDGE.—Steel and concrete. \$11,470. Placerville, El Dorado Co., Cal. Engineer, County Surveyor, Placerville. Owners, El Dorado County. Contractors, Bluxome & Co., San Francisco. Contract price \$11,470.

BUILDING CONTRACTS

SACRAMENTO COUNTY.

ALTERATIONS
NO. 1613 NINTH on S 39½ W 70 feet lot 1, J. K. 9, 10. All work to remodel entrance and front of restaurant, place skylight in building.

Owner.....A. K. Varney Estate, Sacramento.

Architect....Pete Luchich et al, 1013 9th, Sacramento.

Contractor...P. F. Hendricks, 1129 E, Sacramento.

COST, \$400

TILE AND BRICK STORES
LOT 8, BLK 31, SW THIRTY-FIFTH and Magnolia avenue, Oak Park, Sacramento. All work for one-story "Denison" tile and brick office and store building.

Owner.....J. S. McMahon, 3428 Magnolia avenue, Sacramento.

Architect....Alden W. Campbell, 3406 J, Sacramento.

Contractor...C. J. Guth, 1516 27th, Sacramento.

COST, \$4640

Filed Aug. 17, '15. Dated Aug. 17, '15.

ALTERATIONS
NO. 606 K on E 40 feet lot 1 and W 20 feet lot 2, K-L, 6-7, Sacramento. All work to remodel store front and show windows.

Owner.....John Breuner Co., Prem.

Architect....James Seadler, Forum Bldg., Sacramento.

Contractor...Siller Bros., 1614 13th, Sacramento.

COST, \$2264

NO. 2704 TWENTY-FIRST on lot 71, Sutter Terrace Addition, Sacramento. All work for one-story frame dwelling (4 rooms and bath.)

Owner.....Annie May Muller, 1619 P, Sacramento.

Architect....None.

Contractor...C. E. Law, 913 23rd, Sacramento.

COST, \$1100

REMODELING
NO. 724 K on E 20 feet lot 4, K-L-7-8, Sacramento. Remodel front entrance and show windows, etc., in store.

Owner.....James H. Devine et als, N. Y. Cloak and Suit House, Lessee, 724 K, Sacramento.

Architect....None.

Contractor...S. Kulebar & Co., 518 4th, Oakland.

COST, \$5000

REMODEL
NO. 450 K on E ¼ lot 4, K-L-4-5, Sacramento. Remodel store fronts and make two stores.

Owner.....John T. Stoll, 430 K, Sacramento.

Architect....None.

Contractor...Siller Bros., 1614 13th, Sacramento.

COST, \$2982

REMODEL.

NO. 1919 FOURTH on W ½ lot 4, S-T-4-5, Sacramento. Remodel and repair fire damage on first floor, brick chimney, etc.

Owner.....Mrs. J. C. Hand.

Architect....None.

Contractor...C. Valine, 2117 15th, Sacramento.

COST, \$700

REPAIRS

NO. 2326 M on W ½ lot 4, M, N, 23, 24, remodel and shingle dwelling.

Owner.....Charles Holtz, 2326 M, Sacramento.

Contractor...Gus A. Wendt, 2120 M, Sacramento.

COST, \$1200

RAISE AND REPAIR DWELLING

NO. 2116 THIRD on N ¼ lot 5, C, V, 2, 3, Sacramento. Raise dwelling, repair brick foundation, shingle roof, make three rooms on first floor.

Owner.....Anton Morisho.

Architect....None.

Contractor...C. Valine, 2117 15th, Sacramento.

COST, \$1400

GARAGE

NO. 2204 K (rear), Sacramento. One-story garage.

Owner.....Adam Keller, 2204 K, Sacramento.

Architect....None.

Contractor...J. A. Pansack, 1620 25th, Sacramento.

COST, \$560

LIENS FILED.

SACRAMENTO COUNTY.

Aug. 18, 1915—E ½ LOT 3, L, M, 23, 24, Sacramento. Phillip F. Mott, \$152.25; Chester E. King, \$175 vs. Frank E. Wright and Frank P. Williams

LIENS FILED

SACRAMENTO COUNTY.

RECORDED	AMOUNT
Aug. 13, 1915—E ½ LOT 3, L, M, 23d & Terry, \$263.26; Sacramento Bldrs' & Terry, 263.26; Sacramento Bldrs' Supply Co., \$508.32 vs Frank E. Wright and Frank P. Williams....	
Aug. 14, 1915—E ½ LOT 3, L-M, 23-24, Sacramento. Emigh-Winchell Hardware Co. vs. Frank E. Wright and Frank P. Williams	\$66.47

BUILDING CONTRACTS

SAN JOAQUIN COUNTY.

REMODELING

MAIN AND SUTTER, Stockton. Remodel 2 and 3 story brick building into hotel.

Owner.....Yosemite Syndicate, 30 S San Joaquin, Stockton.

Architect...Joseph Losekann, San Joaquin Bldg., Stockton.

Contractor...Thomas Lewis, 1320 S San Joaquin, Stockton.

COST, \$25,000

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LOS ANGELES AND SOUTHERN CALIFORNIA.

RECLAMATION WORK.—Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo county. At a recent meeting of the Supervisors plans and specifications for the reclamation work on the north bank of the Santa Maria river above Santa Barbara county bridge on the Nipomo and Santa Maria road, were received. The River Current Control Co. of San Francisco submitted plans that were accepted, and which will, it is believed stop the encroaching of the waters on the San Luis Obispo side of the stream. Bids are now being taken, and will close on September 8th. Further information with plans may be had from the County Engineer at San Luis Obispo, Cal.

BRIDGE.—Reinforced Concrete, cost not stated. San Luis Obispo, San Luis Obispo Co. Cal. Engineer, county surveyor, San Luis Obispo. Owner, San Luis Obispo County. At the last meeting of the Supervisors plans and specifications for the construction of the bridge across the Salinas river on the San Miguel and Vineyard Canyon road were presented, but failed to be adopted, as the Board decided the time was inopportune and action could be taken at some future date.

BRIDGE.—Reinforced concrete. Cost not stated. San Luis Obispo, San Luis

Obispo Co., Cal. Engineer, county surveyor, San Luis Obispo. Owners, San Luis Obispo county. At the last meeting of the County Supervisors plans and specifications for the Paso Robles creek bridge on the state highway near Templeton were accepted and ordered that bids be called for to be opened on the 8th of September.

BRIDGE.—Steel and timber. Cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. The Supervisors have instructed the County Surveyor to prepare plans and specifications for the construction of a wood and steel bridge across the Ventura river at Foster Park, giving entrance to the Park and to the Casitas and Santa Ana sections. On completion of plans bids will be called.

RESIDENCE.—2 story and base, frame, cost not stated. Los Angeles, Cal. Architect, J. C. Austin, Baker-Detwiller Bldg., L. A. Owner, R. D. Collins. The dwelling will be erected on a fifteen acre tract on Washington street near the city limits. There will be ten rooms, three baths, sleeping porch and a separate garage. Interior will be finished in hardwood and white enamel. Hardwood floors will be used in the living rooms, dining room and reception hall. Plans provide for furnace heat, a hot water circulating system and vacuum cleaning. Bath rooms will be finished in tile. Exterior of the dwelling will be covered with cement plaster on metal lath. A clay tile roof will be

used. Plans are complete and figures are being taken.

RESIDENCE.—2 story and base, hollow tile, \$20,000. Architect, A. Martin, Higgins Bldg., L. A. Owner, J. M. Trumbel. The dwelling has been designed to contain 12 rooms, three baths and sleeping porch. A separate garage will also be erected on the property. Interior of the dwelling will be finished in pine, hardwood and white enamel. Hardwood floors will be used throughout. There will be a central heating system, open fire places, a hot water circulating system and vacuum cleaning. Bath room will be finished in tile. Brick mantels are specified. Exterior of the house will be faced with cement plaster. Plans are complete and figures are being taken.

COMFORT STATION, PAVING AND CURES.—Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, City Engineer. Owners, City of Santa Barbara. Plans are complete and bids will be opened on September 21st for the construction of a comfort station of brick construction, resurfacing 12,000 square feet in Pedregosa St. and constructing concrete curbs and gutters. Plans can be secured from the City Clerk.

SCHOOL.—2 story and base, frame and brick. Cost not stated. Los Angeles, Cal. Architect, Julius W. Kraus, Higgins Bldg., L. A. Owner, Loml School District. Bids will be opened on September 2nd for a six class room building with gymnasium and elementary class room on first floor. Inter-

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h. pine with maple floors. A central heating system. Exterior covered with cement plaster.

SCHOOL—2 story and base, brick, \$60,000. San Pedro, Los Angeles Co., Cal. Architect, Lyman Farwell, Van Nuys Bldg., L. A. Owners, City of San Pedro. Bids will be opened on September 7 for repairs to an old building and construction of a new building 30 by 102 feet. Interior pine with maple floors. Central heating, program clocks and vacuum cleaning, exterior pressed brick.

SCHOOL—2 and 3 story and base, brick, \$21,115. San Gabriel, Los Angeles Co., Cal. Architects, Lyman & Hewitt, Fay Bldg., L. A. Owners, Garvey School District. Contractor, B. H. Paul, 2015 West 28th Street L. A. general construction; Foss & Jones, Pasadena, heating and ventilating; F. N. Newberry, L. A., electric work; H. T. Miles & Son, San Gabriel, painting; Conmy & Winterbottom, Alhambra, plumbing.

cleaning. Exterior pressed brick.

SCHOOL—3 story and base, brick and concrete, cost not stated. Los Angeles, Cal. Architect, W. J. Bleisner, Van Nuys Bldg., L. A. Owners, Polytechnic High School District. Building will cover an area of 101 by 113 feet. Interior pine and hardwood with maple floors. Work includes steam heat, program clocks, vacuum cleaning and plunge in by 80 feet. Exterior plaster with pressed brick and cement plaster. Working drawings nearly complete.

SCHOOL—1 story and base, Concrete, \$21,115. San Gabriel, Los Angeles Co., Cal. Architects, Lyman & Hewitt, Fay Bldg., L. A. Owners, Garvey School District. Contractor, B. H. Paul, 2015 West 28th Street L. A. general construction; Foss & Jones, Pasadena, heating and ventilating; F. N. Newberry, L. A., electric work; H. T. Miles & Son, San Gabriel, painting; Conmy & Winterbottom, Alhambra, plumbing.

SCHOOL—1 story and base, brick or concrete, \$30,000. Calipatria, Imperial Co., Cal. Architect, Norman F. Marsh, 214 Broadway, L. A. Owners, City of Calipatria. The building will contain six class rooms, principal's office and a large auditorium. Interior will be finished in pine with maple floors in the class rooms. A central heating system will be installed. Modern school plumbing, program clocks and vacuum cleaning are specified. Exterior will be faced with cement plaster. Plans are now being prepared.

COLLEGE BUILDING—3 story and base, reinforced concrete, \$60,000. Los Angeles, Cal. Architect, Elmer Grey, Wright and Callender Bldg., L. A. Owners, Throop College of Technology. The building will be erected at the corner of California and Wilson streets and will cover a large ground area. Interior will be arranged for class rooms, study hall, library and laboratories. Plans provide for steam heat vacuum cleaning and modern plumbing and electric work. Exterior will be faced with cement plaster. Plans are now being prepared.

OFFICE BUILDING—5 story and base, Class A construction, \$200,000. Los Angeles, Cal. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, Pacific Mutual Life Insurance Co. The building will be in the nature of an addition to the present building at the corner of 5th and Olive streets, and will cover an area of 82 by 80 feet. The first floor will be arranged for offices and rooms for the directors, while upper floors will contain lofts with vaults and fireproof lockers. There will be a complete steel frame and concrete floors and roof slabs hollow tile interior partitions, metal window sash and frames. Plans provide for elevator service, steam heat and vacuum cleaning. Interior will be finished in hardwood and ornamental plaster. Marble and tile wainscot will be used. Exterior will be faced with glazed tile. Plans are now being prepared.

RESIDENCE—2 story and base, brick and frame, cost not stated. Los Angeles, Cal. Architects, Eisen & Son, Wilcox Bldg., L. A. Owner, Dr. Ralph Williams. The dwelling will be erected on Winsor Boulevard between 3rd and 4th, and has been designed to con-

tain seventeen rooms, three baths and sleeping porch. A large two story garage will also be erected on the property. Interior of the dwelling will be finished in hardwood and white enamel. Hardwood floors will be used throughout except in the baths which will be finished in tile. Plans provide for a central heating system, vacuum cleaning and hot water circulating system. There will be open fire places and tile mantels. Exterior of both the house and garage will be covered with brick veneer and shingles. Plans are now being prepared.

APARTMENT HOUSE—1 story and base, Class C construction, \$70,000. Los Angeles, Cal. Architect, California Architectural and Construction Co., California Bldg., L. A. Owner's name withheld. The building will be erected at the southwest corner of Maryland and Bixel streets, covering an area of 700 by 88 feet, and has been designed to contain a total of 100 rooms which will be arranged in suites of four and five rooms. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors will be used in the living and dining rooms. There will be steam heat, elevator service, a hot water system and vacuum cleaning. All suites will have wall beds. Bath rooms will be finished in tile. Marble wainscot will be used in the entrance vestibule. Exterior of the building will be faced with pressed brick. Plans are now being prepared.

BRIDGE—Reinforced concrete. Cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be opened on August 25th for the following work: Construction of the south abutment and approach to the Saticoy bridge, and for the construction of the Concho Creek bridge on the state highway. The south abutment and approach to the Saticoy bridge is located about one-half mile southeast of the Southern Pacific station at Saticoy. Some approximate quantities in this work are: Embankment, 11,500 cubic yards; concrete piles 35 feet long, 14; concrete reinforcing steel in abutment, 19,100 pounds; steel sheet piling, 75 square feet; concrete piles 35 feet long, 14; guard fence, 1,333 linear feet; 21-inch corrugated iron pipe, 10 feet. The Concho Creek bridge on the state highway is about two miles east of the Southern Pacific station at Camarillo, Ventura County, California. The bridge consists of eight spans, each 30 feet long. Some approximate quantities in this bridge are: Concrete, 156 cubic yards; reinforcing steel, 17,300 pounds; pipe railing, 18 linear feet. Plans can be secured from the office of the County Clerk.

CULVERTS—Reinforced concrete, cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. Plans have been completed and figures will be opened on August 25th for the following work: Construction of the William Labranca culvert, the Harkay culvert, the Proctor culvert, and the Golden culvert, all in the Saticoy Road District, Ventura County, Cal. The culverts are all of reinforced concrete with corrugated iron pipe culvert drains. Some approximate quantities of the four culverts are: Concrete, 260

cubic yards, reinforcing steel, 13,850 pounds; earth fill, 2,100 cubic yards; 16-inch corrugated iron pipe, 126 feet; 24-inch corrugated iron pipe, 58 feet; 36-inch corrugated iron pipe, 4 feet; 38-inch corrugated iron pipe, 44 feet; standard guard fence, 1,110 feet. Plans can be secured from the office of the County Clerk.

CITY HALL, AUDITORIUM, ETC. Class A construction, \$210,000. San Bernardino, San Bernardino Co., Cal. Architects, Elmore R. Jeffery and Frank R. Schaefer, Westley Roberts Bldg., L. A. Owners, City of San Bernardino. The City Council of San Bernardino has approved plans and specifications for a group of municipal buildings, which will be erected on property at the corner of Fourth and F streets. A bond issue of \$210,000 will be voted on October 20th, the funds to be divided as follows: \$70,000 for the city hall, \$30,000 for the auditorium, \$8,000 for the jail and garage, and \$20,000 for furniture and equipment. The preliminary plans, which were accepted, provide for buildings of Spanish Renaissance style. The site will probably be at the corner of Fourth and F streets. The city hall will be a two-story structure, 150 by 62 feet. The first story will provide for the police court, jury room, judges' quarters, water commission, police chief, fire commission, lavatories, city clerk, and auditor. The second floor will contain the office of the mayor, council chamber, committee rooms, city attorney, health department, board of public works, and the building and engineering departments. The jail building will be two stories, 22 by 60 feet. It will contain the receiving hospital and steel cells in the first story and officers' quarters in the second. The garage will be 32 by 20 feet and will provide room for five machines. The auditorium will be 114 by 90 feet. It will have a seating capacity of 2,500 on main floor and 500 in balcony. There will also be a fully equipped stage with dressing rooms, smoking rooms, reception parlors, foyer, etc. It will be provided with a level floor so that it may be used for exhibition and other public purposes. The buildings will be of brick or reinforced concrete construction with plastered exteriors, clay tile roofing, concrete foundations, hardwood interior trim, maple floors in offices and auditorium, reinforced concrete stairways and corridor floors, marble and tile entrances and hallways, steam heat, metal frames and sash and all modern equipment.

Contracts Awarded.

RAILROAD BRIDGE—Steel. Cost not stated. Campo, San Diego Co., Cal. Engineer's name not given. Owners, San Diego & Arizona Railroad Co. Contractor, Charles W. Corbaley, L. A. Contract price not stated.

RESIDENCE—2 story and base, frame, \$15,000. Los Angeles, Cal. Architect, Milwaukee Building Co., Wright and Callender Bldg., L. A. Owner, P. H. Lyon 1202 South Grand avenue, L. A. Contractors, Milwaukee Building Co., Wright and Callender Bldg., L. A. Contract price, \$15,000.

RESIDENCE—1 story and base, hollow tile, \$30,000. San Fernando, Los Angeles Co., Cal. Architect, C. F. Myers 1901 West 41st street, L. A. Owner, General H. G. Otis. Contractors,

Leonardt & Peck, H. W. Hellman Bldg., L. A. Contract price, \$30,000.

WAREHOUSE—2 and 5 story and base, reinforced concrete, \$33,541. Los Angeles, Cal. Architect, E. P. Parcher, Engineer, J. F. Blee, Union League Bldg., L. A. Owners, Hollywood Fireproof Storage Co. Contractor, F. O. Engstrom, 5th and Seaton streets, L. A. Contract price, \$33,541.

HOSPITAL—2 story and base, reinforced concrete, \$32,875. Los Angeles, Cal. Architect, W. S. Garrett, Currier Bldg., L. A. Owners, French Hospital Association. Contractors, The Pozzo Construction Co., 421 Macy street, L. A. Contract price, \$32,875.

SCHOOL—1 story and base, brick, \$21,190. Los Angeles, Cal. Architects, Edelman & Barnett, Black Bldg., L. A. Owners, City of Los Angeles. Contractor, Alex. Grant, 1201 West 37th street, L. A. Contract price, \$21,190.

BRIDGE—Timber construction, \$1,480. Santa Barbara, Santa Barbara Co., Cal. Engineer County Surveyor, Santa Barbara. Owners, Santa Barbara County. Contractor, E. F. Edwards, Santa Barbara. Contract price \$1,480.

PIPE LINE—Cost not stated. Fillmore, Ventura Co., Cal. Engineers' name not given. Owner H. R. Edwards, Fillmore. The City Trustees have granted a franchise to H. R. Edwards for laying and maintaining a pipe line system within the city of Fillmore, connecting the Montebello lease with the new refinery building now under construction.

HIGHWAY CONSTRUCTION, — \$9,229.20. Tustin, Orange Co., Cal. Engineer County Surveyor, Orange. Owners, Orange County. Contractors, Hart & Ducey, Pasadena. Contract price, 3 1/2 miles, \$9,229.20.

ROAD CONSTRUCTION, — \$10,695.78. Anaheim, Orange Co., Cal. Engineer, County Surveyor Orange. Owners, Orange County. Contractor, Max L. Huhermann, Anaheim. Contract price, \$10,695.78.

GARAGE—2 story and base, steel and concrete, \$15,000. Santa Barbara, Santa Barbara Co., Cal. Architect, none. Owners, Ford Co. Contractor, J. A. Clary, Santa Barbara. Contract price, \$15,000.

GARAGE—1 and 2 story and base. Class C. Cost not stated. Los Angeles, Cal. Architects, Kreppele & Erkes, Henne Bldg., L. A. Owner, Dr. Carl Kurtz. Contractors, C. J. Kubach Co., Merchants National Bank Bldg., L. A. Contract price not stated.

SCHOOL—1 story and base, frame, \$5,649. Piru, Ventura Co., Cal. Architect, C. H. Russell, Story Bldg., L. A. Owners, Piru School District. Contractors, Mill and Lumber Co., Fillmore. Contract price, \$5,649.

SCHOOL—1 story and base, frame, cost not stated. Crescenta, Los Angeles Co., Cal. Architects, Tuttle & Angel, Delta Bldg., L. A. Owner, Crescenta School District. Contractor, Thomas H. Addison, 316 Belmont st., Glendale. Price not stated.

PORTLAND AND OREGON

COUNTRY ESTATE—Frame construction, \$150,000. Portland, Ore. Architects, Cutter & Malgreen, Spokane. Owner, T. B. Wilcox, Portland. The buildings which will include an

18 or 20 room house, barns, greenhouses and garage, will be erected on a large tract some miles outside city of Portland. Details as to interior finish and mechanical equipment have not been reached and will be given later when plans are more nearly complete. All construction will be of frame.

DETENTION HOME—2 story base, brick, \$25,000. Portland. Architects, Doyle & Patterson, Foster Bldg., Portland. Plans are complete and figures for the general construction are now being taken. Plans can be secured from the architect.

WAREHOUSES—2 story and base, reinforced concrete, \$25,000. Eugene, Ore. Architect, none. Owners, A. & Lewis, Portland. The building will cover an area of 80 by 150 feet, will be of fireproof construction. Interior will be faced with cement plaster. H. O. Bowen is the local manager and will let all contracts. Plans are complete.

SCHOOL ADMINISTRATION BUILDING—2 story and base, brick, \$10,000. Grand Mound, Ore. Architect, Watson Vernon, Aberdeen. Owner, State of Washington. Bids will be opened on August 31st for building 113 by 37 feet. With two wings 52 feet. Interior finish, pine hardwood. Work includes steam heat vacuum cleaning and modern electric work. Exterior faced with pressed brick.

SCHOOL—1 story and base, brick and stone, \$15,000. Prairie City, Ore. Architect, E. E. McLaren, Lumber Exchange Bldg., Portland. Owners, Town of Prairie City. Bids are being taken for a six class room building finished in pine with maple floors. Work includes steam heat. The exterior will be faced with pressed brick.

SCHOOL—2 story and base, brick, \$15,000. Hubbard, Ore. Architect, Brown & Forbes, Mohawk Bldg., Portland. Owners, Town of Hubbard. Building will contain six class rooms and will be finished in pine and maple floors. There will be steam heat and slate blackboards. Exterior finished with pressed brick. Plans being prepared.

STORES AND HALL—2 story and base, brick, \$20,000. Salem, Ore. Architect, Fred A. Legg, Alinsworth Bldg., Portland. Owners, Roth Grocery. The building will cover an area of 166 feet. The first floor will be occupied by the owners and the second floor has been leased to the Young Men's Christian Association. Interior will be finished in pine. There will be steam heat. Patent store fronts are specified. Exterior will be finished with pressed brick. Plans are complete and figures are being taken.

Stores and lofts, 2 story and base, brick, \$30,000. Portland, Ore. Architects, Camp & Du Put, 426 East 4th street, Portland. Owners, W. B. Ke Products Co., Location, East and Adler Street, covering an area of 50 by 100 feet. First floor, stores second lofts. Interior finish, pine. Patent store fronts. The exterior will be pressed brick. Plans being prepared.

RESIDENCE, 2 1/2 story and base, frame, \$15,000. Portland, Ore. Architect, C. K. Rich, Portland. Owner, C. L. Smith. Contractor, J. L. Quinn.

127 East Broadway, Portland. Contract price, \$15,000.

Contracts Awarded

WAREHOUSES—2 story, mill construction, \$25,000. Portland, Ore. Architects, Sutton & Whitney, Lewis Bldg., Portland. Owner, Fanny W. Brown. Contractor, J. C. Kilgreen, Lewis Bldg., Portland. Contract price, \$25,000.

SEATTLE AND WASHINGTON

BRIDGES—Steel and concrete. Cost follows. Seattle, Wash. Engineers, Seattle Bridge Commission. Owners, City of Seattle. The Board of Public Works has let the contract for the 5th avenue bridge to Hans Pederson, Madison Block, Seattle, at \$242,620.30, is alternative bid on which cofferdams will be used in the construction of the piers and pouring the concrete dry. The Pacific States Construction Co., Burke Bldg., at \$111,916, was awarded the contract for constructing the concrete piers for the Fremont avenue bridge, using cofferdams; and the Sears Building Co., Pittcock Block, Portland, Ore., at \$154,601 secured the contract for the superstructure on the Fremont bridge.

STORES—1 story and base, brick and steel, \$10,000. Seattle, Wash. Architects, Bebb & Gould, Denny Bldg., Seattle. Owners, Tucker-Hartford Co. The building will be erected at the corner of Westlake and Roy streets, covering an irregular area of 120 by 20 by 179 by 133 feet. Interior will be finished in pine and hardwood with some ornamental plaster. Cement and tile floor will be used. There will be patent store fronts, marble wainscot and base. Plans provide for steam heat and a vacuum cleaning system. Exterior will be faced with terra cotta. Plans are complete and figures are being taken.

Contracts Awarded

APARTMENT HOUSE—2 story and base, reinforced concrete, \$32,215. Seattle, Wash. Architects, W. R. B. Wilco and Julian Everett, Boston Bldg., Seattle. Owner, L. Smith. Contractors, MacLea Bros., Empire Bldg., Seattle. Contract price, \$32,215.

HOSPITAL—4 story and base, reinforced concrete \$225,000. Walla Walla, Wash. Architects Beezer Bros., Seattle. Owners, St. Mary's Hospital. Contractor, Robert F. Tegan, Morgan Bldg., Portland, Ore. Contract price, \$225,000.

Failures to secure the schooners needed resulted in the canceling of an order for over a million feet of lumber which had been obtained by an American concern through a trade opportunity submitted by Consul Walter P. Boyle, of Ceiba, Honduras.

CONSTRUCTION WORK ABROAD.

CANADA.

[Consul Julius D. Dreher, Toronto, July 31.]

Reduced Expenditure on Roads in Ontario.

Last year the actual expenditure on road construction in Ontario was \$87,000, of which the Provincial Government contributed one third. The estimates for this year provide for an

outlay of only \$640,000, though this amount may be slightly exceeded. The counties entering upon road construction on the largest scale are York (in which Toronto is situated), Welland, Halton, and Oxford, Welland, which heads the list in this respect, set out in the spring to spend \$200,000 or more upon its roads during this year; but the highway department of the Province, which must approve of all road construction undertaken by the counties, called a halt because in a time of national emergency every municipality should avoid increasing the strain upon the financial resources of the Empire. It is said that Welland will be limited to an expenditure of only \$100,000.

None of the other counties proposed sums too large to receive approval. The Provincial Government grant to the counties this year will be about \$230,000, based upon the one-third proportion of recent years. Under the new highways act the 40 per cent basis does not become operative until next year.

In June last the bank loans to Canadian municipalities amounted to \$16,889,816, that amount having been exceeded only once in the last 23 months. The large aggregate of bank loans to municipalities may serve to explain in part the caution displayed by the Ontario highways department.

CHINA.

[Consul General George E. Anderson, Hongkong, June 25.]

Hongkong Harbor Improvements.

The first step looking toward the ultimate improvement of the harbor of Hongkong along modern lines by governmental agency has been taken in the action of the legislative council of Hongkong in appropriating a small sum for dredging a portion of the harbor for a 30-foot approach to and berths alongside of a new wharf to be erected by the private corporation (the Hongkong & Kowloon Wharf & Godown Co. (Ltd.)) which owns and controls the only modern wharf accommodations in Hongkong. About two years ago this company proposed to construct a new wharf for accommodation of vessels up to 650 feet in length and corresponding draft, but found that the approaches to their property would not admit the berthing of vessels with over 28 feet draft. The matter was taken up with the colonial government at the time and was referred to the home government (London). As a result of the negotiations the colonial government has agreed to dredge two berths alongside the proposed wharf to a depth of 30 feet at lowest spring tide and to dredge 231,600 square yards of harbor as approach thereto. The work will be done by a government dredger which formerly was employed in the construction of the large typhoon shelter in the harbor.

The work is of importance chiefly in that it is the first work of the sort undertaken by the Government in this, one of the greatest shipping ports of the world. For several years there has been considerable agitation in British shipping and governmental circles in the Far East as to the necessity of improving portions of the har-

bor of Hongkong, not only in the way of the construction of modern wharves and warehouses in addition to those now existing as the property of a private concern, but also in the way of deepening portions of the harbor which have been silted up somewhat and which otherwise cannot properly handle the largest ships coming into the harbor, which, it may be well to add, are American and have to do directly with cheap handling of American flour and other freight.

The need of additional modern accommodations for ships and modern means of handling freight is being felt, and the increasing probability of an intensification of growing out of the use of the harbor as a base for the attack on the Hongkong action.

It is announced by the Government that the plans for the improvement of a portion of the harbor along what is known as the "Praya East" by moving several hills into the sea are expected to materialize at no distant date. The inauguration of the enterprise was stopped by the outbreak of the war in Europe.

DOMINICAN REPUBLIC.

[Vice Consul Juan M. Herrero, Santo Domingo, July 8.]

Aqueduct for the City of San Pedro de Macoris

On April 23, 1915, a contract was entered into by the municipality of San Pedro de Macoris, Dominican Republic, represented by its syndic, and Francisco Escalona D' Castro, a contractor of San Juan, P. R., represented by M. Arturo Salas, whereby a concession was granted to Mr. Escalona, giving him or his assigns the right to use the streets, roads, parks, and other public grounds for the installation of an aqueduct to supply water to the city of Macoris. The duration of the contract is fixed at 50 years, the right being reserved to the municipality to acquire said aqueduct at the end of 15 years after payment of its value; and after 95 years the aqueduct will become the property of the municipality. The contract is now pending before the National Congress, and it is understood that as soon as the latter approves it, the work of installation will begin.

FRENCH INDO-CHINA.

[Consul Lawrence P. Briggs, Saigon.]

Contemplated Improvements in Saigon Harbor.

Saigon, like other ports of Indo-China, is nominally under the control of the central Department of Public Works, but by a decree of January 2, 1914, it was granted a certain degree of autonomy and a local administrative council. This Council of Administration, consisting of 12 members and assisted by the chief engineer of the Cochinchina division of the Department of Public Works, has a separate budget and votes improvements and money subject to the veto of the governor of Cochinchina. This council met for the first time on August 7, 1914.

The first task of the new council was to consider an extensive system of improvements for the harbor of Saigon, whose facilities are inadequate for the

accommodation of its commeree. At a recent meeting the following program was agreed upon, to be put into operation as soon as possible:

1. The construction, in common with the navy yard, of a dry dock 300 meters (984 feet) long, at a cost of about \$1,600,000.
2. The installation of an electric towpath along the Canal de Derivation, from Saigon to Cholon (4 or 5 miles), at a cost of about \$200,000.
3. The acquisition of a floating crane, at a cost of about \$30,000.
4. The construction of docks for the mooring of small boats, at a cost of about \$20,000.
5. The construction of warehouses and an inclosing wall for the customs along the quay of Khan-hoi. The estimated cost of this work is fixed at \$20,000.

At its next meeting the council will decide upon a program of improvements for 1916.

PORK FOR DEFENSE.

An enterprising congressman from Kansas City sees a local advantage in the national defense talk. An arsenal for Kansas City is just the thing. No foreign enemy could possibly get as far into the country as Kansas City, so that is just the place for a munitions supply house.

There will be a whole lot of congressional patriots of just this kind, and they won't help the cause of national defense any. Just as the rivers and harbors funds and the postoffice building funds have been made into "pork barrel" distribution funds, so the money to be spent for national defense would, under our customary congressional methods, be awarded according to factional strength in congress rather than considerations of cost attack and defense.

There was recently announced at Washington a system whereby the Postal Department would meet all proposals for postoffice buildings or additions on a basis of postal incomes. The income of an office is possibly as nearly as fair a test of its building needs as can be devised. Of course congress has the final say about the building allowance, but if the department has a scientific system to test all local demands for "pork," it will be more difficult to get congressional majorities to beat the administration's recommendations.

The river and harbor funds have been of late years freed largely from local rails by the concerted work of the engineering officers of the army. All local suggestions are tested by comparison with national considerations, comparison with the trade needs and advantages to be gained in other parts of the country. This does not secure perfect justice nor freedom altogether from personal influence. But it gives a more nearly honest basis of determining appropriations than does "pull" in committee.

The national defense problem will doubtless be worked out in the same systematic way. There will be a board of army officers before whom all recommendations must be worked out, and the decision of the board will, in its turn, be publicly reviewed by the President and Congress. Otherwise we would be having the spectacle of Pres-

ident vying with Tucson, Arizona, for the privilege of mounting howitzers for defense against Montenegro.—Fresno Republican.

A HINDRANCE TO AMERICAN BUSINESS.

[Commercial Attache William C. Downs, Melbourne, Australia, July 2.]

Several complaints have been received that the failure of American manufacturers promptly to confirm transactions which have been closed by cable leaves the agents in Australia in doubt as to whether all the conditions of the transaction are clearly understood and whether everything is in order, not only as regards the prices stipulated, terms and conditions, but also the time of shipment. Several complaints have been received that although orders which have been taken upon cable quotations from American manufacturers have been accepted by cable, confirmations of the cable have not been received, although sufficient time has elapsed for letters from the United States to arrive.

It should be impressed upon American manufacturers that cables sent or received should be confirmed by letter on the date on which they are sent or received in order that any misunderstanding which might arise from the use of codes, which do not always express the meaning in exact language, may be promptly corrected.

On a par with most of the Chronicle's economic reasoning 'is that of a recent editorial against inheritance taxes which have been favored by the present state administration. Here is its argument to show how poor people will be oppressed by the passage of such laws:

"It is living on our principal when we ought to live upon our income. An inheritance tax of any kind, and especially such a tax on large estates, is justifiable only as an emergency tax.

It is taking money which might be so invested as to give employment and using it up. It means just so much less work and so much more idleness.

Those who inherit, of course, object, just as all of us object to all taxes and evade them if we can. But the inheritors can stand it.

Those who really suffer from inheritance taxes are those who must have work in order to live.

Every "poor man" should vote against inheritance taxes. They hurt him."

The thing to do then is to perpetuate large fortunes. Let the descendants of the Rockefellerers and the Guggenheims and the Vanderbilts own the whole thing and they will employ the poor. They are God's appointed children that should have the sole control and distribution of the wealth of the land.

In England where they have an hereditary aristocracy the inheritance tax laws are very strict and exacting. Nothing that descends by inheritance escapes its burden of taxation. Here where there are no recognized classes, no recognized landed aristocracy, the laws are much more lenient and the taxes but a small percentage of the taxes in England on inheritances. The moneyed aristocracy which the Chron-

icle serves, however, is demanding that they be free from all such burdens of state.

INDUSTRIAL ORDERS.

For several months committees have been meeting in San Francisco and Los Angeles to prepare tentative General Safety Orders for California's industries.

The California Employers' Federation selected three San Franciscans Grant Fee, President Building Trade Employers Association; H. J. Ralston, President Ralston Iron Works, and F. H. Abbott, President Franklin Printing Trades Association. The California State Federation of Labor delegated President D. P. Haggerty, Secretary-Treasurer Paul Scharrenberg and Kenneth McLeod of Carpenters Union No. 483 of San Francisco. Walter A. Chown represented the Casualty Underwriters Association. John R. Brownell, Superintendent of Safety was the eighth member of the committee. Mr. Abbott was elected chairman and Mr. Brownell secretary.

In Los Angeles the Merchants' and Manufacturers' Association selected W. T. Bishop, Jr., of Bishop & Company, Reese Llewellyn, of the Llewellyn Iron Works, and John Griffin, of the Pacific Coast Planing Mill Company. The Central Labor Council named C. F. Grow, J. W. Buzzell and L. W. Butler. The Casualty Underwriters' Association delegated H. D. Vandever, and H. L. Boyd represented the Industrial Accident Commission. Mr. Griffin was elected chairman, Mr. Butler vice chairman and Mr. Boyd secretary.

The tentative General Safety Order prepared by these two committees will be considered at two public hearings: The first will be held on Wednesday August 25th, at 10 a. m. in Room 40 Underwood Building, 525 Market street, San Francisco. The second will be held on Friday, September 3rd, at 10 a. m. in Room 405 Union League Building, Second and Hill streets, Los Angeles. All interested are invited to attend.

The committee decided to consider those problems of safeguarding that are applicable to all industries. Gears, belts, pulleys, clutches, transmission shafting, sprockets, flywheels, grinding wheels etc., are to be properly guarded where exposed to contact, and there will be requirements as to size, speed and location. All projecting screws are to be removed, counter sunk or guarded. Provisions are included for making ladders more stable and for providing hand railings on stairways runways and elevated passages and gangways kept clear and in good repair to prevent stumbling and falling.

Copies of the tentative General Safety Orders will be furnished on request from the offices of the Industrial Accident Commission, 525 Market street, San Francisco, or Second and Hill streets, Los Angeles.

MILLIONS FOR GUNCOTTON.

The Nitrated Products Company of Pottsville, Pa., has closed a \$5,000,000 contract for gun cotton and other nitrated explosives to be delivered to the New York agents of the allies.



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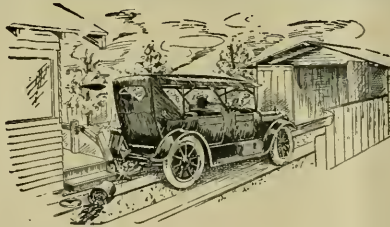
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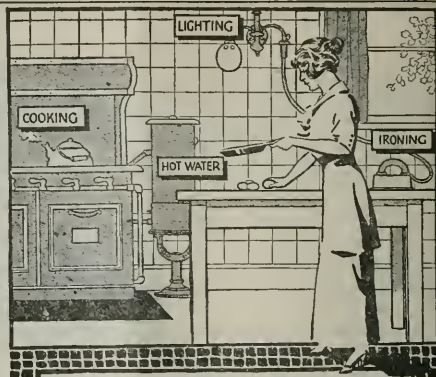
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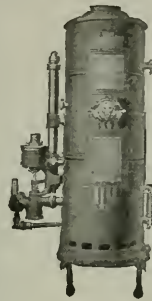
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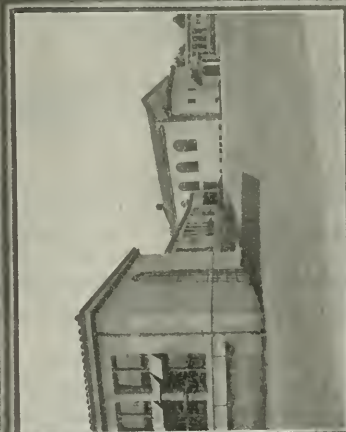
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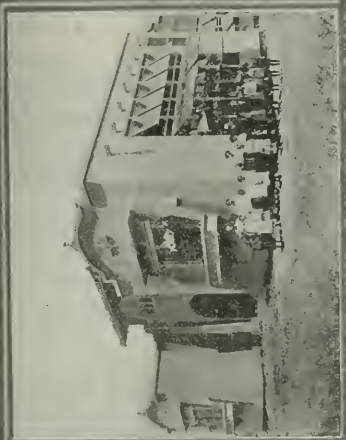
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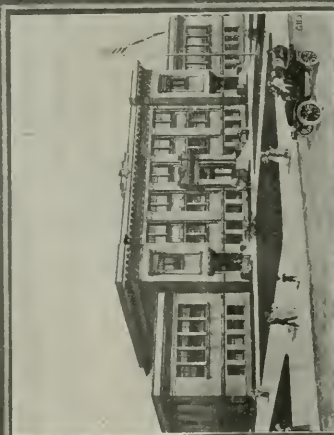
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Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
of the Pacific Coast.

Issued Weekly, \$3.00 per year

San Francisco, September 1, 1915

Fifteenth Year, No 35

For the first time in history the Federal authorities, with the aid of the Department of Agriculture, have compiled an official table of automobile registrations in the various States, together with supplementary material, making a complete record of the status of the motor car in America for the year 1914. Remember that only so long ago in 1909 statistics covering the motor car industry in Government reports were lumped in with the figures for all classes of vehicle manufacture.

In the conservative eyes of the Government officials the motor industry had not, at that time, reached sufficient size to warrant a special classification. Today there is no question on this point, and we may consider that the Government recognition officially acknowledges the right of the industry to a leading place in the economic life of America.

Coming down to concrete figures, we find that in 1914 there were 1,666,984 pleasure cars running in the United States, and there were in addition 44,355 motor trucks in operation.

This gives us the very impressive total of 1,711,339 motor vehicles in use in America. These vehicles paid the tidy sum of \$12,270,035.78 for the privilege of using our roads, and in addition the owners and chauffeurs paid further \$427,179 for the right to drive.

Manufacturers and dealers, who are placed in a special category in most of the States, contributed an additional \$1,255 for the privilege of running cars necessary to their business.

U. S. Auto Census for 1915.

State	Automobiles.	Gross Registration Revenues.
Alabama	8,672	\$ 113,201.75
Arizona	5,040	34,077.50
Arkansas	5,642	56,120.00
California	123,504	1,336,785.25
Colorado	17,756	80,047.00
Connecticut	24,818	406,623.34
Delaware	3,650	35,672.20
Florida	3,368	6,736.00
Georgia	20,915	104,575.00
Idaho	3,346	58,579.75
Illinois	131,110	699,735.30
Indiana	68,590	432,308.78
Iowa	196,087	1,040,135.54
Kansas	19,374	268,471.00
Kentucky	11,766	5,883.00
Louisiana	12,060	*
Maine	15,065	192,542.14
Maryland	18,269	268,231.07
Massachusetts	69,016	923,961.14
Michigan	76,389	**
Minnesota	67,862	132,395.00
Mississippi	5,694	51,146.00
Missouri	54,168	235,873.50
Montana	10,200	27,000.00
Nebraska	16,385	34,325.00
Nevada	1,487	4,381.08
New Hampshire	8,410	185,288.21
New Jersey	60,427	814,536.50
New Mexico	3,090	19,662.23
New York	150,898	1,529,852.36
North Carolina	14,677	89,580.19
North Dakota	17,341	57,961.00
Ohio	122,504	685,452.25
Oklahoma	13,500	13,500.00
Oregon	14,865	77,592.00

Pennsylvania	106,401	1,185,039.50
Rhode Island	11,033	157,020.00
South Carolina	11,000	14,000.00
South Dakota	20,929	125,000.00
Tennessee	19,769	39,538.00
Texas	40,000	*
Utah	2,253	4,852.00
Vermont	8,256	154,266.91
Virginia	43,984	120,814.50
Washington	30,233	60,506.00
West Virginia	6,159	60,648.49
Wisconsin	53,161	293,580.00
Wyoming	2,428	12,140.00
Dist. of Columbia	4,833	20,147.50

Totals 1,666,984 \$12,270,035.78

*State registration not required.

**Law declared unconstitutional.

An important home industry victory has just been announced by the State Board of Control, the chairman of which is John Neylan, and has to do with the metal license signs for automobiles, motorcycles and other forms of motor vehicles. These signs have been the subject of a battle royal between California manufacturers and eastern ones regularly every year for some time back. Heretofore the work has been sent to eastern shops.

The contract for the 1916 signs has this year been awarded to the California Metal Enameling Company of Bairdstown, Southern California. This contract is for 400,000 automobile signs and 50,000 motorcycle plates, and will probably mean a total cash consideration of something in excess of \$75,000.

A gratifying feature in the award is that the California bid was 20 per cent lower than the bid of the lowest eastern bidder. The practical result of this sort of home industry is that scores of workmen will be kept busy for many months in this California factory making these plates and spending their wages in this State.

A recent issue of the Press Bulletin issued by the United States Geological Survey credits California with a monopoly of borax. The production of crude borate materials in the United States during the year 1914 was 62,400 short tons valued at \$1,464,400. This shows an increase of more than 6,000 tons over the previous year, but the value was less. The Bulletin says: "The product during 1914 was obtained from three mines, all in Southern and Southeastern California." The largest part came from the Lila C. mine, owned by the Pacific Coast Borax Company, in the Death Valley region of Inyo County. The Sterling Borax Company, near the borders of Los Angeles County, ranked second in production. The third mine is owned by the Russell Borax Company in the Ventura district. A forty-foot deposit of colemanite, the usual source from which borate is derived, has been discovered at a depth of 370 feet in the Kramer district of San Bernardino County. This was discovered a good deal as Bret Harte's hero "struck pay gravel" when drifting on Poverty Flat, for it was made by a farmer drilling for water.

Pasadena wants a janitor with brains for the new post office that is in the building there. The man who fills the position will be required to take an educational examination. Pretty soon Pasadena will turn some white wing down when he seeks a position as street cleaner, because he fails to qualify in integral calculus.

Lessons from the Exposition.

Collected by George Nelson, C. E.

The Foxboro Exhibit of Indicating and Recording Instruments.

A very complete line of indicating and recording instruments for measuring pressure, temperature, speed and time, also automatic temperature controllers and orifice meters, is shown by the Industrial Instrument Co. and the Foxboro Co., of Foxboro, Mass., at the Exposition.

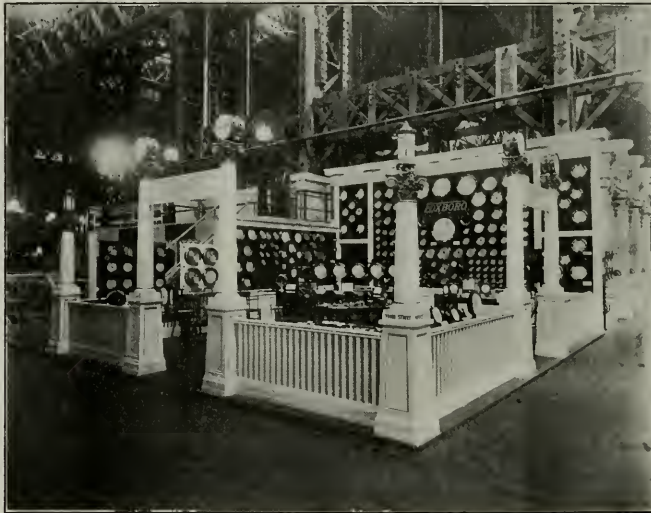
These companies are operated under the direct supervision of Messrs. B. B. and E. H. Bristol—men who have had a very wide experience in the manufacture and sale of measuring instruments—and the instruments which they are manufacturing show many interesting and practical improvements in design.

The booth is finished in cream white and gold and is attractively arranged. In utilizing recording instrument cases, a very attractive lighting has been designed for the pillars at the entrances. At the rear of the booth, there is a large mahogany panel, on which there are symmetrically arranged "Foxboro" recorders and thermographs,

At the center of the booth is arranged a frame on which there is an automatic temperature controller, also a recording thermometers, two liquid level recorders, a vacuum recording gauge and a gas pressure recording gauge in operation. These instruments will be in operation 24 hours a day and will continually record the operation of the controller, the varying water levels in a tank, the vacuum on the controller system and the Machinery Palace Building service gas pressure.

The adaptability of "Foxboro" instruments is shown in the display of several gauge boards for power plants. The uniform design of these instruments enables them to supply both the indicating and recording instruments in the same case, having the same style and finish throughout, which naturally makes a very pleasing effect.

The famous Dr. Horn system of speed measuring instruments are shown in their many different styles and



Foxboro Booth.

also one hundred and seventy indicating gauges for pressure and vacuum for every known purpose in all sizes from 2 in. to 24 in. in diameter. This is the largest assortment of gauges ever arranged on a single panel for display purposes.

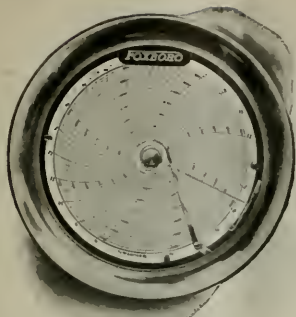
A second attractive mahogany panel at the left side of booth has a display of indicating dial thermometers, round and square case counters, thermographs, recording gauges, recording hygrometers and liquid level recorders; also, an interesting display of the many bulbs, connections and capillary tubing used on this service.

An orifice meter, measuring flow of air, is shown in operation; this is one of the latest developments for accurately measuring the flow of gases and liquids. It is understood that an accuracy of within less than one per cent is guaranteed.

sizes, both in the portable and stationary forms. A frequency meter of Dr. Horn design will be in operation; it will both indicate on a large dial and record on a continuous chart the number of cycles per second of Machinery Palace Building circuit.

All types of recording gauges for any range, from full vacuum to 20,000 lbs. per square inch, and a very complete line of both indicating and recording thermometers for any range, from minus 60 to plus 800 degrees Fht. are shown, together with a complete line of electric pyrometers, for any range up to 3,000 degrees Fht. or its equivalent.

Two Foxboro orifice meters are in operation at booth 29, Collective Gas Exhibit (Manufacturers' Building), measuring all gas consumed in the Collective Gas Exhibit, both for service and illumination.



Recording Gauges.

Recording Gauges for all purposes and all ranges from full vacuum to 20,000 pounds per square inch.

Round form, moisture, dust and fume tight case.

Improved supported helical and diaphragm tube movements and pen arms, eliminating the effect of vibrations and insuring positive action.

Spring-tension self-centering chart holder, which insures the accurate placement of charts.

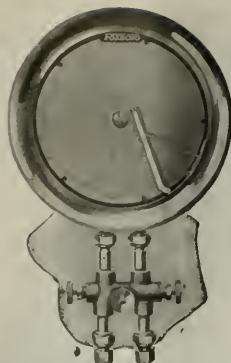
Automatic release pen lifter, which keeps chart and instrument neat and clean.

Strong clock movement with three point support.

Charts have wide open scales, and bold face and skeleton type to make it easy to distinguish between night and day.

All parts interchangeable.

These instruments are neat, compact and efficient, can be used for Steam, Gas, Water, Air, Oil, Ammonia, Brine, anything under pressure and vacuum.

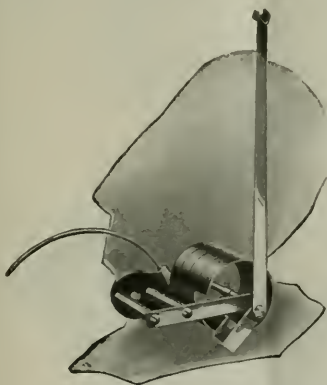


Differential Recorders.

This recording instrument is designed to record on a chart the difference between two existing pressures.

It is guaranteed to give satisfactory results under pressures from 0 to 4-inch head of water, and up to any desired differential pressure and under static pressure up to 1,000 pounds per square inch.

The construction of this Differential Gauge, which is the most satisfactory instrument of its kind ever manufactured, has made possible the use of Orifice Plates for the measurement of gas. This mode of measuring being considered the most accurate that can be had, but has heretofore not been used on account of the inability to obtain an accurate instrument to record differential pressures.



Improved Helical Tube Movement.

As the actuating tube movements form the important part of our Recording instruments, we wish to briefly describe those which we are using.

The illustration shows our improved Helical Tube Movement which is used in all "Foxboro" Recording Gauges for ranges above 12 pounds or its equivalent; also in all "Foxboro" Thermographs.

The Helical tube is mounted on a permanent base. The pen arm instead of being fastened to the free end of the tube is fastened to a shaft passing through the center. The action caused by application of pressure to the tube is transmitted from the tube to the shaft through a connection strip that is flexible only in the direction of the radial expansion of the tube. This construction supports the pen arm and actuating tube, forms a positive center of motion, and makes a very positive acting movement, which is not easily affected by vibrations. Note that all multiplying devices are eliminated and that the adjustment on the pen arm comes at the center of motion.



Orifice Meters.

Space does not permit the illustration of a complete Orifice Meter. This Meter consists, however, of a

"Foxboro" Differential Recorder.

"Foxboro" Static Pressure Recording Gauge.

The necessary Flange Unions and

Orifice Plate, as illustrated above.

Complete with Angle Iron Frame and

All necessary Pipe Fittings.

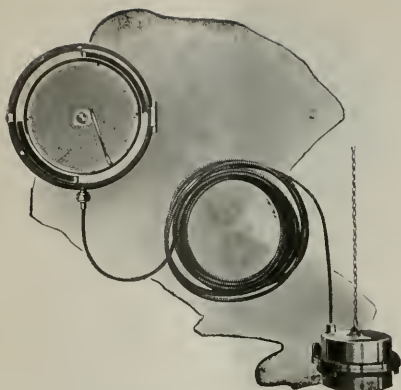
The Differential Recording Gauge in this instance records the difference in the pressures caused by variations in velocity of gas passing through an orifice of definite diameter, inserted in the pipe line.

The Static Recorder records the static pressure of the gas.

In the measurement of gas by this meter, it is usual to have the Differential Gauge chart graduated to read inches of water, and the Static Pressure Gauge in pounds per square inch.

Using the records obtained from these instruments together with the data supplied, the rate of flow in cubic feet per hour is very readily and accurately obtained.

"Foxboro" Orifice Meters can be supplied in any size up to 12 inches. For anything larger than 12 inches, special meters will be built. There are two companies, each of which have over 200 meters in constant use, and they are measuring their gas with an accuracy heretofore considered practically impossible.

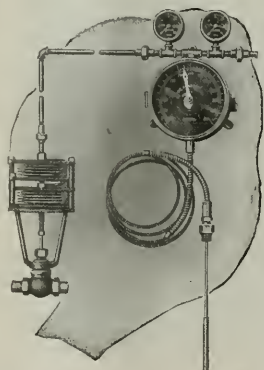


Liquid Level Recorders.

This instrument is designed for recording the varying levels of rivers, reservoirs, canals, forebays, tail races, etc.

One especially good feature about this instrument is that it is not affected by temperature changes or freezing. For instance, the ice in a forebay or tail race has no effect upon the diaphragm bulb, as it is below the depth of ice formation. This instrument has been put to many different uses other than measuring heights of water—being used in paper mills for recording the height of stuff in Jordan Stuff Chests, etc.

It can be used for any liquid other than water. It is guaranteed for accuracy and will be sent upon trial.



Automatic Temperature Controllers and Regulators.

These Controllers are the latest and most simple application of their kind now on the market.

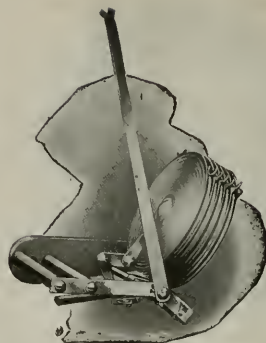
It will accurately control any temperature from -60 to 800 degrees, will operate on any size of valve up to 12 inches. It has a graduated scale. The index may be set at any desired point, and the regulator will automatically control the temperature at that degree without any further adjustment.

Valves are operated by a vacuum or pressure. The vacuum system is recommended as it eliminates condensation or moisture in the pipes.

The diaphragm valve is made completely of metal—no rubber to deteriorate. This valve closes automatically if the system fails, due to leaks or pump troubles, thereby preventing over-heating.

The Controller may be equipped with a clock driving cam so as to automatically control a definite cycle of operations.

The Controller may be included in the same case as Recording Thermometer if desired.



Improved Diaphragm Tube Movement.

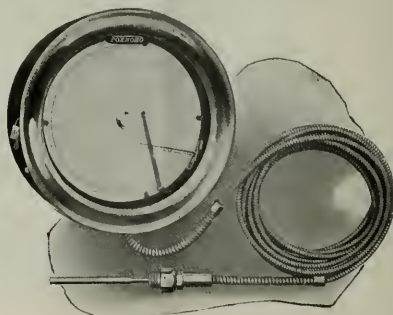
For all low pressures below 12 pounds or its equivalent the improved form of Diaphragm Tube movement is used. The same principle of pen arm construction is carried out in this movement as in the helical tube—the motion being transmitted from the diaphragm tube to the shaft on which the pen arm is fastened.

Although this tube is very sensitive to pressure changes, it is "Dead Beat" and the support given to it eliminates the necessity of clamping devices of any kind, when transporting the instrument.

This short improved diaphragm movement is especially well adapted for use in Liquid Level Recorders. The small capacity results in small transmission of air between the tube and the bulb.

A modification of this tube is used in our Differential Recording instruments which have proven so successful. The rapidity with which instruments having this type of actuating movement have been adopted, proves without question its superiority.

All "Foxboro" instruments are manufactured by The Foxboro Co., but, for the present, are being sold by The Industrial Instrument Co., a subsidiary company.



Improved Recording Thermometers.

"Foxboro" Thermographs or Recording Thermometers are made in many different styles, and in three sizes, viz.: -8 , 10 and 12 -inch.

They can be supplied in any range from -60 to 800 degrees Fahr. or its equivalent in Centigrade or Reaumur.

These instruments can be supplied for hundreds of different purposes. Thousands of them are in daily use giving most satisfactory results.

Over twenty years of experience in instrument making is back of every instrument. We guarantee satisfaction, and will submit instruments on 30 days' free trial.

They are especially adapted for recording temperatures of feed-water, flue gases, super-heated steam, mash tubs, cookers, vacuum pans, vulcanizers, dry rooms, pasteurizers, etc.

The instrument, as illustrated, is the stationary type for permanent installation.

The connecting tube can be any length up to 250 feet, and we will guarantee the instrument to accurately record the bulb temperature.



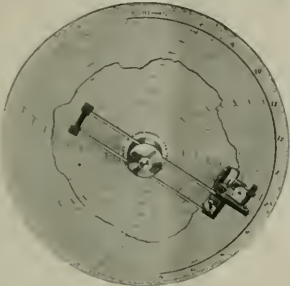
Model "A" Pressure Gauges.

On the previous page we described the movement that is used in all "Foxboro" Model "A" Gauges.

Although the movement is the heart of the gauge, special care also has been exercised to get a perfect dial, and an instrument that is handsome in appearance.

The dials of all Model "A" Gauges are hand calibrated, and are therefore as accurate as it is possible to make an instrument of this kind.

These Indicating Gauges can be supplied in the same case as our Recording instruments. This enables us to supply a full gauge board equipment consisting of Indicating and Recording Gauges, Recording Thermometers, Clocks, etc., all in the same style of case, giving a very uniform appearance and a satisfactory installation.



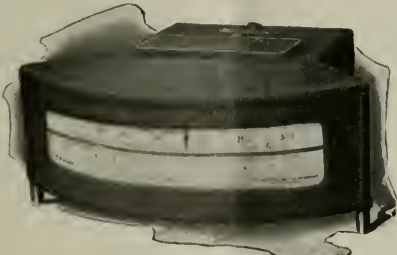
Durand Radial Planimeters.

These Planimeters are designed to obtain average of records on all charts with even scale and radial coordinates.

They are very easy and simple to operate and are exceedingly accurate.

Plots for all our charts can be supplied, which makes the averaging of charts very easy.

The instrument is of the finest workmanship, made by Anslar & Son, Switzerland.



Indicating Electric Pyrometers.

(Stationary Type.)

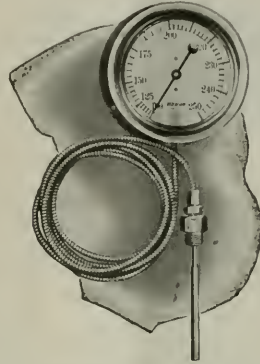
For ranges from 0 to 3,000 degrees Fahr. or 0 to 1,600 degrees Centigrade.

This instrument is supplied in the Stationary type for

permanent installation. It is an ideal instrument for high temperatures; can be depended on for accuracy; is simple to operate; not easily damaged.

It is a high resistance instrument for use with either base metal or platinum-rhodium thermocouples, all fire bars being absolutely interchangeable.

These instruments are especially adapted for Hardening, Tempering and Annealing Furnaces, Brick and Pottery Kilns, Carburetors and Superheaters of Water Gas Sets, Chemical Works, Enameling Furnaces, Galvanizing and Inning Baths, Lead and Oil Baths, Oil and Tar Stills, Incinerators, etc.



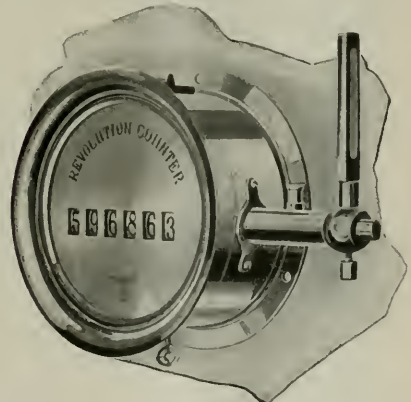
Indicating Dial Type Thermometers.

For ranges from -25 to 1,000 degrees Fahr. or corresponding degrees Centigrade or Reaumur.

This is the Thermometer that you have been looking for. The indicator can be placed any distance up to 100 feet from the bulb and give satisfactory results.

It has Wide Open Scale, Easily Read, No Fragile Parts to Break, No Mercury to Separate.

Can be used anywhere that a Thermometer is required.



Revolution Counters.

These instruments are of the round type and can be reset to zero very readily.

They are for either right or left rotary and reciprocating motions of Marine or Stationary Engines, Motors, Generators, Machine Tools, Shafting, Printing Presses, Fire Winding Machines, etc.

The instrument is made in 6, 8 1/2, 10, and 12-inch sizes, and has a capacity of 99,999,999.

All parts are highly finished. All parts subject to wear are made of bronze or steel.

If properly cared for these counters will last a life time. We have also the square counters.

(Continued in next issue)

ADVANCE NEWS

Classified according to Character of Work



Devoted to the Architectural, Engineering, Building and Industrial Activities of the Pacific Coast.

Circulates among the leading Architects, Engineers, Surveyors, Contractors and Municipal Authorities on the Pacific Coast.

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APARTMENT HOUSES.

SAN FRANCISCO.—Apartment house 3 story and base, frame, \$15,000. Architect, Charles J. Rosseau, 46 Kearny street, S. F. Owner, James Frazer. Location, northwest 4th avenue and Hugo street, covering area of 25 by 90 feet. Will contain six apartments of four rooms, bath and sleeping porch. Interior red gum and hardwood, hardwood floors and wall beds. Steam heat and hot water service. Tile bath rooms. Exterior covered with Klingstone. Plans being prepared.

SAN FRANCISCO.—Apartment house 3 story and base, frame, \$15,000. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owners name not given. Location Fifty Vara District. Will contain 12 apartments of two rooms and bath. Interior pine and hardwood with tile in the baths and wall beds. Steam heat and hot water system. Exterior covered with cement plaster on metal lath. Plans being prepared.

SAN FRANCISCO.—Apartment house, 4 story and base, brick and steel, \$40,000. Architects, Rosseau & Rosseau, 110 Sutter street, S. F. Owners, Girard Investment Co. Location, east Leavenworth, 44 south Geary, covering area of 41 by 65½ feet. Will contain 23 suites finished in pine and hardwood with tile baths and wall beds. Steam heat, automatic elevator, oil burning system hot water supply and vacuum cleaning. Marble and tile entrance. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and segregated figures being taken.

SAN FRANCISCO.—Apartment house, 4 story and base, brick and steel, \$45,000. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, O'Brien Bros. Location, south Bush 187 west of Mason covering area of 42 by 137½ feet. Will contain 29 suites of two rooms and bath. Bath rooms tile floors and wainscot. Steam heat, elevator service, oil burning equipment, hot water system and vacuum cleaning. Marble and tile wainscot. Exterior faced with marble. The plans are complete and segregated figures are being taken.

SAN FRANCISCO.—Apartment house, 3 story and base, frame, \$10,000. Architect, John J. Foley, 46 Kearny street, S. F. Owner, Mr. Sullivan. Location, west Dolores, between 15th and 18th covering area of 30 by 75 feet. Will contain six suites of four rooms. Interior finished in pine and elm panels. Wall beds, steam heat and hot water system. Tile in bath rooms. Exterior covered with cement plaster on metal lath. Plans are being prepared.

MARTINEZ, CONTRA COSTA CO., CAL.—Apartments and store, 2 story and base, frame. Cost not stated.

Architect, James T. Narbett, 704 Macdonald street, Richmond. Owner, Frank Prosser. Will contain four stores and eight apartments with bath. Interior finish will be of pine. Wall beds, tile bath rooms and hot water system. Patent store fronts. Exterior covered with cement plaster on metal lath. Plans being figured.

MARSHFIELD, ORE.—Apartment house, 2 story and base, brick and stone, \$25,000. Architect, Fred Magnusson, Marshfield. Owner, A. C. Goring. Will cover an area of 50 by 145 feet with stores on first floor. Interior finish pine and hardwood veneer. Wall beds, tile in baths, steam heat and hot water system. Exterior faced with cut stone and brick. Plans being prepared.

SAN FRANCISCO.—Apartment house, 4 story and base. Class C construction, \$40,000. Architects, Rosseau & Rosseau, 110 Sutter street, S. F. Owners, Girard Investment Co., Location, east Leavenworth, 44 south Geary, covering an area of 41 by 65½ feet and arranged for 23 apartments of two and three rooms. All suites will have wall beds, private baths finished in tile. Interior finish, pine and hardwood with hardwood floors. Steam heat, automatic elevator, hot water system and vacuum cleaning. Marble and tile wainscot. Exterior faced with pressed brick and terra cotta. Plans are complete.

OAKLAND, CAL.—Apartment house, 3 story and base, brick veneer, \$35,000. Architects, Oliver & Thomas, Pantages Theatre Bldg., Oakland. Owner, C. L. Donohoe, 1463-76th avenue, Oakland. Location corner of Harrison and Grand ave. Will contain 25 suites of two and three rooms with baths and wall beds. Interior finish pine and elm panels. Hardwood floors, steam heat, oil burning plant, and hot water system. Tile in the baths. Exterior faced with pressed brick. Plans complete and in the hands of the owner who is taking figures.

Contracts Awarded.

SAN FRANCISCO.—Apartment house 3 story and base, frame, \$22,500. Architect, A. J. Laib, Russ Bldg., S. F. Owner's name not given. Contractor, Henry Conrad, 2854 Pine street, S. F. Contract price, \$22,500.

BATH HOUSES.

SAN MATEO, SAN MATEO CO., CAL.—Bathing pavilion, 1 story frame. Cost not stated. Architect, W. H. Toepke, 46 Kearny St., S. F. Owners, City of San Mateo. Location, Bay Beach. Will include dressing rooms, open air pavilion, cafe and grill rooms. Interior finish, pine. Exterior, cement plaster on metal lath. Plans being prepared.

BONDS

SANTA PAULA, VENTURA CO., CAL.—For the purpose of constructing and maintaining a system of good roads Ventura County last week voted bonds of \$1,000,000. The election carried by a large majority. The proceeds of the sale of the bonds will finance the construction of the highways and bridges.

MILWAUKEE, ORE.—Bonds of \$25,000 have been voted for the extension and improvement of the water system. Bids on the work will be called for when the bonds have been sold. Engineer J. W. Morris, Morgan Bldg., Portland, is now preparing plans for the work which will include the construction of a reservoir.

SACRAMENTO, CAL.—Members of City School Board will meet with a committee from the Federation of Improvement Clubs for the purpose of discussing a bond issue of \$2,500,000 for new schools to be erected in Sacramento.

MARYSVILLE, YUBA CO., CAL.—With a vote of more than four to one the proposition of incurring a bonded indebtedness of \$18,000 for the extension of the drainage sewer system out D street from its present terminal at Tenth street to Fourteenth. The vote cast was 709 for the issue and 162 against.

SAN MATEO, SAN MATEO CO., CAL.—A plan has been started to bond this city to improve Coyote Point making it an attractive beach resort. The plan has met with much favor and it is expected that immediate action will be taken in setting a date for the election.

REDONDO BEACH, LOS ANGELES CO., CAL.—At a recent meeting of the City Trustees, three bids were received for the purchase of the bonds voted for the construction of a pleasure pier. The firm of Wm. R. Staats & Company were awarded the purchase. The total issue was sold for \$121,000. Work on the pier will commence immediately.

KINGSBURG, FRESNO CO., CAL.—The \$40,000 school bonds recently voted have been sold by the County Supervisors and work on the proposed structure will be started as soon as contracts can be let.

DINUBA, TULARE CO., CAL.—Bonds of \$13,000 for the erection of a new school building have been voted and plans for the structure will be ordered immediately.

MODESTO, STANISLAUS CO., CAL.—A movement has been started here to call an election to vote bonds for the erection of four new grammar schools and one high school.

BRIDGES, DAMS AND HARBOR WORK.

SAN ANDREAS, CALAVERAS CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, Jones-Reddick & Holly, Humboldt Bank Bldg., S. F. Owners, Calaveras County. Plans are complete and figures will be opened on September 13th at 1 p. m. for the construction of either an arch type of girder type reinforced concrete bridge of 80 feet span to be erected over the South Fork of the Mokelumne River between Railroad Flat and West Point. Plans can be

secured from A. W. Poe, County clerk, San Andreas.

UKIAH, MENDOCINO CO., CAL.—Bridges, 2 reinforced concrete. Cost not stated. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Bids will be opened on September 8th for the construction of two bridges in the Third Road District, both on the Two Rivers and Covelo Road. Plans and complete information may be had from the County Clerk at Ukiah.

EUREKA, HUMBOLDT CO., CAL.—Timber trestle. Cost not stated. Engineer, County Surveyor, Eureka. Owners, Humboldt county. Bids will be opened on September 7th for the construction of a trestle bridge across Singley's Creek on the County Road, near the Ocean House, in Road District No. 1.

UKIAH, MENDOCINO CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Bids will be opened on September 8th for a bridge on the lower Coast Road in District No. 5. Plans and specifications can be secured from the County Clerk at Ukiah.

OROVILLE, BUTTE CO., CAL.—Bridges, 10, steel, concrete and timber. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. Bids will be opened on September 11th for the construction of ten bridges numbered 1 to 8 inclusive, commencing near the town of Nelson and running northerly, said entire 8 bridges to be bid on as a whole; also for the construction of a bridge over Durhan Slough; also for the construction of a bridge over North Channel of Butte Creek. Plans on file at the office of the County Surveyor.

DUNSMUIR, SISKIYOU CO., CAL.—Bridge, reinforced concrete. \$27,334. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids opened by State Highway Commission for the reinforced concrete bridge 532 feet in length over the Sacramento river at Dunsmuir, show F. H. Green of Eureka the low, at \$22,600. The highway engineer's estimate on the work was \$27,334. P. J. Lechner, Oakland, was second low at \$23,944. A contract will be awarded shortly.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The Supervisors have directed the Clerk to advertise for bids for the construction of a reinforced concrete bridge on Noble Avenue over the Penitencia Creek. Bids will be opened on September 13th, at 11 a. m. Plans and specifications may be had from the Surveyor at San Jose.

SALINAS, MONTEREY CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Salinas. Owners, Monterey County. The Board of Supervisors has withdrawn their contract to M. H. Kunze & J. A. Wolfe, the lowest bidders for repaving the Chualar bridge, as it was discovered the firm failed to present a check for ten per cent of the amount

bid. New bids have been ordered called.

MARTINEZ, CONTRA COSTA CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Bids will be opened on September 13th for the construction of a reinforced concrete culvert on the Bay Point to Richmond Road. Plans can be secured from the County Surveyor.

MARTINEZ, CONTRA COSTA CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, City Engineer, Martinez. Owners, City of Martinez. Plans and specifications for a big concrete culvert across Talbart street have been completed by City Engineer E. C. Brown, and will be adopted at the next meeting of the City Trustees. A call for bids will be made when the plans have been completed.

OAKLAND, CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Oakland. Owners, Alameda County. Bids will be opened on September 7th for the construction of a bridge in the Pleasanton Road District. Plans and specifications at the County Surveyor's office.

ABERDEEN, WASH.—Bridges, 2 steel and concrete. Cost not stated. Engineer, C. E. Fowler, Central Bldg., Seattle. Owners, City of Aberdeen. Bids are now being taken by the Aberdeen officials for the construction of one 260 foot and one 116 foot steel span bridges. Bids will be opened at Aberdeen on September 8th by the City Clerk. The bridges will have a 21 foot roadway and five foot sidewalks. L. D. Kelsey is city engineer at Aberdeen.

SAN FRANCISCO.—Pier shed, frame and steel. Cost not stated. Engineer, Assistant State Engineer, Ferry Bldg. Owners, State of California. Bids will be opened on September 10th by the State Board of Harbor Commissioners for constructing a new shed on Pier No. 35, and also for furnishing materials for wooden block pavement on Pier No. 22. Plans and specifications can be secured from the Secretary's office in the Ferry Bldg.

BATHING PAVILION, 1 story frame. Cost not stated. San Mateo, San Mateo Co., Cal. Architect, W. H. Toepke, 46 Kearny street, S. F. Owners, City of San Mateo. Location, Bay Beach. Will include dressing rooms, open air pavilion, cafe and grill rooms. Interior finish pine. Exterior cement plaster on metal lath. Plans being prepared.

Contracts Awarded.

REDDING, SHASTA CO., CAL.—Bridge, reinforced concrete. \$6,166. Engineer, County Surveyor, Redding. Owners, Shasta County. Contractor, William Stephens, Redding. Contract price, \$6,166. A bid of \$15,976 was also received by the Portland Bridge Co., Portland, Ore., for construction of the Kennett Bridge, but was laid over until the next meeting of the Board.

VISALIA, TULARE COUNTY, CAL.—Bridge, reinforced concrete and timber. Costs as follow. Engineer, County Surveyor, Visalia. Owners, Tulare County. Contractors, The Turner Co., S. F. Kings River Bridge, \$14,332—

George E. Bridbury, Los Angeles, bridge over canal 76, \$1,196, and Panama Lumber Co., Visalia, two timber bridges at \$2,242 and \$3,044.

MARTINEZ, CONTRA COSTA CO., CAL.—Bridges, 3 reinforced concrete. \$6,930. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractors, Macre & Layaz, San Francisco. Contract price, \$6,930.

DUNSMUIR, SISKIYOU CO., CAL.—Bridge, steel and concrete. \$17,726. Engineer, City Engineer, Kemmet. Contractors, Portland Bridge Co., Portland, Ore. Contract price, \$15,976. The city will furnish the steel at \$1,750.

◆ BANKS

Contracts Awarded.

RIO VISTA, SOLANO CO., CAL.—Bank fixtures, \$3,715. Architect, W. H. Weeks, 76 Post street, S. F. Owners, National Bank of Rio Vista. Contractors, Fink & Schindler Co., S. F. Contract price, \$3,715.

STOCKTON, SAN JOAQUIN CO., CAL.—Bank, 1 story and base. Class A construction. \$75,000. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owners, Stockton Bank of Savings. Contractors, P. J. Walker & Co. Monadnock Bldg., S. F. Contract awarded on percentage basis. Plans being prepared.

◆ FACTORIES AND WAREHOUSES

SAN FRANCISCO.—Brewery and warehouse, 1 - 4 story reinforced concrete and 1 - 2 story frame. Cost not stated. Architect, C. A. Darmer, Tacoma, Washington. Owners, Pacific Brewing & Malting Co., local representatives Tacoma Bottling Works, 2360 Harrison street, S. F. Location, 677 to 679 Treat avenue, covering an area of 55 by 93 feet and 22.10 by 40 feet. Construction of four fire-proof. Interior, pine and tile. Special machinery. Exterior cement plaster. Plans complete and in hands of owners who will do the work by Day Labor.

SAN FRANCISCO.—Brewery addition. Concrete and frame. Architect, none. Owners, Henry Weinard Brewery, 1255 Harrison street, S. F. Work will consist of raising the present building underpinning walls and installation of plumbing. Plans complete and in the hands of the owner who will do the work by Day Labor.

◆ FLATS

SAN FRANCISCO.—Flats, 3 story and base, frame, \$6,500. Architect, none. Owner, John MacDonald, 106 Guerrero street, S. F. Location, west Dolores, north 15th street, covering an area of 25 by 72 and arranged for three flats. Interior finished in pine with elm panels and hardwood floors. Open fire places in the living rooms with tile mantels. Tile bath rooms and automatic heaters. Exterior covered with rustic and cement plaster. Plans in

the hands of the owner, who will do the work by Day Labor.

SAN FRANCISCO.—Flats 2 story and base, frame, \$5,000. Architect, none. Owner, W. L. Hemminga 'Inc., Fell street, S. F. Location, southeast corner 15th avenue and California, covering an area of 27 by 67 feet and arranged for two flats of six rooms each. Interior finish pine and elm with some hardwood floors. Open fire places and tile mantels and tile wainscot in the bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO.—Flats 2-2 story and base, frame, \$5,000 each. Architect, none. Owner, O. E. Anderson, 207 10th avenue, S. F. Location east 15th avenue south of California. Each will contain two modern flats. Interior finish, pine and elm panels with hardwood floors, open fire places and tile or brick mantels. Tile wainscot in the baths. Automatic water heaters. Exterior covered with rustic. Plans in hands of the owner who will do the work by Day Labor.

SAN FRANCISCO.—Flats 2 story and base, frame, \$3,500. Architect, A. J. Bain, Russ Bldg., S. F. Owners, J. M. and Jane Dixon. Location northeast Grant avenue and Whiting Place. Will contain two flats finished in pine and redwood. Open fire places and tile mantels. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

◆ GARAGES

SAN FRANCISCO.—Garage, 1 story and base. Class C construction, \$15,000. Architect, Smith O'Brien, Humholdt Bank Bldg., S. F. Owner's name withheld. Location Valencia near Duchoe avenue. Has been designed for commercial garage. Brick walls, cement floor and steel roof trusses. Interior, pine. Special gasoline storage tanks. Exterior faced with pressed brick. Plans are being prepared.

LOS ANGELES.—Garage, 1 story and base, brick. Cost not stated. Architect, John J. Frauenfelder, Story Bldg., L. A. Owner, James Roche. Location, 542 Figueroa street covering an area of 60 by 165 feet and designed for a commercial garage. Brick walls, cement floor and special gasoline tanks. Metal window sash and frames. Exterior faced with cement plaster. Plans complete.

◆ GOVERNMENT WORK & SUPPLIES

San Francisco, Cal. Repairs.

The contract for repairs, painting and etc., at the United States Mint, San Francisco, Cal., has been awarded to Isidor Kissel, San Francisco, on his bid of \$6,564, time 90 days.

Strawberry Valley Project.

Under authority of the Secretary of the Interior Department a contract has been awarded to Henson, Sim & Vorkink, Salt Lake, Utah, for the construction of Div. 9 of the High Line Canal, Strawberry Valley Irrigation Project. The work involves approximately 25,000 cubic yards of excavation and placing of 2,600 cubic yards of compound concrete. The total contract price is \$35,504.10.

Hilo, H. T., Plaster Molds.

The following bids were received by the supervising Architect, Treasury Department, Washington, D. C., for furnishing plaster molds for the U. S. Post office at Hilo, H. T.:

E. C. Barstow, Washington, \$1,300.
Emil Jung, Washington, D. C., \$1,450.

Lombard & Ludwig, Washington, D. C., \$1,503.

J. Brys & F. Bruyninck Co., Washington, D. C., \$1,820.

Pearl Harbor Dredging.

The contract for dredging in Pearl Harbor, Hawaii, under bids opened at the bureau of yards and docks on July 31, has been awarded to Lord Young Engineering Co., of Honolulu, Hawaii, at \$43.5 cents.

Santa Barbara, Cal., Painting.

The contract for painting plastering in the U. S. Postoffice building at Santa Barbara, Cal., has been awarded to D. J. Inman, Danville, Ill., at \$745.

San Diego Radio Station.

The bid of the Jacobs Construction Co., of Los Angeles, Cal., \$39,950 in amount, has been accepted for constructing buildings at the radio station, San Diego, Cal.

◆ HALLS AND SOCIETY BUILDINGS

SEATTLE, WASH.—Lodge Hall, 3 story and base, brick and steel, \$125,000. Architect, George W. Lawton, Alaska Bldg., Seattle. Owners, Seattle Masonic Hall Association. Location southwest corner Harvard and Pine streets. Arranged exclusively for lodge purposes. Interior trim in pine and hardwood with hardwood floors. Steam heat, elevator service and vacuum cleaning. Exterior faced with pressed brick and terra cotta. Plans complete and owners awaiting a loan.

SEATTLE, WASH.—Lodge hall, 3 story and base, brick and steel, \$150,000. Architect, George W. Lawton, Alaska Bldg., Seattle. Owners, Masonic Temple Association. Location, southeast corner of Pine and Harvard sts. Interior arranged for the exclusive use of the owners. Interior finish pine and hardwoods. Steel frame, brick exterior walls, faced with pressed brick and terra cotta. Plans being figured.

Contracts Awarded

STOCKTON, SAN JOAQUIN CO., CAL.—Lodge hall and stores, 2 story brick and steel, \$35,000. Architect, Franklyn Warner, San Joaquin Bldg., Stockton. Owner, Peter Jordan. Contractors, P. J. Walker Co., Monadnock Bldg., S. F. Contract price, \$35,000.

PORTLAND, ORE.—Lodge hall, 4 story and base, brick and steel, \$90,000. Architects, Houghtaling & Dougan, Henry Bldg., Portland. Owners, Elks Hall Association. Contractors, Le Doux & Le Doux, 189 Simpson st., Portland. Contract price, \$90,000.

◆ HOSPITALS.

SAN FRANCISCO.—Hospital, 2 story frame and cement plaster, \$20,000. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. The Public Buildings Committee has

recommended to the Board of Supervisors that the sum of \$20,000 be made available for the construction of a temporary Central Emergency Hospital to be erected in the Civic Center. The committee report states that a frame and plaster building costing \$20,000 will suffice for the present. Further mention will be made of the work.

OAKLAND, CAL.—Hospital addition, frame and concrete. Cost not stated. Architect, none. Owners, Alameda County. Plans have been completed and bids will be opened on September 12th for the construction of a temporary dormitory and a temporary ward building to be erected at the Alameda County Infirmary. Plans and specifications can be secured from the County Clerk.

SACRAMENTO, CAL.—Hospital group, 1-2 and 3 story and base, reinforced concrete. \$400,000. Architect, A. R. Herold, Forum Bldg., Sacramento. Owners, Sacramento County. Architect Herold has been officially selected to prepare plans and specifications for the new County Hospital. Details of construction have not been made public as yet. Further mention will be made of the work. Construction will be started this year. Plans are being prepared.

HOTELS.

SAN FRANCISCO—Hotel and stores, 3 story and base, brick and steel, \$15,000. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owner's name withheld. Location, Stockton, north of Sacramento, having frontage of 33 by 80 and will contain two stores and 33 rooms, five baths and nine toilets. Interior finish pine with tile baths. Hot water system. Exterior faced with pressed brick. Plans complete and figures being taken.

ALTADENA, LOS ANGELES CO., CAL.—Hotel, 3 story and base, brick. Cost not stated. Architect, N. Barker, Lake & Foothill Blvd., Altadena. Owners, James Smith Estate. Location Colorado and Fair Oaks. Will contain stores and single rooms and apartments. Interior finish, pine. Steam heat, hot water system and patent store fronts. Exterior faced with pressed brick. Revised plans complete and being figured.

IRRIGATION PROJECTS

HANFORD, KINGS CO., CAL.—Irrigation reservoir, concrete construction, \$1,250,000. Engineer's name not given. Owners, Oakdale and South San Joaquin Irrigation Districts. According to word received from this city a million and a quarter dollar reservoir is being planned jointly by the Oakdale and South San Joaquin Irrigation Districts and the Utica Gold Mining Co. The irrigation districts have come to terms with the mining company, and it is expected that the reservoir will be built this fall on the east fork of the Stanislaus River. The project is said to have been approved by the Federal authorities.

OROVILLE, BUTTE CO., CAL.—Irrigation canal. Cost not stated. Engineer's name not given. Owners, Great Western Canal Co., Oroville. The Great

Western Canal Co. has announced that the construction of the second unit of its western canal will be started the coming fall. Arrangements have practically been completed for rights-of-way. The new ditch will be six to seven miles long, and will run into the rice belt in western Butte county. The present system goes to the edges of the rice growing district, with its completion, more than 150,000 acres will be placed under water.

MODESTO, STANISLAUS CO., CAL.—Irrigation ditch, cost not stated. Engineer, F. C. Herrmann, Modesto. Owners, Modesto Irrigation District. Chief Engineer, F. C. Herrmann, of the Modesto Irrigation District, at a recent meeting informed the Board of Directors that he would try to have estimate of the cost of enlarging the main canal, so that it can take care of water for the Waterford irrigation district, completed in time to present at the next meeting of the Modesto board September 13th.

LIBRARIES.

SAN FRANCISCO—Library, 4 story and base, Class A construction, \$1,000,000. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Bids are now being taken for the general construction of the main library building in the Civic Center and will be received on September 3rd, but will not be opened until the regular meeting of the Board of Library Trustees on September 7th. Construction will be Class A throughout. Plans and specifications can be secured from the architect on deposit of \$50.

SAN FRANCISCO—Library stacks, etc., Cost not stated. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Bids will be opened by the Library Trustees on September 7th for furnishing and installing metal book stacks and metal furniture in the new building in the Civic Center. Plans can be secured from the architect.

GRASS VALLEY, NEVADA CO., CAL.—Library, 1 story and base, brick and stone. \$15,000. Architect, William Mosser, Nevada Bank Bldg., S. F. Owners, City of Grass Valley. Preliminary plans have been prepared and accepted for a one story building of classic design. Interior will be finished in pine and hardwood with maple floors and metal book stacks. A central heating system, probably steam heat, will be installed. Exterior will be faced with pressed brick. Plans are in the hands of the Carnegie Association for approval. Further mention will be made of the work.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Library work, concrete. Cost not stated. Architect, none. Owners, City of South San Francisco. All bids received for a concrete retaining wall, concrete steps and for lighting fixtures for the new library building have been received as being above the estimate. New bids will be called.

SACRAMENTO, CAL.—Library, 2 story and base. Reinforced concrete. \$100,000. Architect not selected. Owners, City of Sacramento. The plans for the proposed library building to be

erected in the Civic Center at 9th and "T" streets, have been taken under consideration by the City Commission. A selection will soon be made and the plans selected will be forwarded to the Carnegie Corporation for approval. Three architects from Sacramento submitted plans, J. W. and W. L. Wollett, F. C. Hemmings and C. C. Cuff. All plans call for a building to cost \$100,000.

PENDLETON, ORE.—Library, 1 story and base, hollow tile. \$25,000. Architects, Johnson & Mayer, Commercial Club Bldg., Portland. Owners, City of Pendleton. Design is in the classic style with exterior faced with pressed brick and terra cotta. Interior finish pine and hardwood with maple floors. Steam heat, metal book stacks and metal window sash and frames. Plans complete and figures being taken.

Contracts Awarded.

SAN FRANCISCO—Library, steel erection, \$17,175. Architect, eorge William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Contractors, California Construction Co., New Call Bldg., S. F. Contract price \$17,175.

RAILROAD CONSTRUCTION AND EQUIPMENT.

Contracts Awarded.

ALASKA—Railroad construction, \$148,500. Engineer, Alaska Railroad, Engineers, Alaska Bldg., Seattle. Owners, United States Government. Contractors, Colorado Fuel & Iron Co., Denver, 4950 tons of steel rails. Contract price, \$148,500.

RESIDENCES.

SAN FRANCISCO—Residences, 6 two story and base, frame, \$2,400 each. Architect, none. Owner, J. Anderson, 423 16th avenue, S. F. Location east 17th avenue south of Geary. Contain five rooms and bath. Interiors finished in pine with some elm panels and hardwood floors. Open fire places with tile, or brick mantels. Imitation tile wainscot. Automatic water heaters. Exteriors covered with rustic and cement plaster on metal lath. Plans are complete and work to be done by Day Lahor.

SAN FRANCISCO—Residence 2 story and base, frame, \$8,000. Architect, H. C. Baumann, Chronicle Bldg. S. F. Owner, Gus F. Lehrke. Location, west Connecticut south 18th street. Will contain seven rooms, bath and store. Interior finish pine, hardwood and white enamel. Hardwood floors and tile bath. Open fire place and tile or brick mantel. Automatic water heater. Patent store fronts. Exterior covered with cement plaster. Plans complete and figures have been taken.

SAN FRANCISCO—Residences, 4 two story and base, frame, \$3,500. Architect, Joseph M. Geary, 2581 Folsom st., S. F. Owner, J. H. Kruse. Location north College Terrace west Mission. Each will contain six rooms and bath. Interior finish, pine, elm panels and hardwood floors. Open fire places and tile and brick mantels. Tile wainscot in bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster on metal lath. Plans

complete and contract to be awarded at once.

SAN FRANCISCO.—Residence, 2 story and base, frame, \$2,500. Architect, Chester H. Miller, Dalziel Bldg., Oakland. Owner, B. Pedrett. Location, Lake Shore Tract. Will contain seven rooms and bath. Interior finish pine, elm panels and white enamel. Hardwood floors, tile in bath room. Open fire places and tile mantels. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

SAN FRANCISCO.—Residence, 2 story and base, frame, \$3,500. Architect, A. W. Richardson, 937 Church street, S. F. Owner, J. J. Barry. Location west Coleridge, South Lizzie. Will contain six rooms, bath and sleeping porch. Interior finish pine and hardwood veneer with hardwood floors. Imitation tile in the bath. Automatic water heater and open fire place. Mantel brick. Exterior rustic and cement plaster. The Plans are complete and figures being taken.

OAKLAND, CAL.—Residences, 4 one story and base, frame, \$2,500 each. Architect, none. Owner, F. A. Muller, Syndicate Bldg., Oakland. Location, east Hill, Cass, north Alcatraz. Will contain six rooms, bath and sleeping porches. Interiors finished in pine, elm panels and white enamel. Hardwood floors, open fire places and tile and brick mantels. Tile in bath rooms. Automatic water heaters. Exteriors covered with rustic and cement plaster on metal lath. Plans complete and in hands of owner who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, H. H. Weider, 1735 Broadway, Oakland. Location, east Broadway, south Prospect. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and tile or brick mantel. Tile in bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and in the hands of the owner, who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$5,000. Architect, none. Owners, Banning & Stewart, 5215 Broadway, Oakland. Location, west Belgrave Place, near Napa. Will contain seven rooms, two baths and sleeping porch. Interior finish pine, elm and white enamel. Hardwood floors, open fire places, furnace heat and automatic water heater. Bath finished in tile. Mantels brick. Exterior covered with cement plaster on metal lath. Plans complete and in the hands of the owners, who will do the work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$6,500. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, John J. McDonald. Location, Crocker Highlands Tract. Will contain eight rooms, three baths, sleeping porch and garage. Interior finish pine and hardwood with hardwood floors. Bath rooms finished in tile. Furnace heat, open fire places and tile or brick mantels. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

SAN FRANCISCO.—Residence, 1½ story and base, frame, \$2,500. Architect, none. Owner William Vaughan, 511 Moscow street, S. F. Location, Excelsior Homestead Tract. Will contain five rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile or brick mantel. Bath room tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO.—Residence 2 story and base, frame, \$4,000. Architect, none. Owner, J. M. Peters, 1010 Balboa street, S. F. Location, west 16th avenue south of Lake. Will contain seven rooms bath and sleeping porch. Interior finish, pine, hardwood and white enamel. Hardwood floors, open fire place, tile or brick mantel, and automatic water heater. Tile wainscot in bath room. Exterior covered with cement plaster. Plans complete and work will be done by Day Labor.

OAKLAND, CAL.—Residence 1 story and base, frame, \$2,000. Architect, none. Owner, G. W. Baumann, 6106 Noble street, Oakland. Location north Trask, west of Kingsland. Will contain five rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. Exterior rustic and cement plaster. Plans complete and work will be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, E. L. Higgins, 5250 Miles avenue, Oakland. Location east Thomas north Napa. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel, hardwood floors, open fire place and tile mantel. Bath room finished in tile and equipped with automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work will be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame. Cost not stated. Architects, Garden & Kuhn, Phelan Bldg., S. F. Owner, Frank E. McGurkin. Location, lot 19th Sequoia Hills. Will contain eight rooms, two baths, and sleeping porch. Interior finish, pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and figures being taken.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, C. M. MacGregor, 470-13th street, Oakland. Location, Woodruff, east of 38th street. Will contain five rooms and bath. Interior finish in pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heater. Exterior covered with cement plaster. Plans complete and work will be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$6,550. Architect, F. C. Davis, 515 Buena Vista avenue, S. F. Owner, Grace E. Jones. Location north Wellington west of Edgewood. Will contain eight rooms two baths and sleeping porch. Interior finish pine hardwood and white enamel. Hardwood floors, open fire places and tile mantels. Tile in the bath rooms. Auto-

matic water heaters. Exterior covered with cement plaster on metal lath. Plans being prepared.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, P. E. Woodburn, 3965 Greenwood avenue, Oakland. Location East Vista, south of Everett. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel brick. Automatic water heater. Bath room finished in tile. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN JOSE, SANTA CLARA CO., CAL.—Residence, 1 story and base, frame, cost as follows. Architect none. The following day labor jobs are reported as about to be started in San Jose: J. P. Clark, 11 and San Carlos, 1½ story, \$2,500; M. D. Forsythe, 664 Spencer, alterations, \$1,500 and J. W. Trumbull, 26th near Santa Clara, \$1,500.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, C. L. Saylor, 1035 Green street, Fresno. Location, Fresno Heights. Will contain five rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

MARTINEZ, CONTRA COSTA CO., CAL.—Residences, twenty, 1 story and base, frame. Cost not stated. Architect, none. Owners, Shell Oil Co. This company is now building 36 homes for its employees and is figuring the contract on twenty more additional. Interior finish pine. Exteriors rustic and shingles. Plans now being figured.

LOS ANGELES, CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, Frank L. McIne, 6772 Hollywood, L. A. Owner, L. B. Martin. Location, Lucerne avenue, between 4th and 5th streets. Will contain 12 rooms, four baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors tile bath rooms, open fire places, furnace heat, vacuum cleaning and hot water system. Mantels brick and tile. Exterior covered with cement plaster on metal lath. Plans being prepared.

PEDMONT, ALAMEDA CO., CAL.—Residence, 1 story and base, reinforced concrete. Cost not stated. Architect C. W. Dickey, Central Bank Bldg., Oakland. Owner, Mills Juliet Alexander. Location, Clegg avenue. Will contain 12 rooms, three baths, sleeping porches and a garage. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat, open fire places, brick and tile mantels, hot water system and vacuum cleaning. Tile bath rooms. Exterior faced with cement plaster. Contract for grading awarded to Bates-Borland & Ayer, Oakland, for \$2,000. Other parts of the work out for figures.

Contracts Awarded

PORTLAND, ORE.—Residence 2 story and base, reinforced concrete, \$100,000. Architects, Whitehouse & Foulhoux, Portland. Owner, T. B. Wilcox. Contract price, \$100,000.

LOS ANGELES, CAL.—Residence, 2 story, attic and base frame and brick, cost not stated. Architects, Eisen &

Son, Wilcox Bldg. L. A. Owner, Dr Ralph Williams. Contractor, John F. Andrews, Jr., 1011 Hollingsworth bldg., L. A. Contract price not stated.

SCHOOLS.

SAN FRANCISCO—School 3 story base, brick and steel, \$150,000. Architect, Frederick H. Meyer, Bankers Investment Bldg., S. F. Owner, Cogswell School. Location 26th and Folsom streets. Fire-proof construction, steel frame, brick exterior walls, hollow tile interior partitions and concrete stairways. Interior finish pine with maple floors. Steam heat, vacuum cleaning and modern plumbing. Exterior faced with pressed brick. Contract for structural steel awarded to Western Iron Works. Bids being taken on general construction.

SUISUN, SOLANO CO., CAL.—School, 1 story and base, frame and plaster, \$20,000. Architects, W. H. Crim, Jr., associated with Edward J. Sims, 425 Kearny street, S. F. Owners, Suisun School District. Will contain six class rooms, office and auditorium. Interior finished in pine with maple floors. Central heating system, modern school plumbing, and program clocks. Exterior covered with cement plaster on metal lath. Plans being prepared.

PORTLAND, ORE.—School, 2 story and base, reinforced concrete, \$22,928. Architect, F. A. Harmore, Supt. of School Properties, Portland. Owners, City of Portland. J. F. Shea of Portland presented the lowest bid for the construction of the new Franklin school at \$22,928, with an alternate of \$1,050. He will probably be awarded the contract. Three other close bids were received.

SUISUN, SOLANO CO., CAL.—School 1 story and base, frame, \$20,000. Architect, W. H. Crim, Jr., associated with Edward J. Sims, 425 Kearny street S. F. Owners, Suisun School District. Will contain six class rooms, auditorium and office. Interior finish pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior, cement plaster on metal lath. Plans being prepared.

WOODLAKE, TULARE CO., CAL.—School, 1 story and base, brick, \$25,000. Architect, O. L. Clark, Brower Bldg., Bakersfield. Owners, Woodlake School District. Will contain six rooms and auditorium. Interior finish pine with maple floors. Central heating system and modern school plumbing. Exterior faced with pressed brick. Plans complete and figures being taken.

BRAWLEY, IMPERIAL CO., CAL.—School, 1 story and base, frame. Cost not stated. Architect Albert C. Martin, Higgins Bldg., L. A. Owner, Roman Catholic Church. Designed for a parochial school and will cover an area of 60 by 95 feet. Interior finish pine with maple floors. Exterior cement plaster on metal lath. Plans complete and figures being taken. Father Burbach in charge.

CORONA, RIVERSIDE CO., CAL.—School, 1 story and base, frame and plaster, \$25,000. Architect Leo Kroonen, Corona. Owners, San Jacinto School District. Will contain nine class rooms and an auditorium. Interior finish pine with maple floors in class rooms. Central heating system, mod-

ern plumbing and program clocks. Exterior covered with cement plaster on metal lath. Plans being prepared.

Contracts Awarded

CHULA VISTA, VENTURA CO., CAL.—School, 1 story and base, frame, \$18,346.60. Architect's name not given. Owners, Chula Vista School District. Contractor, J. A. Chisholm, and R. W. Jackson, Chula Vista. Contract price, \$18,346.60. Plumbing, Schultheiss Bros., Chula Vista. \$1,566.

NILAND, IMPERIAL CO., CAL.—School, 1 story, reinforced concrete, \$13,985. Architect, Norman F. Marsh, Central Bldg., L. A. Owners, Niland School District. Contractor, J. Simon Fluor, Santa Ana. Contract price, \$13,985.

LOS ANGELES, CAL.—School, 2 story and base, brick, \$32,750. Architect, W. C. Pennell Baker-Detwiler Bldg., L. A. Owners, City of Los Angeles. Contractor, Frank R. May, Security Bank Bldg., L. A. Contract price \$32,750.

REDONDO BEACH, LOS ANGELES, CAL.—School, 1 story and base, brick and hollow tile, \$24,579. Architect, L. B. Pemberton, Auditorium Bldg., L. A. Owners Redondo School District. Contractor, W. M. Bell, Redondo Beach. Contract price, \$24,579.

SEWERS, STREET WORK & WATER SYSTEMS.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street improvements. Cost not stated. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. Bids will be opened on September 7th for Grading and paving of Grand avenue from the meridian line of Ashton street to the easterly line of the land of Giuseppe Ucelli and that portion of Grand avenue from the westerly line of the lands of the South San Francisco Improvement Co., to the northeasterly line of the Mission road for the full width thereof.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. A resolution ordering the improvement of the Grand avenue extension from Chestnut avenue to Mission road, with a concrete-asphalt pavement was adopted at the last meeting of the City Trustees. Bids on the work will be ordered called for at the next meeting.

SAN JOSE, SANTA CLARA CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Bids have been ordered received for the construction of a drain on the Tulley Road in Supervisor District No. 2. Bids close on September 14th, at 11 a. m. Further information may be had from the County Surveyor.

SAN JOSE, SANTA CLARA CO., CAL.—Crushed Rock. Cost not stated. Engineer, County Surveyor, San Jose. Owners Santa Clara County. The County Supervisors have ordered bids received for Saratoga crushed rock to be delivered in Road District No. 5, at the following roads: Evelyn avenue, 3150 yards; Maud avenue, 1650 yards; Alivi and Mt. View road, 3510 yards; Mathilda avenue, 1235 yards. All to pass 2 inch ring. Bids to be opened Monday, September 13.

SALINAS, MONTEREY CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Salinas. Owners, Monterey County. Bids will be received until September 7th for improving Carmel Valley Road between Hatton Corner and the Laureles Ranch House, in Carmel, Sur and Tubarillos Road Districts.

SALINAS, MONTEREY CO., CAL.—Road grading and macadamizing. Cost not stated. Engineer, County Surveyor, Salinas. Owners, Monterey County. Bids will be received until September 7th at 2 p. m. for grading and macadamizing a part of the Salinas-Monterey Road, in Toro and Monterey Road District.

SAN ANSELMO, MARIN CO., CAL.—Street paving and sewers. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Bids will be received until 6 p. m. on September 6th by the Board of Town Trustees for Construction of sewers in Cedar street and San Anselmo avenue, and paving both streets.

PETALUMA, SONOMA CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Sonoma. Owners, City of Sonoma. The City Engineer has complete plans and specifications for the improvement of Kent street from Walnut to Howard. Bids on the work will soon be called for.

MARTINEZ, CONTRA COSTA CO., CAL.—Water reservoir, concrete construction. Cost not stated. Engineer, City Engineer, Martinez. Owners, City of Martinez. The offer of W. D. Thomas of a free site 150 feet square for a reservoir at an elevation of 350 feet in the Thomas Tract in this city has been taken under advisement by the City Trustees and an early decision is expected. The City Engineer has been instructed to make estimates of the cost of construction and file a report at the next meeting.

MARTINEZ, CONTRA COSTA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer Brown, Martinez. Owners, City of Martinez. At the last meeting of the City Trustees, plans and specifications for the construction of two 18 inch sewers extending the full length of Pine street for both sides of the city, have been ordered prepared. City Engineer Brown will start on the plans at once. On completion of the working drawings bids will be called for. At the same meeting a formal order for the extension of the Ferry street sewer to the center line of Green street was made.

EUREKA, HUMBOLDT CO., CAL.—Furnishing crushed rock. Cost not stated. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Bids will be opened on September 7th at 8 p. m. for furnishing approximately 5,000 cubic yards of crushed rock. Complete particulars can be secured from the County Clerk.

SACRAMENTO, CAL.—Street paving. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Work will soon be started on the paving of more than a mile of concrete roadway 16 feet wide in Fair Oaks.

SACRAMENTO, CAL.—Highway construction, \$22,500. Engineer, State Highway Commission Forum Bldg.,

Sacramento. Owners, State of California. Only four sets of bids were opened by the State Highway Commission on August 23 for constructing Division 2, Route 3, Section A of the State Highway in Siskiyou County. F. H. Green of Eureka presented the low bid at \$22,600. No award was made. A complete list of the bids will be found under the heading of San Francisco in this issue.

STOCKTON, SAN JOAQUIN CO., CAL.—Street improvements, \$25,942.06. Engineer, City Engineer, Stockton. Owners, City of Stockton. At the last meeting of the City Council, plans and specifications for the improvement of North Commerce North Center, Maple and Ash streets and a resolution ordering the work under resolution of inspection No. 529 was adopted. The streets mentioned are to be improved with curbing and guttering and are to be paved with asphalt concrete.

RIVERSIDE, RIVERSIDE CO., CAL.—Road Improvement. Cost not stated. Engineer, County Surveyor, Riverside. Owners, Riverside County. Bids will be opened on September 8th for the improvement of Route No. 2 and a portion of Route No. 1 (Riverside to Scully property). Improvement consisting in part of grading and paving with concrete 16 feet wide and 4 inches thick, 8.71 miles of road, and for the improvement of Routes No. 13 and No. 14, Iowa avenue, from 5th street to County Line and Rialto Road from Riverside to County Line, said improvements consisting in part of grading and paving with concrete 16 feet wide and 4 inches thick 3.67 miles of road.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Road pavement, \$17,689. Engineer, County Surveyor, Santa Barbara. Owners Santa Barbara County. The Supervisors have ordered bids called for for the paving of the Booths Point Road. Bids for the work will be opened on September 20th. The work will cost in the neighborhood of \$17,689, according to the estimate of the County Engineer, from whom further information may be had.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Plans and specifications for the improvement of a portion of Alameda Padre Serra from Los Olives extension to the westerly property line of the Santa Barbara State Normal School have been completed and bids for this work are now being taken by the City Council.

Bids close September 2nd, 12 noon. Further information may be had from the City Engineer.

SANTA ROSA, SONOMA CO., CAL.—Street improvement, \$3,579.95. Engineer, City Engineer, Santa Rosa. Owners, City of Santa Rosa. Bids will be opened on September 7th for paving Santa Rosa avenue and other grading, curbing and sidewalk work. Plans on file at the office of the City Clerk.

MONTEREY, MONTEREY CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Monterey. Owners, City of Monterey. Resolution has been passed for the macadamizing of Main street and bids will be called very shortly.

MONTEREY, MONTEREY CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Monterey. Owners, City of Monterey. Bids will be opened September 7th for paving Pacific street from Madison to Jefferson and also for grading, sidewalk work and curbs. Plans at the office of the City Engineer.

BAKERSFIELD, KERN CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor of Bakersfield. Owners, Kern County. Plans are on foot for the construction of a road to Mt. Whitney from Bakersfield. The first definite steps will be taken when the Supervisors meet next September and three viewers are appointed to look over the road as far as the Tulare county line. If that road can be built, an appeal will be made to Washington, requesting the construction of a road through the forest reserve.

RIVERSIDE, RIVERSIDE CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer Riverside. Owners, City of Riverside. Preliminary steps were taken by the Council for the improvement of North Main street from First street to city limits when plans were ordered prepared for the work. Bids for the work will soon be called for.

RIVERSIDE, RIVERSIDE CO., CAL.—Road Construction. Cost not stated. Engineer, County Surveyor, Riverside. Owners, Riverside County. Plans and specifications have been adopted and bids have been ordered for the construction of the highway from Perris to Elsinore, a distance of 9.29 miles. Bids will be opened on September 8th at 3 p. m. Further information may be had from the County Surveyor at Riverside.

Contracts Awarded.

MARTINEZ, CONTRA COSTA CO., CAL.—Road construction, \$29,681.71. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractor, P. H. Hoare, Bacon Bldg., Oakland. Contract price, \$29,681.71.

PITTSBURG, CONTRA COSTA CO., CAL.—Sewer work. Cost not stated. Engineer, Town Engineer, Pittsburg. Owners, Town of Pittsburg. Contractor, D. H. MacQuiddy, Pittsburg. Contract price not stated.

PETALUMA, SONOMA CO., CAL.—Electroliters, \$1,300. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. Contractors, Pacific Fire Extinguisher Co., 507 Montgomery St., S. F. Contract price \$1,300.

HANFORD, KINGS CO., CAL.—Furnishing rock. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractors, Grant Rock & Gravel Co., Flatiron Bldg., S. F. Contract price not stated.

HANFORD, KINGS CO., CAL.—Highway construction. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractors, Thompson Bros., 1514 H St., Fresno. Contract price not stated.

SAN MATEO, SAN MATEO CO., CAL.—Highway and sewer construction. Cost as follows. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Contractors, Ransome-Crummey Co., Oakland, paving in San Mateo Park, \$70,850; Federal Construction Co., Sharon Bldg., S. F., \$77,800; Fred Lefler, 110 Jessie street, S. F.,

sewers in Hayward Park, contract price not stated.

STORES AND OFFICES.

MARTINEZ, CONTRA COSTA CO., CAL.—Offices 1 story and base, reinforced concrete. Cost not stated. Architect, James T. Narbett, 704 Macdonald ave., Richmond. Owners, Pacific Gas & Electric Co. Bids will be opened on September 7th for a one story building which will contain the local offices of the company. Interior finish pine and hardwood with tile floor. Exterior faced with cement plaster and pressed brick. Plans at office of the architect.

FRESNO, FRESNO CO., CAL.—Stores, 1 story and base, brick, \$20,000. Architect's name not given. Owners, Tupper Estate, Location K and Kern sts. Will be arranged for a number of small stores. Interior finish pine and hardwood. Patent store fronts marble base. Exterior faced with pressed brick.

LOS ANGELES, CAL.—Stores, 1 story and base, brick. Cost not stated. Architects, Morgan-Walls & Morgan, Van Nuys Bldg., L. A. Owner, William Garland. Location Hope near 16th street, covering an area of 50 by 60 feet. Arranged for three stores. Interiors finished in pine and hardwood. Patent store fronts. Exterior faced with pressed brick. Plans complete and figures being taken.

LOS ANGELES, CAL.—Stores and offices, 2 story and base. Class C construction. Cost not stated. Architect, George W. Harding, Washington Bldg., L. A. Owners, Pioneer Truck Co. Location, Alameda street near Jackson covering an area of 30 by 75 feet. Interior finish pine and hardwood. Patent store fronts and marble base. Exterior faced with pressed brick and terra cotta. Plans being prepared.

Contracts Awarded.

LOS ANGELES, CAL.—Store, 1 story and base, brick \$30,000. Architects, Morgan-Walls & Morgan, Van Nuys Bldg., L. A. Owner, L. A. Lothian. Contractor, J. A. Crook, Douglas Bldg., L. A. Contract price, \$30,000.

OAKLAND, CAL. Stores, 1 story and base, brick, \$6,000. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owners, Hawley Investment Co., Contractor, F. A. Muller, Syndicate Bldg., Oakland. Contract price, \$6,000.

THEATRES.

OAKLAND, CAL.—Theatre and stores 3 story and base, reinforced concrete and steel, \$175,000. Architects, Cunningham & Poltice, First National Bank Bldg., S. F. Owners, Moffitt Estate. Location southwest corner of 11th and Franklin streets, covering an area of 100 by 150 feet. Will contain stores besides a theatre with main floor and balcony seating 1500 people. Interior finish hardwood, pine and ornamental plaster. Concrete floors, hollow tile interior partitions, metal window sash and frames. Steam heat and modern ventilating equipment. Exterior faced with cement plaster and terra cotta. Plans for steel work being figured and bids for general construction to be called for at once.

OAKLAND, CAL.—Theatre and stores 3 story and base, Class A construction, \$100,000. Architect, Edward T. Foulkes. Crocker Bldg., S. E. Owner, Henry McPike. Location east Franklin north of 15th street. Will contain a number of stores on first floor besides theatre, while upper floors will be arranged for offices. Steel frames and exterior walls and floors, of concrete. Interior finish pine, hardwood, metal trim and ornamental plaster. Steam heat, elevator service, vacuum cleaning and modern plumbing. Hollow tile interior partitions, metal window sash and frames, marble base. Exterior faced with pressed brick and terra cotta. Plans complete and segregated figures being taken.

SEALED PROPOSALS

NOTICE TO CONTRACTORS.

Proposals for Bridges.

BRIDGE—Department of the Interior, U. S. Reclamation Service, Washington, D. C. Sealed proposals will be received here until 2 o'clock, **September 2, 1915**, for furnishing and erecting a steel bridge of three 100-ft spans and a structural steel movable crest, with operating machinery for the Vandallia Dam of the Milk River Project, Mont. For particulars address U. S. Reclamation Service, Washington. **A. P. DAVIS**, chief engineer.

Proposals for Canal Supplies.

PANAMA CIRCULAR 962—Proposals for Motor-Driven Capstans, Switchboards, Cables and Miscellaneous Equipment for Dry Dock No. 1, Balboa Terminals.—Sealed proposals will be received by the office of the general purchasing officer, the Panama Canal, Washington, D. C. until **10:30 a. m., September 13, 1915**, at which time they will be opened in public for furnishing the above-mentioned articles. Blankets of confidential information relating to this circular will be furnished only to and from this office or the offices of the assistant purchasing agents, Fort Mason, San Francisco, Cal.; also from the U. S. Engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; San Francisco, Cal.; and the U. S. Army, general purchasing officer.

Proposals for Oil Storage Plant.

OIL-STORAGE PLANT.—Scaled proposals indorsed "Proposals for Storage Plants for Fuel Oil" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., October 10, 1915, and then and there publicly opened, for (turnishing and installing fuel-oil storage tanks, pumps, boilers, heaters, buildings and installations at four oil storage stations at Bremerton, Wash.; Mare Island, Cal.; San Diego, Cal. and Norfolk, Va. Plans and specifications for the plants and the information to the bureau when accompanied by a certified check to insure their return, or may be seen at the navy yards and station named or at the navy yards and station named.

M. SMITH, chief clerk of bureau.

Proposal for Building.

BETHLEHEM.—Sealed proposals, endorsed "Proposals for Marine Barracks, Marc Island," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 25, 1915, and then and there publicly opened, for a three-story and basement marine barracks, consisting of reinforced concrete construction, the steel roof and floor joists, and the steel columns. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard.

subject to a deposit of \$25 to insure their return, or may be seen at the navy yard, New York, N. Y. WM. M. SMITH, acting chief of bureau.

Notice to Contractors.

Office of the Board of State Harbor Commissioners, Union Depot and Ferry House, San Francisco, California.

Sealed proposals or bids will be received at this office at or prior to 11 o'clock a. m. on **FRIDAY, September 10, 1915**, for furnishing materials and constructing wood block pavement on the main thoroughfare, between the City and County of San Francisco, in accordance with the plans and specifications prepared therefor by the Chief Engineer and adopted by the Board August 9, 1915, and on file in this office, to which special reference is hereby made. The materials to be used in the work must consist of the requisite quantities of wood paving blocks, roofing felt, gravel, sand and asphalt. All materials will be subjected to a rigid examination and test, and if found defective, undersize, of unstable or not as specified, will be condemned and must be immediately removed from the work by the contractor at his expense.

No bid will be received unless it is made on a blank form furnished from this office. Each bid shall be accompanied by a certified check for an amount equal to the estimated cost of the amount of the proposal to be made payable to the order of the Secretary of the Board, conditioned that the proposed contract shall be awarded, and if the bidder shall fail or neglect to execute a contract and give the bond required within six months after the award of the contract, the case said sum mentioned in said check shall be deemed liquidated damages for such failure and neglect, and shall be paid to the San Francisco Harbor Improvement Fund.

the bond required to be not less than one-half of the amount of the bid, with two or more sureties to be approved by the Board of State Harbor Commissioners, and conditioned for the faithful performance by the contractor of all the terms and conditions of said contract according to the true intent and meaning thereof and to the satisfaction of said Board; and said bond shall be effective as provided in an act approved May 1, 1911, for the protection of material men, mechanics and laborers.

Bids will not be considered by this Board unless delivered to the Secretary or to the Assistant Secretary at the office of the Secretary, Room 17, Ferry building, at or prior to 11 o'clock a. m., on FRIDAY, SEPTEMBER 10 1915, at which time and place place the bids will be opened.

The Board reserves the right to reject any or all bids if deemed for the best interests of the State.

Bidders are invited to be present at the opening of the bids.

Plans and specifications of this work to be had at Room 18, Ferry Building, upon depositing \$20 for same, which will be returned on return of plans and specifications.

Bidders are requested to mark envelopes containing bid: "Bid for Wood Block Pavement, Pier No. 22,"

J. J. DWYER,
THOMAS S. WILLIAMS,
J. H. McCALLUM,

Board of State Harbor Commissioners.
JEROME NEWMAN,
Chief Engineer.

LEO V. MERLE, JR.,
Secretary.

Notice To Contractors

Office of the Board of State Harbor Commissioners, Union Depot and Ferry House, San Francisco, California.

Sealed proposals or bids will be received at this office at or prior to 10 o'clock a. m., on Friday, September 10, 1915, for furnishing materials and constructing a shed on Pier No. 35 and the adjacent bulkhead wharf, on the waterfront of the City and County of San Francisco, in accordance with the plans and specifications prepared therefor by the Chief Engineer and adopted by the Board August 9, 1915.

and on file in this office, to which special reference is hereby made.

The materials to be used in this work shall consist of the requisite quantities of Portland cement (which will be furnished to the contractor by the City of York), redwood lumber, sand, metal lath, castings, structural steel, rods, bolts, spikes, roofing, and painters' materials, glass window frames, etc. All materials used must be of the best of their kind, and of the quality especially specified herein. All materials used in the structure will be subjected to a rigid examination and test, and if found defective, under size, unsuitable, or not as specified, they shall be underwritten and immediately removed from the work by the contractor at his expense.

No bid will be received unless it is made on a blank form furnished from this office. Each bid shall be accompanied by a certified check for an amount equal to Five (5) per cent of the contract price of the proposed work. The check shall be made payable to the order of the Secretary of the Board, conditioned that if the proposal is accepted and the contract awarded, and if the bidder shall fail or neglect to execute a contract within six days after the award is made, in that case the said sum mentioned in said check shall be deemed liquidated damages for such failure and neglect, and shall be paid into the Treasury of the City and County of San Francisco Harbor Improvement Fund.

The bond required to be not less than one-half of the amount of the bid, with two or more sureties to be approved by the Board of State Harbor Commissioners, and conditioned for the faithful performance by the contractor of all the terms and conditions of said contract according to the true intent and meaning thereof, and to the satisfaction of said Board; and said bond shall be effective as provided in an act approved May 1, 1911, for the protection of material men, mechanics and laborers.

Bids will not be considered by this Board unless delivered to the Secretary or to the Assistant Secretary at the office of the Secretary, Room 17, Ferry building, at or prior to 11 o'clock, a. m. on FRIDAY, SEPTEMBER 10, 1915, at which time and place the bids will be opened.

The Board reserves the right to reject any or all bids if deemed for the best interests of the State.

Plans and specifications of this work to be had at Room 18, Ferry building, upon depositing \$20.00 for same, which will be returned on return of the plans and specifications.

Bidders are requested to mark envelopes containing bid: "Bid for shed on Pier No. 35 and the Adjacent Bulkhead Wharf."

J. J. DWYER,
THOMAS S. WILLIAMS,
J. H. McCALLUM,

Board of State Harbor Commissioners.
JEROME NEWMAN,
Chief Engineer.

LEO V. MERLE, JR.
Secretary.

Proposal for Canal Supplies.

PANAMA CIRCULAR 963—Proposals for Manila Rope, Suction Hose, Packing, Asbestos Gaskets, Steel Reinforcing Bars, Ridge Roll, Sheet Brass, Cast Iron Bars, Cast Steel Bars, Metal, Boiler Tubes, Propellers, Vacuum Gauges, Steam Gauges, Grease Pumps, Dies, Reamers, Files, Twist Drills, Taps, Dies, and Dies, etc., etc., Vices, Hoes, Anvils, Car Bits, Tackle Blocks, Spring Hinges, Mule Hooks, Bagon Jacks, Dust Brushes, Wire Brushes, Cast Iron Caps, Pistons, Pistons, Rubber Bands, Paper, Pencils, and Lumber.—Sealed proposals will be received at the office of the general manager of the Panama Canal Zone, Washington, D. C., until 10:30 a. m. **September 10, 1915**, at which time they will be opened in public, for furnishing the above articles. For further particulars and general information relating to this circular (No. 963) may be obtained from this office or the office of the general manager, Panama Canal Zone, Fort Mason, San Francisco, Cal. Also

from the U. S. Engineer offices in the following cities: Seattle, Wash., Los Angeles, Calif.; C. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, noon, Thursday September 16th, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required to complete the "Tank Tower" at the Industrial Home for Adult Blind, Oakland, California, in accordance with the plans and specifications, therefore, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Five (\$5.00) Dollars will be required on plans and specifications. The deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition. The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Tank Tower," Industrial Home for Adult Blind, Oakland, California.

(Signed) W. F. McCLURE,
State Engineer. (*)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, noon, September 15th, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required to complete the "Walls and Walks around Gymnasium Building, California Institution for Deaf and Blind, Berkeley, California, in accordance with the plans and specifications, therefore, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Five (\$5.00) Dollars will be required on plans and specifications. The deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Walls and Walks around Gymnasium Building, California Institution for Deaf and Blind, Berkeley, California."

(Signed) W. F. McCLURE,
State Engineer. (*)

PROPOSALS FOR EARTH WORK.

EARTH WORK—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Grandway Building, Denver, Col., until 2 p. m., September 8, 1915, for earthwork on about ten miles of main canal, Ft. Laramie Unit, North Platte Project, Nebraska-Wyoming. Involving the excavation of approximately 1,206,000 cubic yards of material. This work is situated near the Bridgeport-Guernsey line of the Chicago, Burlington and

Quincy Railway in the vicinity of Ft. Laramie, Wyoming. For particulars address the United States Reclamation Service, Washington, D. C.; Denver, Col.; or Ft. Laramie, Wyoming. A. P. DAVIS, chief engineer.

PROPOSALS FOR COURT HOUSE ADDITIONS.

The following resolution was introduced in the Alameda County Board of Supervisors:

Whereas, in the judgment of this Board, it is for the best interest of the County that an addition be made to the County Court House; now, therefore, be it

Resolved, That an addition be made to the County Court House; that the plans and specifications filed August 9, 1915, be and the same are hereby approved and adopted. Be it further

Resolved, That the Clerk of this Board give notice in accordance with the provisions of law of said work by publishing the same in the Oakland Enquirer and that said notice fix the day for the presentation of bids or proposals for said work.

September 7, 1915 at 10 o'clock a. m., at the office of the Clerk of said Board of Supervisors, and that said notice also require that a certified check on some responsible bank accompany said bid for an amount equal to 10 per cent of the amount of the respective bids or proposals, said check to be payable to the Clerk of this Board and to be forfeited to the County of Alameda as agreed and liquidated damages should the party or parties to whom the contract for said work is awarded fail to enter into the contract for the performance of said work or fail to give bond as required by this Board.

On motion by Supervisor Foss, seconded by Supervisor Heyer, the resolution was adopted by the following vote:

Ayes—Supervisors Foss, Heyer, Kelley, Mullins and Chairman Murphy—5.
TO CONSTRUCT TRESTLES.

The following resolution was introduced:

Whereas, in the judgment of this Board it is for the best judgment of the County that a timber trestle be constructed and the necessary grading be done for the waterway and for footings on the main county road from Alvarado to Centerville, or County Road No. 544, all in Washington Road District, Washington Township, Alameda County, California. Now, therefore,

Resolved, That the plans and specifications filed August 2, 1915, be and the same are hereby approved and adopted. Be it further

Resolved, That the Clerk of this Board give notice in accordance with the provisions of law of said work by publishing the same in the Township Register and that said notice fix the day for the presentation of bids or proposals for said work as Monday,

August 20, 1915, at 10 o'clock a. m., at the office of the Clerk of said Board of Supervisors, and that said notice require that a certified check on some responsible bank accompany said bid for an amount equal to 10 per cent of the amount of the respective bids or proposals. Said check to be payable to the Clerk of this Board and to be forfeited to the County of Alameda as agreed and liquidated damages, should the party or parties to whom the contract for the performance of said work is awarded fail to enter into the contract for the performance of said work or fail to give the bond required by this Board.

On motion by Supervisor Kelley, seconded by Supervisor Heyer, the resolution was adopted by the following vote:

Ayes—Supervisors Foss, Heyer, Kelley, Mullins and Chairman Murphy.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Magazine Building" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., September 11, 1915, and then and there publicly opened, for constructing one steel frame shell house with plastered walls and two brick magazines with steel roof trusses at the naval magazine, Puget Sound, Wash. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard, Bremerton, Wash. W. M. SMITH, acting chief of bureau.

PROPOSALS FOR BRIDGE.

BRIDGE—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Washington, D. C., until 2 o'clock p. m., September 8, 1915, for furnishing and erecting a steel bridge of three 100-foot spans and a structural steel movable crest with operating machinery for the Vandalla dam of the Milk River project, Montana. For particulars address the United States Reclamation Service, Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR SUBMARINES.

SUBMARINES—The date for the opening of proposals for building submarine boats Nos. 62-7, as fixed by the department's advertisement of May 20, 1915, is hereby changed from August 2 to September 20, 1915. JOSEPHUS DANIELS, Secretary of the Navy.

PROPOSALS FOR WHARF CONSTRUCTION.

WHARF—Sealed proposals indorsed "Proposals for Reinforced Concrete Wharf" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., September 15, 1915, and then and there publicly opened, for constructing a reinforced concrete wharf at the United States naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR CONCRETE PIERS.

CONCRETE PIERS—Sealed proposals indorsed "Proposals for Concrete Boat Pier" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., September 15, 1915, and then and there publicly opened, for constructing reinforced concrete torpedo boat piers at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR RAILROAD.

MARINE RAILWAY—Sealed proposals indorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., September 15, 1915, and then and there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PAVING BLOCKS.

The main objection offered to wood block paving is that the oil rises to the surface during the hot weather in summer, and makes a sticky mess to walk on that is carried into adjoining buildings. If someone will invent a process for treating blocks, so they will not show sticky on the surface in this way when the weather is hot, it will be a great boon to the wood-paving industry.—The Woodworker.

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

APARTMENT HOUSE.—3 story and base, frame, \$15,000. San Francisco. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owner's name not given. Location, Fifty Vara District. Will contain 12 apartments of two rooms and bath. Interior pine and hardwood with tile in the baths, and wall beds. Steam heat and hot water system. Exterior covered with cement plaster on exterior lath. Plans being prepared.

APARTMENT HOUSE.—4 story and base, brick and steel, \$10,000. San Francisco. Architects, Rosseau & Rosseau, 110 Sutter street, S. F. Owners, Girard Investment Co. Location, East Lavenworth, 44 south Geary, covering an area of 41 by 63½ feet. Will contain 23 suites finished in pine and hardwood with tile baths and wall beds. Steam heat, automatic elevator, oil burning system, hot water supply and vacuum cleaning. Marble and tile entrance. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and segregated figures being taken.

APARTMENT HOUSE.—4 story and base, brick and steel, \$45,000. San Francisco. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, O'Brien Bros. Location south Bush 157 west of Mason, covering an area of 42 by 137½ feet. Will contain 28 suites of two rooms and bath. Interior finished in hardwood and pine with wall beds. Bath rooms, tile floor and wainscot. Steam heat, elevator service, oil burning equipment, hot water system and vacuum cleaning. Marble and tile wainscot. Exterior faced with marble. Plans complete and segregated figures being taken.

APARTMENT HOUSE.—3 story and base, frame, \$10,000. San Francisco. Architect, John J. Foley, 46 Kearny street, S. F. Owner, Mr. Sullivan. Location west Dolores, between 17th and 18th covering area of 30 by 75 feet. Will contain six suites of four rooms. Interior finished in pine and elm panels. Wall beds, steam heat and hot water system. Tile in bath rooms. Exterior covered with cement plaster on metal lath. Plans are being prepared.

BREWERY AND WAREHOUSE.—1 1/2 story reinforced concrete and 1 2 story frame. Cost not stated. San Francisco. Architect, C. A. Darmer, Tacoma, Washington. Owners, Pacific Brewing & Malting Co. local representative. Tacoma Bottling Works, 2360 Harrison st., S. F. Location 677 to 679 Trent avenue, covering an area of 55 by 93 feet and 22.10 by 40 feet. Construction of four tie proof. Interior pine and tile. Special machinery. Exterior cement plaster. Plans complete and in hands of the owners, who will do the work by Day Labor.

FLATS.—3 story and base, frame, \$6,500. San Francisco. Architect, none. Owner, John Macdonald, 106 Guerrero street, S. F. Location, west Dolores, north 15th street, covering an area of 25 by 72 and arranged for three flats. Interior finish in pine with elm panels and hardwood floors. Open fire places in the living rooms with tile mantels. Tile bath rooms and automatic water heaters. Exterior covered with rustic and cement plaster. Plans in the hands of the owner who will do the work by Day Labor.

FLATS.—2 story and base, frame, \$5,000. San Francisco. Architect none. Owner, W. L. Hemminga Inc., 1600 Fell street, S. F. Location southeast corner 15th avenue and California, covering an area of 27 by 67 feet and arranged for two flats of six rooms each. Interior finish pine and elm with some hardwood floors. Open fire places and tile mantels and tile wainscot in the bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and in the hands of the owner, who will do the work by Day Labor.

HOTEL AND STORES.—3 story and base, brick and steel, \$15,000. San Francisco. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owner's name withheld. Location, west Stockton north Sacramento, having frontage of 33 feet by 50 and will contain two stores and 33 rooms, five baths and nine toilets. Interior finish pine with tile baths. Hot water system. Exterior faced with pressed brick. Plans complete and figures being taken.

RESIDENCES.—Six, 2 story and base, frame, \$2,400 each. San Francisco. Architect, none. Owner, J. Anderson, 423 16th avenue, S. F. Location, east 17th avenue, south of Geary. Contain five rooms and bath. Interiors finished in pine with some elm panels and hardwood floors. Open fire places with tile or brick mantels. Imitation tile wainscot. Automatic water heaters. Exteriors covered with rustic and cement plaster on metal lath. Plans are complete and work is to be done by Day Labor.

RESIDENCE.—2 story and base, frame, \$8,000. San Francisco. Architect, H. C. Baumann, Chronicle Bldg., S. F. Owner, Gus F. Lehrke. Location west Connecticut south 18th street. Will contain seven rooms bath and store. Interior finish pine, hardwood and white enamel. Hardwood floors and tile bath. Open fire place and tile or brick mantel. Automatic water heater. Patent store fronts. Exterior covered with cement plaster. Plans complete and figures have been taken.

RESIDENCES.—Four 2 story and base, frame, \$3,500. San Francisco. Architect, Joseph M. Geary, 2551 Polson street, S. F. Owner, J. H. Kruse. Location, north College Terrace west Mission. Each will contain six rooms and bath. Interior finish pine, elm

panels and hardwood floors. Open fire places and tile and brick mantels. Tile wainscot in bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster on metal lath. Plans complete and contract to be awarded at once.

RESIDENCE.—2 story and base, frame, \$3,500. San Francisco. Architect, A. W. Richardson, 927 Church street, S. F. Owner, J. J. Barry. Location west Coleridge south Lizzie. Will contain six rooms, bath and sleeping porch. Interior finish pine and hardwood veneer with hardwood floors. Imitation tile in the bath. Automatic water heater and open fire place. Mantel brick. Exterior rustic and cement plaster. Plans complete and figures being taken.

RESIDENCE.—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, A. R. Lapham, 511 12th avenue, S. F. Location east 11th avenue south Balboa. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, tile in bath rooms. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE.—2 story and base, frame, \$2,500. San Francisco. Architect, Chester H. Miller, Dalziel Bldg., Oakland. Owner, B. Pedrett. Location Lake Shore Tract. Will contain seven rooms and bath. Interior finish pine, elm panels and white enamel. Hardwood floors, tile in bath room. Open fire places and tile mantels. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

HOSPITAL.—2 story frame and cement plaster, \$20,000. San Francisco. Architect, City Department of Architecture Temporary City Hall, S. F. Owners, City and County of San Francisco. The Public Buildings Committee has recommended to the Board of Supervisors that the sum of \$20,000 be made available for the construction of a temporary Central Emergency hospital to be erected in the Civic Center. The committee report states that a frame and plaster building costing \$20,000 will suffice for the present. Further mention will be made of the work.

LIBRARY.—4 story and base, Class A construction, \$1,000,000. San Francisco. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Bids are now being taken for the general construction of the main library building in the Civic Center and will be received on September 3rd but will not be opened until the regular meeting of the Board of Library Trustees on September 7th. Construction will be Class A throughout. Plans and specifications can be secured from the architect on deposit of \$50.

LIBRARY STACKS AND ETC.—Cost not stated. San Francisco. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Bids will be opened by the Library Trustees on September 7th for furnishing and installing metal book stacks and metal furniture in new building in the Civic Center. Plans can be secured from the architect.

APARTMENT HOUSE.—3 story and base, frame, \$15,000. San Francisco. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owner, James Frazer. Location northwest 4th avenue and Hugo street, covering an area of 25 by 90 feet. Will contain six apartments of four rooms, bath and sleeping porch. Interior red gum and hardwood, hardwood floors and wall beds. Steam heat and hot water service. Tile bath rooms. Exterior will be covered with Klingstone. Plans are being prepared.

SCHOOL.—3 story and base, brick and steel, \$150,000. San Francisco. Architect, Frederick H. Meyer, Bankers Investment Bldg. S. F. Owner, Cogswell School. Location, 26th and Folsom sts. Fireproof construction, steel frame, brick exterior walls, hollow tile interior partitions and concrete stairways. Interior finish pine with maple floors. Steam heat, vacuum cleaning and modern plumbing. Exterior faced with pressed brick. Contract for structural steel awarded to Western Iron Works. Bids being taken on general construction.

APARTMENT HOUSE.—4 story and base, class C construction, \$40,000. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter st., S. F. Owners, Girard Investment Co. Location, east Leavenworth, 44 south Geary, covering an area of 41 by 63½ feet and arranged for 23 apartments of two and three rooms. All suites will have wall beds, private baths finished in tile. Interior finish pine and hardwood with hardwood floors. Steam heat, automatic elevator, hot water system and vacuum cleaning. Marble and tile wainscot. Exterior faced with pressed brick and terra cotta. Plans are complete.

BREWERY ADDITION.—Concrete and frame \$6,500. San Francisco. Architect, none. Owners, Henry Weinhard Brewery, 1255 Harrison street, S. F. Work will consist of raising the present building, underpinning walls and installation of plumbing. Plans complete and in the hands of the owners who will do the work by Day Labor.

FLATS.—2-2 story and base, frame, \$5,000 each. San Francisco. Architect, none. Owner, O. E. Anderson, 207 10th avenue, S. F. Location, east 18th avenue south of California. Each will contain two modern flats. Interior finish, pine and elm panels with hardwood floors, open fire places and tile or brick mantels. Tile wainscot in the baths. Automatic water heaters. Exterior covered with rustic. Plans in hands of the owner, who will do the work by Day Labor.

FLATS.—2 story and base, frame, \$3,500. San Francisco. Architect, A. J. Bain, Russ Bldg., S. F. Owners, J. M. and Jane Dixon. Location north-

east Grant avenue and Whiting Place. Will contain two flats finished in pine and redwood. Open fire places and tile mantels. Exterior covered with rustic. Plans complete and work will be done by Day Labor.

GARAGE.—1 story and base, Class C construction, \$15,000. San Francisco. Architect, Smith O'Brien, Humboldt Bank Bldg., S. F. Owner's name withheld. Location, Valencia near Duboce avenue. Has been designed for commercial garage. Brick walls, cement floor and steel roof trusses. Interior pine. Special gasoline storage tanks. Exterior faced with pressed brick. Plans being prepared.

RESIDENCE.—1½ story and base, frame, \$2,500. San Francisco. Architect, none. Owner, William Vaughan, 541 Moscow street S. F. Location, Excelsior Homestead Tract. Will contain five rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile or brick mantel. Bath room, tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans in hands of the owner and work to be done by Day Labor.

RESIDENCE.—2 story and base, frame, \$4,000. San Francisco. Architect, none. Owner J. M. Peterson, 1010 Balboa street, S. F. Location, west 16th avenue south of Lake. Will contain seven rooms, bath and sleeping porch. Interior finish, pine, hardwood and white enamel. Hardwood floors, open fire place, tile or brick mantel and automatic water heater. Tile wainscot in bath room. Exterior covered with cement plaster. Plans complete and work will be done by Day Labor.

PIER SHED.—Frame and steel. Cost not stated. San Francisco. Engineer, Assistant State Engineer, Ferry Bldg. Owners State of California. Bids will be opened on September 10th by the State Board of Harbor Commissioners for constructing a shed on Pier No. 35 and also for furnishing materials for wooden block pavement on Pier No. 32. Plans and specifications can be secured from the Secretary's office in the Ferry Bldg.

Contracts Awarded

LIBRARY.—Steel erection. \$17,175. San Francisco. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Contractors, California Construction Co., New Call Bldg., S. F. Contract price, \$17,175.

APARTMENT HOUSE.—3 story and base, frame, \$22,500. San Francisco. Architect, A. J. Laib, Russ Bldg., S. F. Owner's name not given. Contractor, Henry Conrad, 2854 Pine street, S. F. Contract price, \$22,500.

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Amt.
2409	Heyman	Heyman	1500
2410	Williams	Williams	400
2411	Silk House	Owner	400
2412	Tecoma Bottling	Owner	500
2413	Doane	Doane	400
2414	Lozier	Lozier	400

2415	Lyric	Brumfield	500
2416	Swayne	Hoyt	750
2417	Progress	Novelty	800
2418	Morri	Morri	800
2419	Standard Oil	Owner	750
2420	Green	Fletcher	500
2421	Leathern	Leathern	750
2422	Junck	Koenig	3429
2423	Escalle	Elvin	4600
2424	Green	Fletcher	1500
2425	Green	Fletcher	3350
2426	Orth	De Luca	1930
2427	Menzel	Menzel	2450
2428	Scalafano	Brisca	1000
2429	Boc	Boe	1500
2430	Nelson	Nelson	2400
2431	Hart	Healing	1000
2432	Wehr	Schneider	400
2433	Crocker	Crocker	400
2434	Collins	Muller	1000
2435	Chapellone	Chapellone	1000
2436	Molinari	Delucchi	500
2437	Anderson	Anderson	2400
2438	Anderson	Anderson	2400
2439	Anderson	Anderson	2400
2440	Anderson	Anderson	2400
2441	Anderson	Anderson	2400
2442	Anderson	Anderson	2400
2443	Seonover	Nelson	1765
2444	Wissmann	Albach	1330
2445	Wissmann	Nelson	405
2446	Wissmann	Fagan	350
2447	Enright	Gilmour	3191
2448	Pontacabe	Hantzsche	600
2449	Christenson	Christenson	1800
2450	Schneider	John	800
2451	Hemminga	Hemminga	4000
2452	Un Sq Auto Pk.	Owner	5500
2453	Tiscornia	Tiscornia	1900
2454	Brown	McIntosh	4400
2455	Graves	Pioneer	800
2456	Graves	Kissel	2250
2457	Pracy	Zinkand	3434
2458	Bothin	Barrett	3300
2459	Loree	Haws	5250
2460	Marque	Ladouceur	823
2461	SCH44	Ratto	6743
2462	Nelson	Nelson	1900
2463	Nelson	Nelson	1900
2464	Nelson	Nelson	1900
2465	Grace	Grace	1500
2466	Lang	Grace	1500
2467	Lang	Wolf	450
2468	Penard	Penard	800
2469	Behrend	Kawner	400
2470	Palace Htl	Palace Htl	500
2471	Lehring	Gehring	1000
2472	Leaf	Leaf	1000
2473	Brodeck	Novelty	400
2474	Pavilla	Rossi	500
2475	Austin	Austin	1000
2476	Tuten	Hughson	1800
2477	Cullen	McCarthy	1000
2478	MacDonald	Macdonald	6500
2479	Lapham	Lapham	2750
2480	Hollnagel	Hollnagel	400
2481	Rex Elec.	Dunnart	400
2482	City & Co. S. F.	Cal Con	17175
2483	Am. Biscuit	Forbes	1700
2484	Kruse	Wengard	10210
2485	Brady	Britt	5250
2486	Green	Sparron	7500
2488	Poppiano	Curran	2050
2488	Yager	Yager	5000

DWELLING

(2409) E THIRTY-FOURTH, AVE 25 S
Cabrillo. One-story and basement
frame dwelling.
Owner.....Oscar Heyman & Bro., 742
Market, S. F.
Architect.....None.
Day's work.....COST, \$1500

RAISE AND ALTER DWELLING

(2410) NO 1219 LANE, Raise and alter
dwelling.
Owner.....Alf. R. Williams.
Architect.....None.
Day's work.....COST, \$400

ALTER STORE

(2411) NO. 127 GRANT AVE. Alter
store.
Owner.....The Silk House.
Architect.....Bernard J. Joseph, 447 Call
Bldg., S. F.
Day's work.....COST, \$400

RAISE BUILDING

(2112) NO. 675 TREAT AVE. Raise
office building.

wner.....Tacoma Bottling Co., premises.
 Architect.....None.
 Day's work.....COST, \$500

REPAIRS
 (115) NO. 159 SPRUCE. Repair for garage.
 Owner.....Frank H. Doane, Prem.
 Architect.....None.
 Day's work.....COST, \$100

CONCRETE FLOOR
 (411) NO. 1962 GEARY. Concrete floor.
 Owner.....Lozier Motor Co., Prem.
 Architect.....None.
 Day's work.....COST, \$100

ELECTRIC SIGN
 (115) E FILLMORE, 300 S Eddy. Electric sign.
 Owner.....Lyric Theatre, Prem.
 Architect.....None.
 Contractor.....Brumfield Electric Sign Co., 18 7th, S. F.
 COST, \$500

ALTERATIONS
 (416) S TOWNSEND, 95 W 2nd. Alteration for warehouse.
 Owner.....Swayne & Hoyt, 430 Sansome, S. F.
 Engineer.....A. E. Hornlein, 15 Stockton, S. F.
 Day's work.....COST, \$750

SIGN
 (417) NO. 1535 FILLMORE. Electric sign.
 Owner.....Progress Theatre, Prem.
 Architect.....None.
 Contractor.....Novelty Electric Sign Co., 165 Eddy S. F.
 COST, \$800

ADDITION
 (420) N ANZA, 82-6 W 6th avenue. Alter and add to cottage.
 Owner.....John Cahill, 520 Anza, S. F.
 Architect.....None.
 Contractor.....Wm. Velps, NW Geary and Blake.
 COST, \$500

ADDITION
 (211) NO. 1519 SANCHEZ. Alter and add to dwelling.
 Owner.....G. M. Leathern.
 Architect.....None.
 Day's work.....COST, \$750

ALTERATIONS
 (222) N SEVENTEENTH, 30 E Church W 30 N 82-4 S 87-6 S to beg. Alterations and additions to a two-story frame building.
 Owner.....H. D. Junck, 3696 17th, San Francisco.
 Architect.....C. O. Clausen, Hearst Bldg. S. F.
 Contractor.....Ludwig B. G. Koenig, 3525 19th, S. F.
 Filed Aug. 21, '15. Dated Aug. 21, '15.
 Roof on\$857.25
 Brown coated857.25
 When accepted857.25
 Usual 35 days857.25
 TOTAL COST, \$3429

Bond, Sureties, Forfeit, none. Limit, 90 days. Plans and specifications filed.

ADDITION
 (213) W GUERRERO, 101-6 S Cumberland S 23-1x105. Grading, concrete, brick, carpenter, plastering.

roofing, sheet metal, glazing, hardware, painting, plumbing, shades and lighting fixtures for two flats.
 Owner.....Louis Escalle, 170 Shotwell, S. F.
 Architect.....None.

Contractor.....Frank Elvin, 4017 18th, San Francisco.

Filed Aug. 21, '15. Dated July 21, '15.
 Frame up\$1150
 When plastered1150
 When completed1150
 Usual 35 days1150
 TOTAL COST, \$1600

Bond, Sureties, Forfeit, none. Limit, 75 days. Plans and specifications filed.
 Note: First report Aug. 14, No. 2369.

PLUMBING AND HEATING
 (2124) N PAGE, 165-6 W Central avenue N 137-6xW 40. All work for plumbing and heating, etc., for 7 apartments.

Owner.....Carrie Green, 1458 Page, San Francisco.

Architect.....A. J. Laib, Russ Bldg., San Francisco.

Contractor.....Seibert Co., 1433 Divisadero, S. F.

Filed Aug. 21, '15. Dated Aug. 19, '15.
 Heating system roughed in\$200
 Plumbing is roughed in300
 Oil tanks are in100
 Plumbing is completed250
 Heating system is completed375
 Usual 35 days275
 TOTAL COST, \$1500

Bond \$750. Sureties, Massachusetts Bonding and Insurance Co. Forfeit, none. Limit, without delay. Plans and specifications filed.

PAINTING ETC.
 (2125) SAME AS ABOVE. All work for painting, electric and carpenter work for 7 apartments.

Owner.....Same as above.
 Architect.....None.

Contractor.....J. P. Fletcher, Russ Bldg., San Francisco.

Filed Aug. 21, '15. Dated Aug. 19, '15.
 Building moved to front\$1567.00
 Brown coated1565.00
 Standing finish is on1565.00
 Completed1565.00
 Usual 35 days2087.50
 TOTAL COST, \$8350

Bond, \$4175. Sureties, Massachusetts Bonding and Insurance Co. Forfeit, none. Limit, 90 days. Plans and specifications filed.

EXCAVATION, ETC.

(2426) N GEARY, 90 W 3rd avenue. Excavating and reinforced concrete work for an auto repair shop.

Owner.....Bertha M. Orth, 1819 Oak, San Francisco.

Architect.....Charles F. Whittlesey, 555 Clayton, S. F.

Contractor.....A. De Luca.

Filed Aug. 21, '15. Dated Aug. 15, '15.

Progressive semi-monthly
 Balance on final certificate
 TOTAL COST, \$1930

Bond, Sureties, Forfeit, Limit, none. Plans and specifications filed.

DWELLING
 (2127) E FORTY-FIFTH AVE, 250 N Fulton. Two-story and basement frame dwelling.

Owner.....Carl Mouzel, 850 45th avenue, S. F.

Architect.....None.
 Day's work.....COST, \$21.00

ALTERATIONS
 (2128) NO. 1229 CALIFORNIA. Alterations and additions to cottage.
 Owner.....Pasquale Scalfaro, 1229 Columbus avenue, S. F.
 Architect.....None.
 Contractor.....A. Brisco, 72 Valdez, San Francisco
 COST, \$1000

DWELLING
 (2129) S OCEAN, 6011 W. W. One and one-half story and basement frame dwelling.
 Owner.....A. M. Bay, 750 Haight, S. F.
 Architect.....O. E. Evans & Co., mission, S. F.
 Day's work.....COST, \$1000

FLATS
 (2130) S GROVE, 141 E. C. Two-story and basement frame flats (25x55).
 Owner.....Emil Nelson, 211 Bayview, San Francisco.
 Architect.....None.
 Day's work.....COST, \$500

ALTERATIONS
 (2131) NO. 2004 Divisadero. Plumbing, electric work and alterations for dwelling.
 Owner.....John B. Hart, premises.
 Architect.....None.
 Contractor.....Geo. Heafing, 2645 Sacramento, S. F.
 COST, \$1000

SHOP
 (2132) NO. 1524 HYDE. One-story frame shop.
 Owner.....Theo. Wehr, 1524 Hyde.
 Architect.....None.
 Contractor.....C. A. Schneider, 63 Lynch, San Francisco.
 COST, \$1000

ALTERATIONS
 (2433) SE JESSIE and Baker. Alterations and repair shop.
 Owner.....W. Crocker, 525 Crocker Bldg., S. F.
 Architect.....None.
 Day's work.....COST, \$1000

ALTERATIONS
 (2434) NO. 36 MARKET. Alter front.
 Owner.....Collins & Hayden, Prem.
 Architect.....None.
 Contractor.....Muller Mfg. Co., 426 20th, San Francisco.
 COST, \$1500

REPAIRS
 (2435) NO. 705 FRANCISCO. Repair stable.
 Owner.....Angelo Chappone, 705 Union.
 Architect.....L. Traverso, 84 Union.
 Contractor.....San Francisco.
 Day's work.....COST, \$1000

ALTERATIONS
 (2436) NO. 511 POTRERO. Alterations for store.
 Owner.....P. Molinari, premises.
 Architect.....None.
 Contractor.....P. De Luca, 39 White, S. F.
 COST, \$1000

RESIDENCE
 (2437) E SEVENTH, 801. Alterations and additions to two-story frame residence.

Owner.....J. Anderson, 423 16th avenue, S. F.
 Architect...None.
 Day's work. COST, \$2400

RESIDENCE
 (2438) E SEVENTEENTH AVE., 425 S Geary. Two-story and basement frame residence.
 Owner.....J. Anderson, 423 16th avenue, S. F.
 Architect...None.
 Day's work. COST, \$2400

RESIDENCE
 (2439) E SEVENTEENTH AVE., 400 S Geary. Two-story and basement frame residence.
 Owner.....J. Anderson, 423 16th avenue, S. F.
 Architect...None.
 Day's work. COST, \$2400

RESIDENCE
 (2440) E SEVENTEENTH AVE., 375 S Geary. Two-story and basement frame residence.
 Owner.....J. Anderson, 423 16th avenue, S. F.
 Architect...None.
 Day's work. COST, \$2400

RESIDENCE
 (2441) E SEVENTEENTH AVE., 350 S Geary. Two-story and basement frame residence.
 Owner.....J. Anderson, 423 16th avenue, S. F.
 Architect...None.
 Day's work. COST, \$2400

RESIDENCE
 (2442) E SEVENTEENTH AVE., 325 S Geary. Two-story and basement frame residence.
 Owner.....J. Anderson, 423 16th avenue, S. F.
 Architect...None.
 Day's work. COST, \$2400

STORES AND APARTMENTS
 (2443) W MISSION 163-6 N 17th N 23-6xW 98. All work including paneling of vestibule above marble wainscot with elm 3-ply panels for three-story frame stores and apartments.
 Owner.....Frank M. Scoonover, 5 Montgomery, S. F.
 Architect...Charles E. J. Rodgers, Kohl Bldg., S. F.
 Contractor...A. D. Nelson, Nevada Bank Bldg., S. F.
 Filed Aug. 23, '15. Dated Aug. 23, '15. Foundation walls complete.....\$ 250
 Enclosed, roof on and brown coated 2500
 Completed and accepted 3073
 Usual 35 days 1942
TOTAL COST, \$7765
 Bond, \$3882.50. Sureties, Southwestern Surety Insurance Co. Forfeit, \$10. Limit, 75 days from August 21. Plans and specifications filed.

PLUMBING, ETC.
 (2444) SE CLEMENT 30. All work of plumbing, gas fitting and sewerage and Hawk's heating system for alterations to make three-story frame flats, stores and offices.
 Owner.....Anna R. Wissmann, 24th avenue and Clement, S. F.

Architect...H. Geilfuss & Son, Maskey Bldg., S. F.
 Contractor...Ahlbach & Mayer, 55 Dorland, S. F.
 Filed Aug. 23, '15. Dated July 19, '15. Roughed in\$517
 Completed and accepted 518
 Usual 35 days 343
TOTAL COST, \$1380
 Bond, \$690. Sureties, Hartford Accident and Indemnity Co. Forfeit, \$10. Limit, 5 days after completion of carpenter work. Plans and specifications filed.

PAINTING
 (2445) PAINTING ON ABOVE.
 Contractor...Fick Bros., 475 Haight, San Francisco.
 Filed Aug. 23, '15. Dated July 19, '15. Progressive on 1st and 15th of75%
 Usual 35 days25%
COST, \$405
 Bond, Sureties, none. Forfeit, \$10. Limit, 11 days after completion of carpenter. Plans and specifications filed.

ELECTRIC WORK
 (2446) ELECTRIC WORK ON ABOVE
 Contractor...Wm. A. Fagan, 426 24th avenue, S. F.
 Filed Aug. 23, '15. Dated July 19, '15. Roughed in\$130
 Completed 130
 Usual 35 days 90
TOTAL COST, \$350
 Bond, Sureties, none. Forfeit \$10. Limit, 5 days after completion of carpenter work. Plans and specifications filed.

FRAME FLATS
 (2447) N McALLISTER, 75 W Willard W 25xN 100. All work except plumbing, tile, electric fixtures shades and wall beds (furnished by owner) for two-story and basement frame flats.
 Owner.....Helen V. Enright (wf Patrick J.) and Mary A. Murphy.
 Designer...Patrick J. Enright.
 Contractor...George D. Gilmour, 376 Howard, S. F.
 Filed Aug. 23, '15. Dated Aug. 21, '15. Frame up\$797.75
 Ready for plastering 797.75
 Completed and accepted 797.75
 Usual 35 days 797.75
TOTAL COST, \$3191
 Bond, \$16000. Sureties, Richard J. Dunnigan and Margaret Gilmour. Forfeit, none. Limit, 90 days from Aug 15. Plans and specifications filed.

ALTERATIONS
 (2448) N CLEMENT, 80 E 25th avenue. Alter and add to dwelling.
 Owner.....Peter Fontacabe, 2334 Clement, S. F.
 Architect...None.
 Contractor...Hantzsch & McKay, 423 24th avenue, S. F.
COST, \$600

DWELLING
 (2449) S NEY, 225 W Crant. One and one-half story and basement frame dwelling.
 Owner.....John Christenson, 3361 Polson, S. F.
 Architect...None.
 Day's work COST, \$1800

ALTERATIONS
 (2450) NO. 846 FORTY-FIFTH AVE. Move, raise and alter dwelling.

Owner.....Emil Schneider, 554 Baker, S. F.
 Architect...None.
 Contractor...F. A. John, 2664 Bush, San Francisco.
COST, \$8

SHED
 (2452) NE POST and Powell. Erection shed.
 Owner.....Union Square Auto Park NE Post and Powell.
 Architect...None.
 Day's work. COST, \$4

FLATS
 (2454) SE FIFTEENTH AV and California. Two-story and basement frame (2) flats (27-3x67).
 Owner.....W. L. Hemmings, 1600 Fell, S. F.
 Architect...None.
 Day's work. COST, \$50

DWELLING
 (2453) S OCEAN, 60-11 E Otsego. One story and basement frame dwelling.
 Owner.....Domino Tiscornia, 46 Mission, S. F.
 Architect...None.
 Day's work. COST, \$190

RESIDENCE
 (2454) LOT 5, BLK 28 of map 1 blocks 27 to 34, Forest Hill Extension. All work for a two-story frame residence.
 Owner.....O. A. Brown Building Co.
 Architect...Smith & Stewart, 224 Kearny, S. F.
 Contractor...Wm. McIntosh, 289 Cumberland, S. F.
 Filed Aug. 24, '15. Dated Aug. 21, '15. Frame up\$ 2
 Brown coated 8
 Interior finish 8
 Accepted 12
 Usual 35 days 12
TOTAL COST, \$440
 Bond, Sureties, Forfeit, none. Limit, 75 working days. Plans and specifications filed.

PLATE GLASS
 (2455) E SCOTT, 60 N Green, 30 187-6. All work for plate glass and plate glass mirrors, etc., beveling same for residence.
 Owner.....Maude James Graves, 283 Scott, S. F.
 Architect...None.
 Contractor...Pioneer Plate and Window Glass Co., 1072 Mission, S. F.
 Filed Aug. 24, '15. Dated Aug. 19, '15. Completed and accepted 25
 Usual 35 days 25
TOTAL COST, \$60
 Bond, \$600. Sureties, New Amsterdam Casualty Co. Forfeit, \$10. Limit, 4 days. Plans and specifications filed.

PAINTING
 (2456) PAINTING ON ABOVE.
 Contractor...J. R. Kissel, 1723 Polk, San Francisco.
 Filed Aug. 24, '15. Dated Aug. 24, '15. 1st and 15th of each month..... 75
 Usual 35 days 25
TOTAL COST, \$225
 Bond, \$1125. Sureties, Southwestern Surety Insurance Co. Forfeit, \$1. Limit, 30 days. Plans and specifications filed.

SIDENCE.

(371) W TWENTY-FIRST AVE, 100
1100a N 33-4xW 120. All work for
two-story and basement frame resi-
dence.

Owner.....George W. and Mabel L.
Pracy, 1069 Church, S. F.
Architect.....Falch & Knoll, Hearst
Bldg., S. F.

Contractor.....Edward Zinkand, 434 10th
avenue, S. F.

nd Aug. 25, '15. Dated Aug. 25, '15.
Frame up and roof boards on\$53.50
Brown coated 53.50
Completed and accepted 53.50
Usual 35 days 53.50
TOTAL COST,\$3414

nd, \$1707. Sureties, Fidelity and
Deposit Co. of Maryland. Forfeit, \$5.
Limit, 75 days from filing. Plans and
specifications filed.

STORES

(58) W VALENCIA, 40 S 15th, 50x
37-6. All work except plumbing
and gas fitting for one-story class
building (stores).

Owner.....The Pothin Real Estate
Co., 604 Mission, S. F.

Architect.....J. A. Ettler, 604 Mission,
San Francisco.

Contractor.....Barrett & Hilt, 424 Shar-
on Bldg., S. F.

nd Aug. 25, '15. Dated Aug. 17, '15.
Concrete work done\$1000
Plastering, woodwork, roof

sheet metal and electric work
done 1000
Completed and accepted 475
Usual 35 days 825
TOTAL COST,\$3300

nd, \$1650. Sureties, Henry Hilt.
Forfeit, \$5. Limit, 35 days. Plans and
specifications filed.

Note: First report Aug. 21. No. 2406.

FLATS

(59) E TWENTY-FOURTH AVE,
25 S California. All work for two-
story and basement frame flats.

Owner.....Mrs. Sarah V. Loree,
Franklin and Eddy, S. F.

Designer.....C. M. Norgrove, 2200 Roose-
velt avenue, Berkeley.

Contractor.....C. A. Haws, 1731 Bancroft
Way, Berkeley.

nd Aug. 25, '15. Dated Aug. 16, '15.
One-third work performed 25%
Two-thirds work performed 50%
Usual 35 days 25%
TOTAL COST,\$5250

nd, \$2500. Sureties, Maryland Cas-
ty Co. Forfeit, Limit, none. Plans
and specifications filed.

ALTERATIONS

(460) NO. 347 EDINBURGH, between
Brazil and Exeelsior. All work for
alterations except electricity, gas
and plumbing for building.

Owner.....Catherine Marque, 349
Edinburgh, S. F.

Architect.....None.
Contractor.....John Landouneur and Nar-
clisse Guerard.

nd Aug. 25, '15. Dated Aug. 24, '15.
Completed and accepted 75%
Usual 35 days 25%
TOTAL COST,\$623

nd, Sureties, Forfeit, none. Limit,
days from Aug. 24, 1915. No plans
specifications.

FRAME APARTMENTS

(461) W MISSION, 190-9 N 25th N
25xW 117-6. All work for three-

story and basement frame apart-
ments.

Owner.....Annie M. Schulz.
Architect.....John J. Foley, 46 Kearny
street, S. F.

Contractor.....Ratto & Ratto, 232 Hart-
ford, S. F.

Filed Aug. 25, '15. Dated Aug. 21, '15.
Frame up and roof on\$1687
Brown coated 1687
Completed and accepted 1687
Usual 35 days 1687
TOTAL COST,\$6748

Bond, \$3374. Sureties, Southwestern
Surety Insurance Co. Forfeit, none.
Limit, 90 days. Plans and specifica-
tions filed.

DWELLING

(2462) W TWENTY-NINTH AVE, 101
N Irving. One and one-half story
and basement frame dwelling.

Owner.....F. Nelson, 30 Presidio Ter-
race, S. F.

Architect.....None.
Day's work COST,\$1900

DWELLING

(2463) W TWENTY-NINTH AVE, 299
N Irving. One and one-half story
and basement frame dwelling.

Owner.....F. Nelson, 30 Presidio Ter-
race, S. F.

Architect.....None
Day's work COST,\$1900

DWELLING

(2464) W TWENTYNINTH AVE, 200
N Irving. One and one-half story
and basement frame dwelling.

Owner.....F. Nelson, 30 Presidio Ter-
race, S. F.

Architect.....None.
Day's work COST,\$1900

DWELLING

(2465) W UTAH, 175 N 24th street.
Two-story and basement framedwlg.

Owner.....John T. Grace, 1013 Rhode
Island, S. F.

Architect.....None.
Day's work COST,\$1500

DWELLING

(2466) W UTAH, 200 N 24th street.
Two-story and basement framedwlg.

Owner.....John T. Grace, 1013 Rhode
Island, S. F.

Architect.....None.
Day's work COST,\$1500

GARAGE

(2467) NO. 1030 CLAYTON (rear). One
story frame garage.

Owner.....M. Levy, premises.
Architect.....Arthur Scholz, 839 Phelan
Bldg., S. F.

Contractor.....John Wolf, 1369 12th ave-
nue, S. F. COST,\$450

GARAGE

(2468) SW BRODERICK and Eddy.
Garage.

Owner.....M. Penard, Mill Valley.
Architect.....Poulkes & Hildebrand,
Crocker Bldg., S. F.

Day's work COST,\$800

FRONT

(2469) NO. 2205 MARKET, New front.
Owner.....Behrend & Son, Prom.

Architect.....None.
Contractor.....Kawneer Mfg. Co., 110
Jessie, S. F.

COST,\$400

ELECTRIC SIGN

(2470) SW MARKET and New Mont-
gomery. Electric sign.

Owner.....Palace Hotel, premises.
Architect.....None.

Day's work COST,\$500

DWELLING

(2471) N SADOWA, 132 E Plymouth.
One and one-half story and basement
frame dwelling.

Owner.....Mrs. C. Gehring, 143
Sickles, S. F.

Architect.....None.
Contractor.....Fred C. Gehring, 117
Sagamore, S. F.

COST,\$1000

FLAT

(2472) NE TWENTY-FIRST and Ir-
ving. Change store into flat.

Owner.....A. H. Lear, 447 New Call
Bldg., S. F.

Architect.....Bernard J. Joseph, 447
New Call Bldg., S. F.

Day's work COST,\$1000

ELECTRIC SIGN

(2473) NO. 910 MARKET. Electric
sign.

Owner.....Brodek & Co., premises.
Architect.....None.

Contractor.....Novelty Electric Sign Co.,
165 Eddy, S. F.

COST,\$400

ALTERATIONS

(2474) NO. 1815 CHESTNUT. Alter
dwelling.

Owner.....G. Favilla, 2014 Steiner,
San Francisco.

Architect.....None.
Contractor.....F. Rossi, 1799 Filbert, San
Francisco.

COST,\$500

DWELLING

(2475) S FLOOD, 200 W Edna. One-
story and basement frame dwelling.

Owner.....H. W. Austin, 327 Flood
avenue, S. F.

Architect.....None.
Day's work COST,\$1000

DWELLING

(2476) N MANGELS, 100 E Hamburg.
One-story and basement frame dwlg.

Owner.....J. W. Totten, 401 Steiner,
San Francisco.

Architect.....G. L. Hughson, 1608 Stew-
art, Berkeley.

Contractor.....G. L. Hughson, 1608 Stew-
art, Berkeley.

COST,\$1300

HALL

(2477) SE DIAMOND and Elizabeth.
One-story frame hall.

Owner.....Rev. J. J. Cullen, premises.
Architect.....None.

Contractor.....McCarthy & Walker, 432
Eureka, S. F.

COST,\$1000

FLATS

(2478) W DOLORES, 134 N 15th.
Three-story and basement frame
flats.

Owner.....John MacDonald, 106
Guerrero, S. F.

Architect.....None.
Day's work COST,\$6500

DWELLING

(2479) E ELEVENTH AVE, 50 S Bal-

boa. Two-story and basement frame dwelling.
Owner.....A. K. Lapham, 511 12th
avenue, S. F.

Architect....None.
Days work.....COST, \$27.40

ALTERATIONS
(2180) NO. 1331 CASTRO. Alteration
for bakery.
Owner.....P. Hollnagel.
Architect....None.
Days work.....COST, \$400

ALTERATIONS
(2481) NO. 1174 SUTTER. Alteration
for store.
Owner.....Rex Electric and Con-
struction Co., Monadnock
Bldg., S. F.
Architect....None.
Contractor, Dunnivant - Oakley Co.,
Powell & Broadway, S. F.
COST, \$400

STEEL
(2182) LARKIN, McALLISTER, HYDE
and Fulton. All work for structural
steel for Public Library.
Owner.....City and County of San
Francisco.
Architect....Geo. W. Kelham, Sharon
Bldg., S. F.
Engineer.....H. J. Brunnier, 312 Sharon
Bldg., S. F.
Contractor.....California Construction
Co., New Call Bldg., S. F.
Filed Aug. 26, '15. Dated Aug. 23, '15.
On 1st and 15th 85%
Usual 35 days 15%
TOTAL COST, \$17,175
Bond, \$4,294 and \$8,587.50. Sureties,
Aetna Accident and Liability Co. Forfeit,
\$20. Limit, 50 days. Plans and
specifications filed.

GRADING, ETC.
(2483) NW BATTERY and Broadway,
N 25xW 137-6. All work for grad-
ing concrete work, sidewalk lights
and trap doors.
Owner.....The American Biscuit Co.,
815 Battery, S. F.
Architect....None.
Contractor.....Richard J. H. Forbes, 681
Monadnock Bldg., S. F.
Filed Aug. 26, '15. Dated Aug. 24, '15.
Concrete walls in \$600
Completed and accepted 675
Usual 35 days 425
TOTAL COST, \$1,700
Bond, \$850. Sureties, Aetna Accident
and Liability Co. Forfeit, \$5. Limit,
30 days. Plans and specifications filed.

COTTAGES
(2184) NW MISSION and College Ter-
race W 100xN 52-9. All work for
four two-story and basement frame
cottages.
Owner.....J. H. Kruse, 23rd and Fol-
som, S. F.
Architect....J. M. Geary, 2581 Post, San
Francisco.
Contractor.....C. Wengard, 3638 Judah,
San Francisco.
Filed Aug. 26, '15. Dated Aug. 25, '15.
Frame up \$252.50
Brown coated 2552.50
Completed and accepted 2552.50
Usual 35 days 2552.50
TOTAL COST, \$10,210
Bond, Sureties, Forfeit, none. Limit,
without delay. Plans and specifications
filed.

Note: The above buildings will be
erected on the following locations: NW
College Terrace and Mission; N college
25, 50 and 75 feet W Mission

FLATS
(2185) S FULTON, 181-2 W Clayton.
All work except gas and electric fix-
tures for two-story and basement
frame (2) flats.
Owner.....Edward J. and Maude C.
Brady, 427 Webster, S. F.
Architect....None.
Contractor.....O. W. Britt, 330 Ivy, S. F.
Filed Aug. 26, '15. Dated Aug. 5, '15.
2nd story flooring laid \$1300
Brown coated 1300
Completed and accepted 1320
Usual 35 days 1330
TOTAL COST, \$5,250
Bond, \$2625. Sureties, National Surety
Co. Forfeit, none. Limit, Nov. 1, 1915.
Plans and specifications filed.

BORING WELL
(2486) BLK BDED BY NOE, CASTRO,
Duboce avenue and 14th. All work
for boring well. Cost based on pro-
duction of well: 60 gallons per min-
ute, \$3,000 to be paid; 45 gallons per
minute \$3,750 to be paid; 30 gallons
per minute, \$2,500 to be paid.
Owner.....German General Benevo-
lent Society, premises.
Architect....None.
Contractor.....John J. Sparrow and
Lloyd W. Elliott, 88 6th,
San Francisco.
Filed Aug. 26, '15. Dated Aug. 20, '15.
Accepted \$1500
Usual 35 days 3000
Balance, 6 notes of \$500 each.. 3000
TOTAL COST, \$7,500
Bond, \$2500. Sureties, Thos. Ford and
Edith Kottling. Forfeit, none. Limit,
90 days. No plans or specifications.

DRAINAGE
(2487) N UNION, 65 W Leavenworth,
W 48-6xN 137-6. All work for drain-
age, including trap at curb line,
plumbing, gas and water fitting,
drain boxes, etc., for 12 apartments.
Owner.....S. Foppiano, 622 Broad-
way, S. F.
Architect....L. Traverso, 854 Union,
San Francisco.
Contractor.....Curran & Bulotti, 635 Val-
lejo, San Francisco.
Filed Aug. 26, '15. Dated Aug. 24, '15.
Gas and water in \$350
Roughed in 400
Completed and accepted 750
Usual 35 days 550
TOTAL COST, \$2,050
Bond, Sureties, Forfeit, none. Limit,
without delay. No plans or specifi-
cations.

FRAME FLATS
(2488) S LAKE, 57-6 W 15th avenue
W 25xS 100. All work for two-story
and basement frame flats.
Owner.....Grace Yager, 1539 Clay,
San Francisco.
Architect....None.
Contractor.....W. W. Yager, 1239 Polk,
San Francisco.
Filed Aug. 27, '15. Dated Aug. 26, '15.
Roof on \$1250
First coat plaster on 1250
Completed and accepted 1250
Usual 35 days 1250
TOTAL COST, \$5,000

Bond, Sureties, Forfeit, none. Lim-
85 days. Plans and specifications file

LEASES.

RECORDED AMOUN
Aug. 20, 1915—NO. 1998 BUTSH NE
Buchanan. Owen Boggan to Peter
Berges and Leon Dumarais, 5
years \$25
Aug. 21, 1915—E GILBERT, 175 S
from Brannan, SE 25xNE 80. F.
W. Klevesahl to Gusto Pertigera
& Co., 3 years \$4
Aug. 23, 1915—NW VAN NESS AVE.
and Myrtle, 1015 Van Ness avenue.
C. F. Buckley to Thomas O'D.
Buckley, 3 years \$25
Aug. 23, 1915—NO. 1600 NE DIVISA-
DERO and Post. William F. Har-
ris to H. O. Pollock, 3 years.....
..... \$40 per mon
Aug. 27, 1915—SW BEACH and Grant
avenue W 137-6xS 137-6. Moses
Ellis, formerly Moses Ellis, Sr.,
trustee, to M. Serraille, 5 years.....
..... \$9.00

NOTICE OF NON-RESPONSIBILITY

Aug. 27, 1915—SE CALIFORNIA and
15th avenue E 27-6xS 100. San
Francisco Land Co. as to improve-
ments on leased property.....

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED
Aug. 20, 1915—S CLAY, between
Front and Davis, 60 E of Front.
Corville Estate Co. to Brockhage,
Foley & Green Aug. 10, 19
Aug. 20, 1915—E DELAWARE, 154 S
22nd (Sierra) E 200xS 246. Pacific
Gas and Electric Co. to Darby Lay-
don Aug. 14, 19
Aug. 20, 1915—S CASELLI AVE (553)
W Douglass 25x100. E. B.
Erickson to whom it may con-
cern Aug. 17, 19
Aug. 20, 1915—LOT 27, LYON &
Hoag's subdivision Lincoln Manor;
lot 32, Lyon & Hoag's subdivision
Lincoln Manor. Lyon & Hoag Cpn.
to Pockman & Co. Aug. 9, 19
Aug. 20, 1915—E TWENTY-FOURTH
avenue, 155 N Geary N 25xS 120.
William Newman to G. M. Hantz-
che and Fred O. McKay
..... Aug. 7, 19
Aug. 20, 1915—NE LESEE 116-6 NW
from N Park E 73-5 N 25 W 88-4
SE 29-132. William H. Beatty to
B. D. Beatty Aug. 20, 19
Aug. 20, 1915—S GREEN 112-6 W
Hyde W 25xS 137-6. Enrico Be-
sozzi to E. J. Montgomery
..... Aug. 19, 19
Aug. 20, 1915—E TWELFTH AVE.
100 S Cabrillo S 25xS 120. Marion
L. Hall and Sue Johnston to
Charles Schwarz Aug. 17, 19
Aug. 20, 1915—NW PINE and Mason
W 62-6xN 23. Gerard Investment
Company to whom it may concern
..... Aug. 20, 19
Aug. 20, 1915—SE CLAY and Joice.
Ellen Ryan to Lichters & Grell.....
..... Aug. 17, 19
Aug. 21, 1915—E ELEVENTH AVE.
175 S Balboa S 25xS 120. M. C.
Ruch to whom it may concern.....
..... Aug. 21, 19

23, 1915—E THIRTY-FIRST AV
N Clement E 170xN23. Mrs. J.
Hoox and Mrs. E. M. Adair to
whom it may concern.....Aug. 12, 1915
23, 1915—LOTS 28 AND 29, BLK
Flint Tract Homestead Associa-
tion. Percy E. Towne to William
LittleAug. 16, 1915
23, 1915—N UNION 27-6 W Bak-
er 27-6xN 110. Mary Stein to
Ratto & Ratto.Aug. 21, 1915
23, 1915—W TWELFTH AVE,
5 N Balboa N 25xW 120. Alton
Lapham to whom it may concern
.....Aug. 20, 1915
23, 1915—N O'FARRELL 74 W
arkin W 63-6xN 120. Herman
udemann and Maria Schumacher
J. B. Reite.Aug. 21, 1915
23, 1915—NW DEVISADERO
and Jackson. Florence G. Weill to
tto Carson & Co., Aug. 23, '15;
S. SmithAug. 13, 1915
23, 1915—S GROVE 162 E Brod-
rick E 27-6xS 137-6. Mrs. J. J. or
Elizabeth M. and J. J. Butler or
John J. Butler to whom it may
concernJuly 15, 1915
24, 1915—NW BUSH and Stock-
ton W 50xN 91-6. W. A. Rudgear
to James L. McLaughlin.....Aug. 1, 1915
24, 1915—W STANYAN and
line, lot 25, block B, Sutto Addi-
tion S 30 W parallel with Bel-
grave Ave, 50-2 m or 1 N 30 m or 1
rave avenue 50-2 m or 1 30 m or 1
46-1. Robert M. and Caroline T.
McHolson to O. E. Evans Co.....
.....July 26, 1915
24, 1915—E FORTY-FOURTH
avenue, 100 N Anza N 25xE 120.
Michele Capitani to William H.
ValthallAug. 23, 1915
25, 1915—W BRYANT, 100-5 N
Army N 24xW100. Harold F. Ever-
ett to Philip W. Montrouil.....
.....Aug. 24, 1915
25, 1915—N CALIFORNIA, 30 E
eldesdorff E 20 m or 1 to a point
32-6 W Sansone N 124 W 30 m or 1
124. S. F. Investment Co to Mc-
fowan & Butler.....Aug. 23, 1915
25, 1915—LOT 21, BLK 7, Lake-
view. Gus Carlson to whom it
may concernAug. 25, 1915
25, 1915—NW CLEMENTINA,
230 SW 4th SW 22-6xNW 80. Rose
and Dennis Quigley to whom it
may concernAug. 24, 1915
26, 1915—E SEVENTH AVE, 125
S Kirkham S 75xE 120; W 4th ave-
nue 220-3/4 S Parnassus avenue, S
75xW 100. A. J. Ralsch to Cox
Bros.Aug. 25, 1915
26, 1915—W NINETEENTH
Ave, between Anza and Geary 25x
120. Anna C. Schram to A. W.
MacKillopMay 15, 1915
26, 1915—SE JERSEY and
Vicksburg (rear). George Dent
and Rose Smith to Jacob F. Nelsen
.....Aug. 24, 1915
26, 1915—N FOLSOM, 125 E 5th
N 80xE 25. Henrietta Schiff to
Frank ElvinAug. 26, 1915
26, 1915—E STOCKTON 81-8 S
Clay S 67-2xE 68-2. Louis Gass-
ner to A. H. Leaf & Co.....Aug. 21, 1915
26, 1915—LOTS 14 AND 17,
Block 1, College Hill Tract. A. E.
Olson to whom it may concern.....
.....Aug. 26, 1915
26, 1915—LOT 5, Lyon & Hoag's
subdivision Bakers Beach Land

Co. Frank W. Aitken to W. A. and
C. C. TerrillAug. 19, 1915
Aug. 26, 1915—E HYDE, 102-6 S
Turk E 137-6xS 35. O. A. Craemer
to whom it may concern.....
.....Aug. 25, 1915
Aug. 26, 1915—N CLEMENT, 52-6 E
15th avenue E 25xN 100. William
H. Kiler to Conservative Building
and Investment Co.Aug. 26, 1915
Aug. 26, 1915—N ELLIS, 55 W Jones
N 120xW 52-6. The Peter Windel-
er Co. to Richard J. H. Forbes....
.....Aug. 18, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

Aug. 20, 1915—NO. 3870 EIGH-
TEENTH (aeroplane). M. C. Tun-
son vs. C. F. McDonald and George
L. Williams\$81
Aug. 20, 1915—N CALIFORNIA, 54-3
E Steiner E 151, N 132-8 1/4, W 99, S
25, W 99, S 25, W 32, S 106-3 1/4 m or
l. James B. Fletcher vs. Pacific
Realty Company\$2050
Aug. 23, 1915—N GEARY 80-4 W
Blake W 25xN 100. Hart-Wood
Lumber Co. vs. George and Ame-
lia Ziegler and S. F. Building Co.
.....\$243.97
Aug. 24, 1915—S McALLISTER, 106-3
W Lyon W 25xS 137-6. Gas and
Electric Appliance Co vs. Califor-
nia Co. Operative Real Estate Co.
and L. Helbing\$150.97
Aug. 24, 1915—N GEARY, 80-4 W
Blake W 25xN 100. James Can-
tley vs. Geo. and Amelia Ziegler,
S. F. Building Co.....\$35
Aug. 24, 1915—EXPOSITION SITE.
The Hill Bros. vs. Garcia & Goni,
Panama-Pacific Exposition Co.,
Francesco Rossi, C. W. Steere et al.
.....\$170
Aug. 25, 1915—SW ELLIS and Lar-
kin S 49xW 87-6. Munster & Born-
holdt vs. Mary C. and Joseph B.
Kennedy\$4,021.20
Aug. 26, 1915—LOT 44, Lyon & Hoag's
Ashbury Terrace. M. Bertolino vs.
James F. Brenan, John Diestel Co.
.....\$177
Aug. 27, 1915—S SACRAMENTO 137-6
E Drumm E 108-8 1/4 S 67-8 W 20 S
24 W 88-8 1/4 N 91-8. Fair Mfg.
Co. vs. Louis R. Holm and Termi-
nal Investment Co.....\$340.85
Aug. 27, 1915—E DOLORES, 147 S
22nd S 36xE 117-6. George Ryan
vs. W. H. Daniel and A. Land.....\$241.32
Aug. 27, 1915—NE GIRARD, 100 SE
Olmsted SE 25xNE 120. Charles
Warnock vs. James and Mary
Douglas\$25

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

RECORDED AMOUNT

Aug. 25, 1915—SW GAMBIER 50 SE
Silliman E 50xSW 95. Brown Es-
tate Co. to J. H. Grady
Aug. 23, 1915—SW ELLIS and Larkin
W 87-6xS 49. Fred Koldenstrodt
to Marion and G. Kennedy and
Shea & Loquist

OAKLAND AND ALAMEDA COUNTY

BUILDING.—Reinforced Concrete. Cost
not stated. Oakland, Cal. Engineer,
County Surveyor, Oakland. Owners,
Alameda County. Bids will be opened
on September 7th for the construction
of a bridge in the Pleasanton Road
District. Plans and specifications at
the County Surveyor's office.

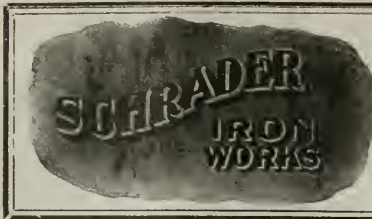
RESIDENCES.—Four, 1 story and
base, frame, \$2,500 each. Oakland, Cal.
Architect, none. Owner, E. A. Muller,
Syndicate Bldg., Oakland. Location,
east Hillegass, north Alcatraz. Will
contain six rooms, bath and sleeping
porch. Interiors finished in pine, elm
panels and white enamel. Hardwood
floors, open fire places and tile and
brick mantels. Tile in bath rooms. Au-
tomatic water heaters. Exteriors cov-
ered with rustic and cement plaster
on meal lath. Plans complete and in
the hands of owner who will do the
work by Day Labor.

RESIDENCE.—1 story and base,
frame, \$2,500. Oakland, Cal. Archi-
tect, none. Owner, H. H. Weider, 1735
Broadway, Oakland. Location, east
Broadway, south Prospect. Will con-
tain five rooms, bath and sleeping
porch. Interior finish pine and white
enamel. Hardwood floors, open fire
place and tile or brick mantel. Tile in
bath room. Automatic water heater.
Exterior covered with rustic and ce-
ment plaster. Plans complete and in
the hands of the owner who will do
the work by Day Labor.

RESIDENCE.—2 story and base,
frame, \$5,000. Oakland, Cal. Archi-
tect, none. Owners, Banning & Stew-
art, 5215 Broadway, Oakland. Loca-
tion, west Belgrave Place near Napa.
Will contain seven rooms, two baths
and sleeping porch. Interior finish pine,
elm and white enamel. Hardwood
floors, open fire places, furnace heat,
and automatic water heater. Bath fin-
ished in tile. Mantels brick. Exterior
covered with cement plaster on
metal lath. Plans complete and in the
hands of the owners who will do the
work by Day Labor.

RESIDENCE.—2 story and base,
frame, \$6,500. Oakland, Cal. Architect,
Charles V. McCall, Central Bank Bldg.,
Oakland. Owner, John J. McDonald.
Location, Crocker Highlands Tract.
Will contain eight rooms, three baths,
sleeping porch and garage. Interior
finish pine and hardwood with hard-
wood floors. Bath rooms finished in
tile. Furnace heat, open fire places
and tile or brick mantels. Automatic
water heater. Exterior covered with
cement plaster on metal lath. Plans
complete and figures being taken.

THEATRE AND STORES.—3 story
and base, reinforced concrete and steel,
\$175,000. Oakland, Cal. Architects,
Cunningham and Pollock, First Na-
tional Bank Bldg., S. F. Owners, Moffat
Estate. Location, southwest corner of
11th and Franklin streets, covering an
area of 100 by 150 feet. Will contain
stores besides a theatre with main floor
and balcony seating 1500 people. Inter-
ior finish hardwood, pine and orna-
mental plaster. Concrete floors, hollow
tile partitions, metal window sash and
frames. Steam heat and modern ven-
tilating equipment. Exterior faced with
cement plaster and terra cotta. Plans
for steel work being figured and bids



Structural Steel Contractors

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HARRISON ST.,
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San Francisco**

Telephone Market 337

for general construction to be called for at once.

THEATRE AND STORES—3 story and base. Class A construction, \$100,000. Oakland, Cal. Architect, Edward T. Faulkes, Crocker Bldg., S. F. Owner, Henry McPike. Location, east Franklin, north of 15th street. Will contain a number of stores on first floor besides theatre, while upper floors will be arranged for offices. Steel frames and exterior walls and floors of concrete. Interior finish pine, hardwood, metal trim and ornamental plaster. Steam heat, elevator service, vacuum cleaning and modern plumbing. Hollow tile interior partitions, metal window sash and frames, marble base. Exterior faced with pressed brick and terra cotta. Plans complete and segregated figures being taken.

HOSPITAL ADDITION—Frame and concrete. Cost not stated. Oakland, Cal. Architect, none. Owners, Alameda County. Plans have been completed and bids will be opened on September 15th for the construction of a temporary ward building to be erected at the Alameda County Infirmary. Plans and specifications can be secured from the County Clerk.

APARTMENT HOUSE—2 story and base, brick veneer, \$53,000. Oakland, Cal. Architects, Oliver & Thomas, Pantegates Theatre Bldg., Oakland. Owner, C. L. Donohoe, 1163 17th avenue, Oakland. Location corner of Harrison and Grand Ave. Will contain 25 suites of two and three rooms and baths and wall beds. Interior finish pine and elm panels. Hardwood floors, steam heat, oil burning plant and hot water system. Tile in the baths. Exterior faced with pressed brick. Plans complete and in the hands of the owner who is taking all figures.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, G. W. Baumann, 6109 Noble street Oakland. Location, north Trask, west Kingsford. Will contain five rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. Exterior, rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,500. Oakland, Cal. Architect, none. Owner E. L. Higgins, 5250 Miles Avenue, Oakland. Location east Thomas, north Napa. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Bath room finished in tile and equipped with automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work will be done by Day Labor.

RESIDENCE—2 story and base, frame. Cost not stated. Oakland, Cal. Architects Garden & Kuhn, Phelan Bldg., S. F. Owner, Frank E. McGurran. Location, Lot 19 Sequoia Hills. Will contain eight rooms two baths and sleeping porch. Interior finish, pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and figures are being taken.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect none. Owner, C. M. MacGregor, 407 13th street, Oakland. Location, Woodruff east of 38th street. Will contain five rooms and bath. Interior finished in pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heater. Exterior covered with cement plaster. Plans complete and work will be done by Day Labor.

RESIDENCE—2 story and base, frame, \$6,550. Oakland, Cal. Architect, F. C. Davis, 515 Buena Vista ave., S. F. Owner, Grace E. Jones. Location north Wellington west of Edgewood. Will contain eight rooms two baths and sleeping porch. Interior finish, pine, hardwood and white enamel. Hardwood floors, open fire places and tile mantels. Tile in the bath rooms. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans being prepared.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, P. E. Woodburn, 2365 Greenwood ave., Oakland. Location east Vista, south of Everett. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel brick. Automatic water heater. Bath room finished in tile. Exterior covered with rustic and cement plaster. Plans complete and the work will be done by Day Labor.

RESIDENCE—1 story and base, reinforced concrete. Cost not stated. Piedmont, Alameda Co., Cal. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owner, Mills Juliet Alexander. Location, Gregg avenue. Will contain 12 rooms, three baths, sleeping porches and a garage. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat, open fire places, brick and tile mantels, hot water system and vacuum cleaning. Tile bath rooms. Exterior faced with cement plaster. Contract for grading awarded to Bates, Borland & Ayer, Oakland, for \$2,000. Other parts of the work out for figures.

Contracts Awarded.

STORES—1 story and base, brick. \$6,000. Oakland, Cal. Architect, C. Dickey, Central Bank Bldg., Oakland. Owners, Hawley Investment Co. Contractor, P. A. Muller, Syndicate Bldg., Oakland. Contract price, \$6,000.

Building Contracts Awarded

Oakland

No.	Owner	Contractor	Amount
1657	Oakland	Faulkes	1
1658	Borman	Kollmer	2
1659	McCargar	Bischoff	7
1660	Kelly	Woodward	7
1661	Englander	Dexter	1
1662	Hull	Nall	1
1663	Sigourney	Whitford	2
1664	Shredded Wheat	Makin	6
1665	Shredded Wheat	Stock	5
1667	St. Mary	St. Mary	1
1668	St. Mary	St. Mary	1
1669	Klantly	Glanly	1
1670	Llewellyn	Ingerson	2
1671	Muller	Muller	2
1675	Muller	Muller	2
1676	Muller	Muller	2
1677	Muller	Muller	2
1678	Banning	Stewart	5
1679	Penycoot	Strang	2
1680	Weider	Weider	2
1682	Foreign Miss	Litton	1
1687	Pollard	Strang	1
1688	Ahl	Geary	1
1689	Ways	Price	2
1690	Shredded Wheat	Otis	5
1691	Shredded Wheat	Dalziel	7
1692	Stanley	Stanley	1
1693	Higgins	Higgins	3
1694	Baumann	Owner	20
1695	Alforno	Alforno	13
1696	MacGregor	MacGregor	20
1698	Gutleben	Walden	2
1700	Gutleben	Walden	10
1701	Michell	Sommarstrom	30
1701	Jones	Jones	56
1703	Eldorado	S. F. Mill	90
1705	Moor	Webb	11
1707	Brehu	Texdahl	4
1708	Hugo	Hugo	18
1709	Woodburn	Woodburn	25
1710	Gray	Butler	25
1711	Shredded Wheat	Fuller	17

DWELLING

(1657) FORTY-NINTH STREET at Shafter avenue. One-story five-room dwelling.
Owner.....City of Oakland.
Architect.....None.
Contractor, John R. Faulkes, 9825 14th street, Oakland.
COST, \$12

DWELLING

(1658) 8 SIXTY-THIRD STREET. 2 W California street, Oakland. One-story, five-room dwelling.
Owner.....August H. Borman, 9 63rd street, Oakland.
Architect.....None.
Contractor, Jacob Kollmer, 2813 Stuart street, Berkeley.
COST, \$22

DWELLING

(1659) W EL CAMINO REAL, 180 Uplands, Oakland. Two-story, 1 room dwelling.
Owner.....Jesse B. McCargar, 57 Oak Grove avenue, Okd.
Architect.....None.
Contractor, John A. Bischoff, 60 Harwood avenue, Okd.
COST, \$700

DWELLING

(1660) W PARK BLVD, 180 N 1 Centro Oakland. Two-story, seven room dwelling.
Owner.....Chester Kelly, 110 Oakland.
Architect.....None.

Contractor...E. W. Woodward, 4021
Brighton avenue, Okla.
COST, \$2500

ELLING
610 E SIXTY-NINTH AVE., 115 S
Fourth Hill Blvd., Oakland. One-story,
six-room dwelling.
Owner.....J. Englander, 616 54th St.,
Oakland.
Architect...None.
Contractor...R. R. Dexter, 2212 Grove,
Oakland.
COST, \$1800

ALTERATIONS
621 S APGAR, 300 W Market, Oak-
land. Alterations.
Owner.....C. K. Hull, 36th and San
Pablo, Oakland.
Architect...None.
Contractor...Geo. C. Nall, 950 11st St.,
Oakland.
COST, \$150

ELLING
437 W HADDON RD, 200 N Excel-
lor, Oakland. One-story, six-room
dwelling.
Owner.....T. W. Sigourney, 694 Had-
don Road, Oakland.
Architect...None.
Contractor...W. T. Whitford, 421 12nd
street, Oakland.
COST, \$2750

RING ETC
510 LOTS 8, 9, 10, 11, 12, 13, 14, 15,
16, 17, 18, 19, 20, 21, 22, 23, 24, and
lots 4, 5, 6, 7, 26, 27, 28, 29, 30,
and 32, Map R. J. McMullen's sub-
division of block 576, Oakland. All
work of furring, lathing and plaster-
ing for four-story, reinforced
concrete factory.
Owner.....Pacific Coast Shredded
Wheat Co.
Architect...Hobart & Cheney, Crocker
Bldg., S. F.
Contractor...W. M. Makin, 154 Ricardo,
Oakland.
Filed Aug. 21, '15. Dated Aug. 12, '15.
Monthly of 75%
Usual 35 days 25%
TOTAL COST, \$6390
d, \$3195. Sureties, Massachusetts
Bonding and Insurance Co. Forfeit,
\$10. Limit, 90 days from Jan. 1, 1916.
Plans. Specifications filed.

551 SAME AS ABOVE. Carpenter
and mill work.
Owner.....Same as above.
Architect...Same as above.
Contractor...Lester Stock, Hearst
Bldg., S. F.
Filed Aug. 21, '15. Dated Aug. 14, '15.
Payments same as above.
TOTAL COST, \$5100
d, \$2550. Sureties, Pacific Coast
Balty Co. Forfeit, \$10. Limit, 105
days after Nov. 1. No plans. Specifi-
cations filed.

ELLING
371 NE NINETY-SIXTH AVE and
Five street, Oakland. One-story, 4-
room dwelling.
Owner.....Joe St. Mary, 9257, E-14th
street, Oakland.
Architect...None.
Contractor...None.
COST, \$1150

DWELLING
(16681) E NINETY-SIXTH AVE, 30 N
Olive, Oakland. One-story, four-
room dwelling.
Owner.....Joe St. Mary, 9257, E-14th
street, Oakland.
Architect...None.
Day's work. COST, \$1150

DWELLING
(16699) E EIGHTY-SEVENTH AVE, 82
S Holly, Oakland. One-story, five-
room dwelling.
Owner.....C. W. Glantz, 1123 88th
avenue, Oakland.
Architect...None.
Day's work. COST, \$1600

ALTERATIONS
(16709) NO. 1612 TELEGRAPH, Oak-
land. Alterations.
Owner.....J. Llewellyn, 1635 Broad-
way, Oakland.
Architect...None.
Contractor...C. A. Ingerson, 288 Lester
avenue, Oakland.
COST, \$500

DWELLING
(16714) E HILLEGASS, 295 N Alcatraz,
Oakland. One-story six-room dwlg.
Owner.....F. A. Muller, Syndicate
Bldg., Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING
(16751) E HILLEGASS, 330 N Alcatraz,
Oakland. One-story, six-room dwlg.
Owner.....F. A. Muller, Syndicate
Bldg., Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING
(16761) E HILLEGASS, 365 N Alcatraz,
Oakland. One-story, six-room dwlg.
Owner.....F. A. Muller, Syndicate
Bldg., Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING
(16771) E HILLEGASS, 260 N Alcatraz,
Oakland. One-story, six-room dwlg.
Owner.....F. A. Muller, Syndicate
Bldg., Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING
(16781) W BELGRAVE PLACE, 236 N
Napa, Oakland. Two-story, 7-room
dwelling.
Owner.....Banning & Stewart, 5215
Broadway, Oakland.
Architect...None.
Day's work. COST, \$5000

DWELLING
(16799) N E-FIFTEENTH ST., 112 N
15th avenue, Oakland. One and one-
half story seven-room dwelling.
Owner.....T. J. Pennycott, 1517 E-
15th street, Oakland.
Architect...None.
Contractor...M. N. Strang, 895 Pacific
avenue, Alameda.
COST, \$2150

DWELLING
(16800) E BROADWAY, 219 S Pros-
pect Drive. One-story five-room
dwelling.
Owner.....H. H. Weider, 1734 Broad-
way, Oakland.

Architect...None
Day's work. COST, \$2500

ALTERATIONS
(16821) NO. 353 E-ELEVENTH ST.,
Oakland. Alterations.
Owner.....Occidental Woman's Board
of Foreign Missions, Prem.
Architect...None.
Contractor...R. B. Litton, 2326 26th
avenue, Oakland.
COST, \$600

ALTERATIONS
(16881) NO. 676 SIXTIETH STREET,
Oakland. Alterations.
Owner.....W. Ahlf, Premises.
Architect...None.
Contractor...L. G. Geary, 679 60th St.,
Oakland.
COST, \$500

DWELLING
(16890) S GREENWOOD AVE, 180 N
Park Boulevard, Oakland. One and
one-half story six-room dwelling.
Owner.....F. L. Wayne, 5723 Oak
Grove avenue, Oakland.
Architect...Hiram K. Lovell, Dalziel
Bldg., Oakland.
Contractor...Price Bros., 5723 Oak
Grove, Oakland.
COST, \$2500

ELEVATORS
(16900) LOTS 5 TO 24 inclusive and
Portions lots 4, 5, 6, 7, 25, 26, 27, 28,
29, 30, 31, 32, Map R. J. McMullen's
subdivision of Block 576, Oakland.
All work for elevators for four-
story reinforced concrete factory.
Owner.....Pacific Coast Shredded
Wheat Co.
Architect...Hobart & Cheney, Crocker
Bldg., S. F.
Contractor...Otis Elevator Co, Bay and
Stockton, S. F.
Filed Aug. 25, '15. Dated Aug. 17, '15.
Monthly of 75%
Usual 35 days 25%
TOTAL COST, \$5050
Bond, \$2525. Sureties, National Surety
Co. Forfeit, \$10. Limit, 90 days from
Jan. 1, 1916. No plans, specifications
filed.

PLUMBING, ETC.
(16911) PLUMBING, HEATING AND
mechanical sweep system on above.
Contractor...Robert Dalziel, Jr., 218
1st. S. F.
Filed Aug. 25, '15. Dated Aug. 19, '15.
Payments same.
TOTAL COST, \$7252
Bond, \$5626. Sureties, Surety Co. of
California. Forfeit, \$10. Limit, 200
days from Aug. 25, 1915. No plans,
specifications filed.

DWELLING
(16921) W LOMA VISTA, 100 N Cali-
fornia, Oakland. One-story, four-
room dwelling.
Owner.....J. L. Stanley, 1985 32nd
street, Oakland.
Architect...None.
Day's work. COST, \$1000

DWELLING
(16931) E THOMAS, 220 N Napa, Oak-
land. Two-story, seven-room dwlg.
Owner.....E. L. Higgins, 5250 Miles
avenue, Oakland
Architect...None
Day's work COST \$3100

DOWELLING

(1694) N TRASK, 260 W Kingsland, Oakland. One-story, seven-room dwelling.

Owner.....G. W. Baumann, 6106 Noble, Oakland.

Architect....None.

Day's work. COST, \$2000

DOWELLING

(1695) S APGAR, 150 W West, Oakland. One-story four-room dwlg.

Owner.....G. R. Alforno, 515 Apgar, Oakland.

Architect....None.

Day's work. COST, \$1300

DOWELLING

(1696) W WOODRUFF, 415 N E-38th street, Oakland. One-story, five-room dwelling.

Owner.....C. W. MacGregor, 470 13th street, Oakland.

Architect....None.

Day's work. COST, \$2000

DOWELLING

(1697) E HIGH, 200 N San Carlos, Oakland. One-story 5-room dwlg.

Owner.....Freda and Elizabeth Gutleben, 2225 High, Oakland.

Architect....C. H. Miller, Dalziel Bldg., Oakland.

Contractor...J. T. Walden, 2312 Courtland avenue, Oakland.

COST, \$2000

DOWELLING

(1698) W COURTLAND AVE, 200 N San Carlos, Oakland. One-story, 3-room dwelling.

Owner.....Rev. J. Gutleben, 2225 High, Oakland.

Architect....C. H. Miller, Dalziel Bldg., Oakland.

Contractor...J. T. Walden, 2312 Courtland avenue, Oakland.

COST, \$1000

DOWELLING

(1700) W OAKLAND AVE, 500 N Walsworth, Oakland. One-story five-room dwelling.

Owner.....A. Mitchell, 1522 5th street, Oakland.

Architect....None.

Contractor...Sommaström Bros., 301 Oakland Ave., Oakland.

COST, \$3000

DOWELLING

(1701) N WELLINGTON, 129 W Edgewood, Oakland. Two-story, eight-room dwelling.

Owner.....Grace E. Jones.

Architect....F. C. Davis, 515 Buena Vista avenue, S. F.

Day's work. COST, \$5650

FACTORY

(1702) SW THIRD and Bristol, Oakland. One-story, two-room class A factory and warehouse.

Owner.....El Dorado Oil Works, Prem.

Architect....R. M. Nichols.

Contractor...S. F. Mill Furnishing Co., 521-23 7th, S. F.

COST, \$9000

DOWELLING

(1703) S McLELLAN, 500 E California, Oakland. One-story, six-room dwelling.

Owner.....Alexandria Moor, Bellevue Hotel, S. F.

Architect....None.

Contractor...Thos. W. Webb, 4663 Fair avenue, Oakland.

COST, \$1183

DOWELLING

(1708) W RHODA, 150 N Madeline, Oakland. One-story, five-room dwlg.

Owner.....P. A. Hugo, 145 Grand avenue, Oakland.

Architect....None.

Day's work. COST, \$1500

DOWELLING

(1709) E VISTA, 150 S Everett, Oakland. One-story, five-room dwlg.

Owner.....P. E. Woodburn, 3965 Greenwood Ave., Oakland.

Architect....None.

Day's work. COST, \$2500

DOWELLING

(1710) S OAK GROVE, 400 N Forrest, Oakland. Two-story six-room dwlg.

Owner.....Mary M. Gray, 5329 Manila avenue, Oakland.

Architect....None.

Contractor...H. S. Butler, 5648 Oak Grove, Oakland.

COST, \$2500

GLAZING

(1711) LOTS 8 TO 24 inclusive and ptn lots 4, 5, 6, 7, and 25 to 32, inclusive, Map R. J. McMullen's subdivision Block 576, Oakland. All work for glazing for four-story reinforced concrete factory.

Owner.....Pacific Coast Shredded Wheat Co.

Architect....Hobart & Cheney, Crocker Bldg., S. F.

Contractor...W. P. Fuller & Co., 10th and Alice, Oakland.

Filed Aug. 27, '15. Dated Aug. 17, '15.

Monthly75%

Usual 35 days25%

TOTAL COST, \$1700

Bond, \$850. Sureties, Fidelity and Deposit Co. Perfeit, \$10. Limit, 30 days after Feb. 1, 1916. Specifications only filed.

Building Contracts Awarded Berkeley.

No.	Owner	Contractor	Amt.
1666	Harris	Van Sant	9079
1671	Am. Photo	Pearson	800
1672	Johnson	Johnson	3000
1673	Lindsay	Koford	800
1697	Andrew	Armstrong	6563
1702	Welcker	Morse	500
1704	Faze	Broad	1500
1706	Texdahl	Texdahl	1950

DOWELLING AND GARAGE

(1666) LOT 10, ELWOOD COURT, Berkeley. All work except electric fixtures, shades, heater, furnace and piping for two-story and basement frame dwelling and garage.

Owner.....Thomas W. Harris, 2434 Piedmont avenue, Bkly.

Architect....Clarence A. Tantan, 251 Kearny, care Bakewell & Brown, S. F.

Contractor...Van Sant-Houghton Co., 503 Market, S. F.

Filed Aug. 21, '15. Dated Aug. 18, '15.

On 15th of each month75%

Usual 35 days25%

TOTAL COST, \$9079

Bond, \$1539.50. Sureties, Harry P. F. Gordon and Raymond Ashton. Forfeit, as fixed by architect. Limit, Jan. 1, 1916. Plans and specifications filed.

LUMBER SHED

(1671) E BONAR, 200 S Addison, Berkeley. Lumber shed.

Owner.....American Photo Play Co. premises.

Architect....None.

Contractor...Ben Pearson, 2403 Grant Berkeley.

COST, \$800

DOWELLING

(1672) N INDIAN ROCK, 60 E San Luis, Berkeley. One-story 8-room dwelling.

Owner.....Maria A. Johnson, 2903 Newberry street, Berkeley

Architect....None.

Contractor...Albert N. Johnson, 2903 Newberry, Berkeley.

COST, \$3000

DOWELLING

(1673) S ROSE, 100 E Grant, Berkeley. One-story 3-room dwelling.

Owner.....Mrs. H. E. Lindsay, Prem.

Architect....None.

Contractor...James Koford, 1636 Milvia, Berkeley.

COST, \$800

DOWELLING AND GARAGE

(1697) LOTS 18 AND 19, BLK H, Oakridge, Claremont, Berkeley. All work except excavation, concrete and cement work for two-story frame dwelling and class C garage.

Owner.....A. Andrew, Oakland.

Architect....C. W. Dickey, Central Bank Bldg., Oakland.

Contractor...G. Armstrong, 220 E-11th street, Oakland.

Filed Aug. 26, '15. Dated Aug. 25, '15.

On 1st and 15th75%

Usual 35 days25%

TOTAL COST, \$6565

Bond, Sureties, Forfeit, none. Limit, November 25. No plans or specifications filed.

ADDITION

(1702) E OXFORD, N Rose, Berkeley Addition.

Owner.....Mrs. M. Welcker, The Cedars, Berkeley.

Architect....None.

Contractor...T. O. Morse, 3040 Halcyon Berkeley.

COST, \$500

ALTERATIONS

(1704) NO 3660 CLAREMONT AVE, Berkeley. Alteration and addition.

Owner.....H. P. Faze, premises.

Architect....None.

Contractor...A. H. Broad, 2117 Klutznick, Berkeley.

COST, \$1500

DOWELLING

(1706) W TEXDAHL, 200 S Oregon Berkeley. One-story, six-room dwlg.

Owner.....C. Texdahl, 3625 Harper Berkeley.

Architect....None.

Days work. COST, \$1950

ADDITION

(1707) NO. 2709 DERBY, Berkeley

Owner.....Miss Brehm, premises.

Architect....None.

Contractor...C. Texdahl, 3625 Harper Berkeley.

COST, \$400

Building Contracts Awarded

Alameda.

No.	Owner.	Contractor	Amt.
1681	Loyegrove	Richards	1000
1683	Swan	Swan	1000
1684	Huntington	Tremble	3300
1685	West End Bldg.	Owner	1500
1686	Lander	Rockingham	1600

DWELLING

(1681) NO. 1312 SANTA CLARA AVE, Alameda. One-story, five-room dwlg. Owner.....M. E. Lovegrove, 1310 Santa Clara avenue, Ala. Architect.....None. Contractor.....L. Richards, 1614 Bay, Ala. COST, \$1000

DWELLING

(1683) NO. 516 TAYLOR, Alameda. One and one-half story five-room dwelling. Owner.....A. F. Swan, 534 Palace Court, Alameda. Architect.....None. Day's work. COST, \$1000

DWELLING

(1684) W OAK, 480 S Clinton, Alameda. One and one-half story six-room dwelling. Owner.....O. S. Huntington, 857 Oak, Alameda. Architect.....Universal Drafting Bureau, 1844 5th avenue, Okd. Contractor.....M. H. Tremble, 2475, Rawson, Oakland. COST, \$3300

DWELLING

(1685) NO. 1205 BUENA VISTA, Alameda. One-story five-room dwlg. Owner.....West End Building Association, 1600 Webster, Ala. Architect.....None. Day's work. COST, \$1500

DWELLING

(1686) NO. 1351 MOUND, Alameda. One-story four-room dwelling. Owner.....Mrs. M. Lander, 1515 Benton, Alameda. Architect.....None. Contractor.....J. Rockingham, 2306 San Jose, Alameda. COST, \$1600

DWELLING

(1687) PEARL ST., Alameda. One-story five-room dwelling. Owner.....Pollard & Sons, Santa Clara and Park, Alameda. Architect.....None. Contractor.....F. N. Strang, 805 Pacific avenue, Alameda. COST, \$1800

COMPLETION NOTICES.

ALAMEDA COUNTY

Aug. 23, 1915—LOTS 6 AND 7, Cameron Tract, Oakland. German Old Peoples' Home of S. F. to Julius G. ZwickerAug. 21, 1915
Aug. 23, 1915—E THOMAS, 100 N Napa, N 39x100, Oakland. E. L. Higgins to whom it may concernAug. 19, 1915
Aug. 24, 1915—N TWENTIETH ST, 25 W Curtis, Oakland. S. Ortmann to J. Frank GunnAug. 23, 1915
Aug. 25, 1915—N EIGHTEENTH, 82-3

W Kirkham, N 104-93W 25, Oakland. N. A. Jones to A. J. PetersonAug. 21, 1915
Aug. 25, 1915—NW PACIFIC AVE and Bay street, 56x70, Alameda. E. D. Portmann to R. W. KnepperAug. 21, 1915

Aug. 25, 1915—LOTS 8 TO 24, inclusive and portions lots 4, 5, 6, 7, 25, 26, 27, 28, 29, 30, 31, and 32, Map R. J. McMullen's subdivision Block 576, Oakland. Pacific Coast Shredded Wheat Co. to J. E. BreitwiserAug. 20, 1915
Aug. 26, 1915—E GROVE, 50 N 33rd street, S 50 E 119-64, N 61 W to point beginning, Oakland. Judith Lamoureux to H. N. TurrellAug. 25, 1915

Aug. 26, 1915—W SPAULDING AVE, 358.16 N Dwight Way N 35xW 129.25, Berkeley. F. H. Nilsson to W. JohnsonAug. 25, 1915
Aug. 26, 1915—N LE CONTE AVE, 125 E Le Roy Ave E 50xN 125, Berkeley. Mary A. L. Holt to J. DawsonAug. 24, 1915
Aug. 26, 1915—PTN LOT 18, Map Hemphill Court, Oakland. Alexander Allen to Banning & StewartAug. 25, 1915

Aug. 26, 1915—LOT 18, BLK 19, being E Inyo street, 250 S Solano avenue, Albany. J. S. Killam to M. P. BrashAug. 24, 1915
Aug. 27, 1915—LOT 44, BLK A, Piedmont Vista Tract, Piedmont. George A. Young to John W. JessimanAug. 27, 1915

Aug. 27, 1915—LOT 12, BLK 4, Rock Ridge Park, Oakland. Wm. C. Mason to whom it may concernJuly 30, 1915
Aug. 27, 1915—E 65 LOT 1, BLK 13, Map Northbrae, Berkeley. Wm. C. Mason to whom it may concernAug. 27, 1915
Aug. 27, 1915—LOTS 6 AND 7, Cameron Tract, Oakland. German Old Peoples Home of San Francisco to Robert TrostAug. 27, 1915

LIENS FILED

ALAMEDA COUNTY.

Aug. 23, 1915—PORT LOTS 79 AND 80, Map Barker Park, Oakland. Emma Otto (wf Paul)\$5000
Aug. 23, 1915—PORT RANCHO SAN Lorenzo (Castro), Eden Tp. Laura Williams\$2,500
Aug. 23, 1915—PART SEC 30, TP 3 S, Range 3 E, Mt. Diablo base and meridian, Alameda Co. Charles Olsson\$5,000

Aug. 23, 1915—LOT 12, BLK G, Map Foothill Park, Oakland. George W. and Grace A. Donald\$3,500
Aug. 23, 1915—N FOURTEENTH ST, 82 E Cypress St, E 25xN 110, Oakland. Concettina Rist (wf Emil C)\$2,800

Aug. 25, 1915—PTN PLOTS 3 AND 11, Stanton Tract No. 1, Eden Tp. Truman W. Stump\$4200
Aug. 25, 1915—NW SEVENTH AVE 105 NE E-14th street NE 40xNV 75, Oakland. Mary Louise Raun (wf Eduard (as recorded) P)\$3500
Aug. 25, 1915—N THIRTY-SEVENTH street, 280.06 W West street, W 50xN 148, Oakland. Anna L. Har-

ington (wf W V)\$4900
Aug. 26, 1915—NW PACIFIC AVE and Wood W 47 N 120 E 47.49 S 120, Alameda. F. L. Luce\$4000
Aug. 26, 1915—LOT 37, WOODLAWN Park, Oakland. Sophia Harriet Harper\$4200

SAN JOSE AND THE SANTA CLARA VALLEY

BRIDGE.—Reinforced Concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The Supervisors have directed the clerk to advertise for bids for the construction of a reinforced concrete bridge on Noble Avenue over the Penitencia Creek. Bids will be opened on September 13th at 11 a. m. Plans and specifications may be had from the Surveyor at San Jose.

Bridge.—Reinforced concrete. Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. The Board of Supervisors has withdrawn its contract to W. H. Kunze & J. A. Wolfe, the lowest bidders for repairing the Chualar bridge, as it was discovered that the firm failed to present a check for ten per cent of the amount bid. New bids have been ordered called.

ROAD CONSTRUCTION.—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Bids have been ordered received for the construction of a drain on the Tulley road in Supervisor District No. 2. Bids close on September 13th at 11 a. m. Further information may be had from the County Surveyor.

CRUSHED ROCK.—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The County Supervisors have ordered bids received for Saratoga crushed rock to be delivered in Road District No. 5 at the following roads: Evelyn avenue, 3450 yards; Maud avenue, 1650 yards; Alviso and Mt. View Road, 3510 yards; Mathilda avenue, 1238 yards. All to pass 2 inch ring. Bids to be opened Monday, September 13th.

ROAD IMPROVEMENT.—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Bids will be received until September 7th for improving Carmel Valley Road between Hutton Corner and the Laurellos Ranch House, in Carmel, Sur and Tubacitos Road Districts.

ROAD GRADING AND MACADAMIZING.—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Bids will be received until September 7th at 2 p. m. for grading and macadamizing a part of the Salinas-Monterey Road, in Toro and Monterey Road District.

LIBRARY WORK.—Concrete. Cost not stated. South San Francisco, San Mateo Co., Cal. Owners, City of South San Francisco. All bids received for a concrete retaining wall, concrete steps and for lighting fixtures for the new library building have been received as being above the estimate. New bids will be called.

PAVING AND GRADING.—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. Bids will be opened on September 10 for grading and curbing and paving of Grand avenue from the median line of Ashton street to the easterly line of the land of Guiseppe Telli and that portion of Grand avenue from the westerly line of the lands of the South San Francisco Improvement Co. to the northeasterly line of the Mission Road for the full width thereof.

STREET IMPROVEMENT.—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. A resolution ordering the improvement of the Grand avenue extension from Chestnut avenue to Mission road, with a concrete-asphalt pavement was adopted at the last meeting of the City Trustees. Bids on the work will be ordered called for at the next meeting.

RESIDENCE.—1 story and base. Frame. Cost as follows. San Jose, Santa Clara Co., Cal. Architect, none. The following day labor jobs are reported as about to be started in San Jose, J. P. Clark, 11 and San Carlos, 5 1/2 story \$2500; M. D. Forsythe 664 Spencer, alterations, \$1500, and J. W. Trumbull, 25th, near Santa Clara, ave., \$1500.

STREET PAVING.—Cost not stated. Monterey, Monterey Co., Cal. Engineer, City Engineer, Monterey. Owners, City of Monterey. Bids will be opened on September 7th for paving concrete street from Madison to Jefferson and also for grading, sidewalk and curbs. Plans at the office of the City Engineer.

STREET IMPROVEMENT.—Cost not stated. Monterey, Monterey Co., Cal. Engineer, City Engineer, Monterey. Owners, City of Monterey. Resolution has been passed for the macadamizing of Main street and bids will be called for shortly.

Contracts Awarded.

HIGHWAY AND SEWER CONSTRUCTION.—Cost as follows. San Mateo, San Mateo Co., Cal. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Contractors, Ranque-Crummey Co., Oakland, paving in San Mateo Park, \$70,550; Federal Construction Co., Sharon Bldg., S. F. \$77,500. Fred Keller 110 Jessie street, S. F., sewer in Hayward park, contract price not stated.

BUILDING CONTRACTS.

SANTA CLARA COUNTY.

DWELLING

LOT 9, BLK 2, HESTER PARK TCT., San Jose. Frame dwelling.
Owner, F. H. Lovejoy, San Jose.
Designer, L. J. Kelly, 6 Mayellen avenue, San Jose.
Contractor, L. J. Kelly, 6 Mayellen avenue, San Jose.
Filed Aug. 18, '15. Dated Aug. 6, '15.
Frame up \$412.50
First coat of plaster 412.50
Completed 412.50
Usual 35 days 412.50
TOTAL COST, \$1650

Bond, \$850. Sureties, A. M. Kelly and W. L. Atkinson, San Jose. Forfeit, none. Limit, none. Plans and specifications filed.

APARTMENT HOUSE

ON DEVINE ST., between 1st and 2nd, San Jose. All work except plumbing, metal work, hardwood floors, excavation for two-story apartment house (frame).

Owner, Mrs. Mary A. Ward, San Jose.

Architect, F. D. Wolf, 1st National Bank Bldg., San Jose.

Contractor, W. J. Moore, San Jose.

Filed Aug. 16, '15. Dated Aug. 5, '15.
Frame up \$1756
Plastered 1756
Accepted 1756
Usual 35 days 1757

TOTAL COST, \$7025

Bond, \$3,512.50. Sureties, F. B. and A. L. Hubbard San Jose. Forfeit, \$5. Limit 35 days. Plans and specifications filed.

DWELLING

STEVENS CREEK ROAD, LOS GATOS road and Bascome avenue, near San Jose. Frame house.

Owner, M. Di Fiore, R. F. D. box 182, Stevens Creek road, east of Los Gatos road, San Jose.

Architect, C. S. McKenzie, Bank of San Jose Bldg., San Jose.

Contractor, F. Peres, R. W. Moore Bldg., San Jose.

Filed Aug. 19, '15. Dated Aug. 16, '15.
Frame up \$537.50
1st coat of plaster on 537.50
Completed 537.50
Usual 35 days 537.50

TOTAL COST \$2150

Bond \$1100. Sureties, C. A. Leddy and J. S. Desimone, Forfeit, none. Limit, 60 days. Plans and specifications filed.

COTTAGE

180 S FIFTEENTH, San Jose. Eight-room one and one-half story cottage.
Owner, J. P. Clark, 11th and San Carlos, San Jose.

Architect, None.

Day's work.

COST, \$2500

BUILDING CONTRACTS

SAN MATEO COUNTY.

DWELLING

LOTS 18 AND 19, BLK 22, Crocker Tract, Daly City. All work for one-story and basement frame dwelling.
Owner, Michael Kemmit, San Francisco.
Architect, None.

Contractor, Charles Carlson, Daly City.

Filed Aug. 24, '15. Dated Aug. 10, '15.

Frame up \$400
Brown plastered 400
Completed 400
Usual 35 days 400

TOTAL COST, \$1600

Bond, Sureties, Forfeit, none. Limit, 60 days. Plans and specifications filed.

LINGALOW

LOT 17, BLK 9, Map No. 2, Stanford Park, San Mateo County. All work except shades for six-room bungalow.

Owner, Arnold G. Wagner and Margaret L. Wagner, Pa Alto, Cal.

Architect, Roy Heald, Palo Alto.
Contractor, Gott & Dewar, Mounta View.

Frame up \$1735.
Brown coated 735.
Completed 735.
Usual 35 days 735.

TOTAL COST, \$29

Bond, \$2,000. Sureties, J. W. Fish and Charles F. Hartley, Forfeit, none. Limit, 90 working days. Plans as specifications filed.

COMPLETION NOTICES

SANTA CLARA COUNTY.

RECORDED

Aug. 14, 1915—NO. \$21 BRYANT ST., Palo Alto, Cal. Blanche Coolidge to G. N. Mosher, May 15, 19.
Aug. 17, 1915—EAST SIDE OF RACE street near San Fernando street, San Jose. W. J. Culligan to T. J. Schurabeck, Aug. 10, 19.
Aug. 17, 1915—LOT 8, RANDALL Tract on Morse street, near San Jose. B. W. Rucker to W. E. Childers, Aug. 3, 19.
Aug. 13, 1915—ON "OLD RESIDENCE BARN" sight, Stanford University. Trustees Stanford University to J. F. Archibald, Aug. 11, 19.
Aug. 10, 1915—ST. JAMES PARK, opp 2nd street entrance. Maria R. Robins (Naglee Memorial) San Jose, to Vermont Marble Co., S. F., Aug. 9, 19.

LIENS FILED.

SANTA CLARA COUNTY.

RECORDED

Aug. 16, 1915—SW SAN FERNANDO street (and 2nd). Frank Peres, San Jose vs. S. F. Investment Corporation, and Munson Bros. and John Doe, Aug. 10, 1915.

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED

Aug. 21, 1915—PORTIONS OF LOTS 14 and 16 in block 42, Redwood Highlands. Redwood Highlands Company to whom it may concern, Aug. 18, 19.
Aug. 23, 1915—LOT 7, BLK 101, South San Francisco, Cal. South San Francisco Land and Improvement Co. to Jorgensen & Stark, Aug. 14, 19.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

CULVERT.—Reinforced concrete. Cost not stated. Martinez, Contra Costa County, Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Bids will be opened September 13th for the construction a reinforced concrete culvert on t Bay Point to Pittsburg Road. Plans can be secured from the County Surveyor.

CULVERT.—Reinforced concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, City Engineer.

Martinez. Owners, City of Martinez. Plans and specifications for a big concrete culvert across Talbair street have been completed by City Engineer E. C. Brown, and will be adopted at the next meeting of the City Trustees. A call for bids will be made when the plans have been completed.

APARTMENTS AND STORES.—2 story and base, frame. Cost not stated. Martinez, Contra Costa Co., Cal. Architect, James T. Narbett, 704 Macdonald street, Richmond. Owner, Frank Prosser. Will contain four stores and eight apartments with bath. Interior finish, pine. Wall beds, tile in bath rooms and hot water system. Patent store fronts. Exterior covered with cement plaster on metal lath. Plans being figured.

SCHOOL.—1 story and base, frame, and plaster, \$30,000. Suisun, Solano Co., Cal. Architects, W. H. Crim, Jr. associated with Edward J. Sims, 425 Kearny st., S. F. Owners, Suisun School District. Will contain six class rooms, office and an auditorium. Interior finished in pine with maple floors. Central heating system, modern school plumbing and program clocks. Exterior covered with cement plaster on metal lath. Plans being prepared.

OFFICES.—1 story and base, reinforced concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Architect, James T. Narbett, 704 Macdonald ave., Richmond. Owners, Pacific Gas & Electric Co. Bids will be opened on September 7th for a cement one story building which will contain the local offices of the company. Interior finish, pine and hardwood with tile floor. Exterior faced with cement plaster and pressed brick. Plans at office of the architect.

SEWER CONSTRUCTION.—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, City Engineer Brown, Martinez. Owners, City of Martinez. At the last meeting of the City Trustees plans and specifications for the construction of two 18 inch sewers extending the full length of Pine street for both sides of the city, have been ordered prepared. City Engineer Brown will start on the plans at once. On completion of the working drawings bids will be called for. At the same meeting a formal order for the extension of Ferry street sewer to the center line of Green street was made.

RESIDENCES.—20, 1 story and base, frame. Cost not stated. Martinez, Contra Costa Co., Cal. Architect, none. Owners Shell Oil Co. This company is now building 36 homes for their employees and are figuring the contract on twenty additional houses. Interior finish. Exteriors, rustic and shingles. Plans now being figured.

SCHOOL.—1 story and base, frame, \$30,000. Suisun, Solano Co., Cal. Architect, W. H. Crim, Jr., associated with Edward J. Sims, 425 Kearny street, S. F. Owners, Suisun School District. Will contain six class rooms, auditorium and office. Interior finish pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior cement plaster on metal lath. Plans are being prepared.

STREET IMPROVEMENT.—\$3,579.95. Santa Rosa, Sonoma Co., Cal. En-

gineer City Engineer. Santa Rosa. Owners, City of Santa Rosa. Bids will be opened on September 7th for paving Santa Rosa ave. and other grading, curbing and sidewalk work. Plans on file at the office of the City Clerk.

STREET PAVING AND SEWERS.—Cost not stated. San Anselmo, Marin Co., Cal. Engineer, Town Engineer. San Anselmo. Owners, Town of San Anselmo. Bids will be received until 6 p. m. on September 6th by the Board of Town Trustees for construction of sewers in Cedar street and San Anselmo avenue, and paving both streets.

STREET PAVING.—Cost not stated. Petaluma, Sonoma Co., Cal. Engineer, City Engineer. Sonoma. Owners, City of Sonoma. The City Engineer has completed plans and specifications for the improvement of Kent street from Walnut to Howard. Bids on the work will soon be called for.

WATER RESERVOIR.—Concrete construction. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, City Engineer, Martinez. Owners, City of Martinez. The offer of W. D. Thomas of a free site 150 feet square for a reservoir at an elevation of 350 feet in the Thomas Tract of this city, has been taken under advisement by the City Trustees and an early decision is expected. The City Engineer has been instructed to make estimates of the cost of construction and file a report at the next meeting.

Contracts Awarded

BANK FIXTURES.—\$3,715. Rio Vista, Solano Co., Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, National Bank of Rio Vista. Contractors, Fink & Schindler Co., S. F. Contract price, \$3,715.

ROAD CONSTRUCTION.—\$29,681.71. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractor, P. H. Hoare, Bacon Bldg., Oakland. Contract price, \$29,681.71.

SEWER WORK.—Cost not stated. Pittsburg, Contra Costa Co., Cal. Engineer, Town Engineer, Pittsburg. Owners, Town of Pittsburg. Contractor, D. H. MacQuiddy, Pittsburg. Contract price not stated.

ELECTROLIERS.—\$1,300. Petaluma, Sonoma Co., Cal. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. Contractors, Pacific Fire Extinguisher Co., 507 Montgomery st., S. F. Contract price, \$1,300.

BRIDGES.—Three reinforced concrete. \$6,930. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Contractors, Macre & Layaz, San Francisco. Contract price, \$6,930.

BUILDING CONTRACTS.

CONTRA COSTA COUNTY.

PAINTING, ETC.

LOTS 7 AND 8, BLK 323 of Welch or additional survey of town of Martinez. Painting, tinting, varnishing, renovating, linacusta and other work in a one-story addition to Bank of Martinez and balance of second stories. Owner.....Bank of Martinez, Martinez.

Architect.....Alexander A. Cuthin, 9 Post, S. F.
Contractor.....C. J. Fiske & Co., San Francisco.

Filed Aug. 24, '15. Dated Aug. 15, '15.
75% of work completed.....\$191.25
Completed and accepted.....382.50
Usual 35 days.....191.25

TOTAL COST, \$765

Bond, \$382.50. Sureties, Massachusetts Bonding and Insurance Co. Forfeit, none. Limit, as quickly as possible. Plans and specifications filed.

DWELLING

SAND MOUND ISLAND, ten miles due east city of Antioch, and 1½ miles from Dutch Slough on Bridgford Ranch. All labor, materials, etc., for dwelling house.

Owner.....Clark and Clark.

Architect.....None.

Contractor.....H. W. Bridgford.

Filed Aug. 24, '15. Dated Aug. 24, '15.
Entire building enclosed.....\$500
Completed and accepted.....500
Usual 35 days.....500

TOTAL COST, \$1,500

Bond, Sureties, Forfeit, none. Limit, 42 working days. Plans and specifications filed.

DWELLING

LOT NO. 4, BLK A, Homestead Tract, Martinez. All work for two-story dwelling.

Owner.....John Marchi, 1011 Main, Martinez.

Architect.....James T. Narbett, 704 Macdonald Av., Richmond.

Contractor.....D. H. MacQuiddy, Pittsburg.

Filed Aug. 25, '15. Dated Aug. 24, '15.
First floor joists in place.....\$332.50
Roof on.....332.50
Completed and accepted.....332.50
Usual 35 days.....332.50

TOTAL COST, \$3330

Bond, \$1665. Sureties, C. C. Bean and J. J. MacQuiddy. Forfeit, none. Limit, 60 days. Plans and specifications filed.

LIENS FILED

CONTRA COSTA COUNTY.

RECORDED AMOUNT
Aug. 12, 1915—LOT 5, BLK 35, original survey Town of Martinez. A. Baccieri, Madeline Pino and Mrs. H. Costa vs. Charles Tucker...\$77.77
Aug. 17, 1915—LOT 28 in Map of Orinda Villa Park. Sunset Lumber Co. vs. Dr. George W. Davis and Orinda Villa Park Land Co....\$176.16

LIENS FILED.

MARIN COUNTY.

RECORDED AMOUNT
Aug. 25, 1915—SITUATE IN FAIRFAX, Marin Co. Finsen & Schloesser Co. vs. Cascade Land Co., a corporation.....\$196.84

RELEASE OF LIENS

MARIN COUNTY.

RECORDED AMOUNT
Aug. 21, 1915—SITUATE IN SAN ANSELMO Christenson Lumber Co. to King. Charles Laylander...\$31.77

Professional Directory

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Phelan Bldg. San Francisco

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA.

IRRIGATION RESERVOIR.—Concrete construction, \$1,250,000. Hanford, Kings Co., Cal. Engineer's name not given. Owners, Oakdale and South San Joaquin Irrigation Districts. According to word received from this city a million and a quarter dollar reservoir is being planned jointly by the Oakdale and South San Joaquin Irrigation districts and the Utica Gold Mining Co. The Irrigation districts have come to terms with the mining company and it is expected that the reservoir will be built this fall on the east fork of the Stanislaus River. The project is said to have been approved by the Federal authorities.

IRRIGATION DITCH.—Cost not stated. Engineer, F. C. Herrmann, Modesto. Owners, Modesto Irrigation District. Chief Engineer, F. C. Herrmann, of the Modesto Irrigation District, at a recent meeting informed the Board of Directors that he would try to have estimates of the cost of enlarging the main canal, so that it can take care of water for the Waterford Irrigation District, completed in time to present at the next meeting of the Modesto Board September 13th.

RESIDENCE.—1 story and base, frame, \$2,000. Fresno, Fresno Co., Cal. Architect, none. Owner, C. L. Saylor, 1035 Green street, Fresno. Location, Fresno Heights. Will contain five rooms and bath. Interior finish pine.

Some hardwood floors. Open fire place and tile mantel. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SCHOOL.—1 story and base, brick, \$26,000. Woodlake, Tulare Co., Cal. Architect, O. L. Clark, Brower Bldg., Bakersfield. Owners, Woodlake School District. Will contain six rooms and auditorium. Interior finish, pine with maple floors. Central heating system and modern school plumbing. Exterior faced with pressed brick. Plans complete and figures being taken.

STORES.—1 story and base, brick, \$20,000. Fresno, Fresno Co., Cal. Architect's name not given. Owners, Tupper Estate. Location, K and Kern sts. Will be arranged for a number of small stores. Interior finish, pine and hardwood. Patent store fronts marble bases. Exterior faced with pressed brick. Plans being prepared.

ROAD CONSTRUCTION.—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners Kern County. Plans are on foot for the construction of a road to Mt. Whitney from Bakersfield. The first definite steps will be taken when the Supervisors meet next September and three viewers are appointed to look over the road as far as the Tulare County line. If that road can be built an appeal will be made to Washington, requesting the construction of a road through the forest reserve, timber. Costs as follows. Visalia, Tulare Co., Cal. Engineer, County Sur-

vapor, Visalia. Owners, Tulare County. Contractors, The Turner Co., Kings River Bridge, \$14,332—George Briabury, Los Angeles, bridge canal 76, \$1,195, and Panama Land Co., Visalia, two timber bridges \$2,242 and \$3,044.

Contracts Awarded.

FURNISHING ROCK.—Cost not stated. Hanford, Kings County Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractor, Grant Rock & Gravel Co., Flat Bldg., S. F. Contract price not stated.

HIGHWAY CONSTRUCTION.—Cost not stated. Hanford, Kings Co., Engineer, County Surveyor, Hanford. Owners' Kings County. Contractor, Thompson Bros., 1514 H street, Fresno. Contract price not stated.

BUILDING CONTRACTS.

FRESNO COUNTY.

DWELLING
LOTS 5, 6, 7, BLOOMINGTON AD N
Fresno. All work for dwelling.
Owner, Mr. Tucker.
Architect, None.
Contractor, J. E. Cregor.

COST, \$

FINISHING DWELLING
LOTS 34, 35, BLK 1, FORTHCAMP
No. 2, Fresno. All work finish
dwelling.
Owner, Mary C. Caldwell.
Architect, None.
Contractor, Carl C. Larsen.
Filed Aug. 25, '15. Dated Aug. 25.
Painting done

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Sacramento
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Shady Canyons
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Eastern Railway
Francisco Depot Key Route Ferry

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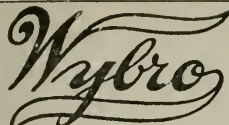
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Branch Office, 635 F St., Washington, D. C.

14, 15, BLK 8, FRESNO HGTS,
\$90. All work for dwelling.
C. L. Saylor, 1035 Green,
Sacramento.
None.
work. COST \$1500
LING
2, BLK 11, PARK ADD, Fresno.
Selling.
None, Riecke, 1625 K, Fresno.
None.
J. M. Ackerman, 857 T,
Fresno.
COST, \$2700



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COMPLETION NOTICES

FRESNO COUNTY.

RECORDED ACCEPTED
Aug. 21, 1915—Ptn NE $\frac{1}{4}$ of SW $\frac{1}{4}$
of Sec 26, 16-22. Kingsburg Grow-
ers' Association to whom it may
concern.....Aug. 20, 1915
Aug. 23, 1915—LOT 6, BLK 10, Wil-
son North Fresno Tract. Elsie C.
Burdick to whom it may concern
.....Aug. 23, 1915

LIENS FILED

FRESNO COUNTY.

RECORDED AMOUNT
Aug. 21, 1915—ONE ACRE in NW $\frac{1}{4}$
of NW $\frac{1}{4}$ of sec 23-16-17. S. R.
Johnston, \$22; J. W. McDonald,
\$45 vs. F. S. and Mrs. E. S. Hass....

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

BRIDGE.—Reinforced concrete. Cost
not stated. Ukiah, Mendocino Co., Cal.
Engineer, County Surveyor Ukiah.
Owners, Mendocino County. Bids will
be opened on September 8th for a
bridge on the lower coast road in Dis-
trict No. 5. Plans and specifications
can be secured from the County Clerk.

HOSPITAL GROUP.—1, 2 and 3 story
and base reinforced concrete. \$100,000.
Sacramento, Cal. Architect, A. R. Her-
old, Forum Bldg., Sacramento. Owners,
Sacramento County. Architect Herold
has been officially selected to prepare
plans and specifications for the new
County Hospital. Details of construc-
tion have not been made public as yet.
Further mention will be made of the
work. Construction will be started
this year. Plans being prepared.

BRIDGES.—Ten, steel, concrete and
timber. Cost not stated. Oroville,
Butte Co., Cal., Engineer, County Sur-
veyor, Oroville. Owners, Butte county.
Bids will be opened on September 11th
for the construction of ten bridges
numbered 1 to 10 inclusive, commencing
near the town of Nelson and running
northerly, said entire 8 bridges
to be bid on as a whole; also for the
construction of a bridge over Durban
Slough; also for the construction of
a bridge over North Channel of Butte
Creek. Plans on file at the office of
the County Surveyor.

BRIDGES. Two, reinforced concrete

cost not stated. Ukiah, Mendocino Co.,
Cal. Engineer, County Surveyor,
Ukiah. Owners, Mendocino county.
Bids will be opened on September 8th
for the construction of two bridges in
the Third Road District, both on the
Two Rivers and Covelo Road. Plans
and complete information may be had
from the County Clerk at Ukiah.

TIMBER TRESTLE.—Cost not stated.
Eureka, Humboldt Co., Cal. Engi-
neer, County Surveyor, Eureka. Own-
ers, Humboldt County. Bids will be
opened on September 7th for the con-
struction of a trestle bridge across
Singlesy's Creek on the County Road,
near the Ocean House, in Road Dis-
trict No. 1.

BRIDGE.—Reinforced Concrete. \$27,-
831. Dunsmuir, Siskiyou Co., Cal. En-
gineer, State Highway Commission, for
the reinforced concrete bridge 332 feet
in length over the Sacramento River
at Dunsmuir, show P. H. Green of
Eureka, the low at \$22,600. The high-
way engineer's estimate on the work
was \$27,831. F. J. Lechner, Oakland,
was second low at \$23,941. A contract
will be awarded shortly.

BRIDGE.—Reinforced concrete. \$6,
166. Redding, Shasta County, Cal. En-
gineer, County Surveyor, Redding.
Owners, Shasta County. Contractor,
William Stephens, Redding. Contract
price, \$6,166. A bid of \$15,376 was also
received from the Portland Bridge Co.,
Portland, Ore., for construction of the
Kennett Bridge, but was laid over un-
til the next meeting of the Board.

BRIDGES.—Reinforced concrete and
IRRIGATION CANAL.—Cost not stated.
Oroville, Butte Co., Cal. Engi-
neer's name not given. Owners, Great
Western Canal Co., Oroville. The Great
Western Canal Co. has announced that
the construction of its western canal
will be started during the coming fall.
Arrangements have practically been
completed for rights-of-way. The new
ditch will be six or seven miles long
and will run into the rice belt in
western Butte county. The present sys-
tem goes to the edges of the rice grow-
ing district, with its completion more
than 150,000 acres will be placed under
water.

LIBRARY.—2 story and base, rein-
forced concrete. \$100,000. Sacramento,
Cal. Architect not selected. Owners,
City of Sacramento. The plans received
for the proposed library building to
be erected in the Civic Center at 9th
and "I" street, have been taken un-
der consideration by the City Com-
mission. A selection will soon be made.

and the plans selected will be forwarded to the Carnegie Corporation for approval. Three architects from Sacramento submitted plans, J. W. & W. L. Wollert, E. C. Hennings and C. C. Huff. All plans call for a building to cost \$100,000.

LIBRARY.—1 story and base, brick and stone, \$15,000. Grass Valley, Nevada Co., Cal. Architect, William Cooper, Nevada Bank Bldg., S. F. Owners, City of Grass Valley. Preliminary plans have been prepared and accepted for a one-story building of classic design. Interior will be finished in pine and hardwood with maple floors and metal book stacks. A central heating system, probably steam heat, will be installed. Exterior will be faced with pressed brick. Plans are in the hands of the Carnegie Association for approval. Further mention will be made of the work.

STREET PAVING.—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Work will soon be started on the paving of more than a mile of concrete roadway, 16 feet wide, in Fair Oaks.

FURNISHING CRUSHED ROCK.—Cost not stated. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Bids will be opened on September 7th at 8 a. m. for furnishing approximately 5,000 cubic yards of crushed rock. Complete particulars can be secured from the County Clerk.

HIGHWAY CONSTRUCTION.—\$22,600. Sacramento, Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Only four sets of bids were opened by the State Highway Commission on August 23rd for constructing Division 2, Route 3, Section A of the State Highway in Siskiyou County. F. H. Green of Eureka, presented the low bid at \$22,600. No award was made. A complete list of the bids will be found under the heading of San Francisco in this issue.

STREET IMPROVEMENTS.—\$25,000. Stockton, San Joaquin County, Cal. Engineer, City Engineer, Stockton. Owners, city of Stockton. At the last meeting of the City Council, plans and specifications for the improvement of North Commerce, North Center, Maple and Ash streets and a resolution ordering the work under resolution of intention No. 529 was adopted. The streets mentioned are to be improved with curbing and guttering and are to be paved with asphalt concrete.

BRIDGE.—Reinforced concrete. Cost not stated. San Andreas, Calaveras co., Cal. Engineers Jones, Reddick & Holly, Humboldt Bank Bldg., S. F. Owners, Calaveras County. Plans are complete and figures will be opened on September 13th at 1 p. m. for the construction of either an arch type or girder type reinforced concrete bridge of 100 feet span, to be erected over the south fork of the Mokelumne River between Railroad Flat and West Point. Plans can be secured from A. W. Poe, County Clerk, San Andreas.

Contracts Awarded.

BRIDGE.—Steel and concrete, \$22,600. Dunsmuir, Siskiyou Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Contractor, F. H. Green, Eureka. Contract price \$22,600.

BRIDGE.—Steel and concrete, \$17,756. Redding, Shasta Co., Cal. Engineer, City Engineer, Kennet. Contractors, Portland Bridge Co., Portland, Ore. Contract price \$15,376. The city will furnish the steel at \$1750.

LODGE HALL AND STORES.—Two story brick and steel, \$35,000. Stockton, San Joaquin Co., Cal. Architect, Franklyn Warner, San Joaquin Bldg., Stockton. Owner, Peter Jordan. Contractors, P. J. Walker Co., Monadnock Bldg., S. F. Contract price, \$35,000.

BANK.—1 story and base. Class A construction, \$75,000. Stockton, San Joaquin Co., Cal. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owners, Stockton Bank of Savings. Contract awarded on percentage basis. Plans being prepared.

CANDIDATE FOR COUNTY SURVEYOR.

UKIAH, Mendocino Co., Cal.—Clair J. Huff is a candidate for County Surveyor of Mendocino County.

BUILDING CONTRACTS

SACRAMENTO COUNTY.

FRAME APARTMENTS

NO. 908 TENTH on N $\frac{1}{2}$ of S $\frac{1}{2}$ lot 1, I-J-29-30, Sacramento. All work for two-story frame apartments.

Owner.....W. H. McMorry, 1621 17th, Sacramento.

Architect....None.

Contractor...G. E. Harvie, 2212 T, Sacramento.

COST, \$5200

Filed Aug. 24, '15. Dated Aug. 24, '15.

ADDITION

NO. 1214 FOURTH on E $\frac{1}{2}$ lot 4, M-N-3-1, Sacramento. All work for frame addition, making two-story frame, brick store and lodging house.

Owner.....George W. Locke & Son, 320 J, Sacramento.

Architect....None.

Contractor...R. M. Smith, 2017 15th, Sacramento.

COST, \$6000

ALTERATION

NOS. 1015-1027 K on W $\frac{1}{2}$ of S $\frac{1}{2}$ lot 6, J-K-10-11, Sacramento. Remodel front, general repairs, place shelves and cases.

Owner.....The Cherry Company, Inc., 1009 Market, S. F.

Architect....None.

Contractor...Barton & Hite, 1699 $\frac{1}{2}$ 9th, Sacramento.

COST, \$2459

ALTERATION

NO. 3514 CYPRESS AVE., on E $\frac{1}{2}$ lots 1 and 2, block 55, South Sacramento. Repair fire damage, new roof and general repairs to building.

Owner.....Sam and Clara Stone, 1425 10th, Sacramento.

Architect....None.

Contractor...G. W. McKay, 1018 T, Sacramento.

COST, \$1500

SIERRA AVE. on lots 413 and 444, Wright & Kimbrough sub. 17, Sacramento. All work for one-story frame residence, 8 rooms and 2 baths. Owner.....W. T. Hetchman, 20th and K, Sacramento.

Architect....W. A. Edwards.

Contractor...R. H. Cooley, 1540 San Pablo avenue, Oakland.

COST, \$5000

LIENS FILED.

SACRAMENTO COUNTY.

Aug. 23, 1915—W 30 FT OF S $\frac{1}{2}$ LOT 7, M-N-2-3, Sacramento. S Lee vs. James A. Laidlaw, Karm Singh. \$71.40
Aug. 23, 1915—LOT 16, BLK E of Fairmont, Sacramento. James Cunningham vs. Alfred Wm. Brady. \$.56
Aug. 21, 1915—W 30 FT OF LOT 7, M-N-2-3, Sacramento. T. J. Dodds and W. S. Davies vs. Jas. A. Laidlaw, Karm Singh and T. W. Ludwick \$93.10

LOS ANGELES AND SOUTHERN CALIFORNIA.

STREET IMPROVEMENT.—Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, City Engineer Santa Barbara. Owners, City of Santa Barbara. Plans and specifications for the improvement of a portion of Alameda Padre Serra from Los Olivos extension to the westerly property line of the Santa Barbara State Normal School have been completed and bids for the work are now being taken by the City Council. Bids close September 2nd, 12 noon. Further information may be had from the City Engineer.

GARAGE.—1 story and base, brick. Cost not stated. Los Angeles, Cal. Architect, John J. Frauenfelder, Story Bldg., L. A. Owner, James Roche. Location, 512 Figueroa street covering an area of 60 by 165 feet and designed for a commercial garage. Brick walls, cement floor and special gasoline tanks. Metal window sash and frames. Exterior faced with cement plaster. Plans complete.

HOTEL.—3 story and base, brick. Cost not stated. Altadena, Los Angeles Co., Cal. Architect, N. Barker, Lake & Foothill Blvd., Altadena. Owners, James Smith Estate. Location, Colorado and Fair Oaks. Will contain stores and single rooms and apartments. Interior finish pine. Steam heat, hot water system and patent store fronts. Exterior faced with pressed brick. Revised plans complete and being figured.

RESIDENCE.—2 story and base, frame. Cost not stated. Los Angeles, Cal. Architect, Frank L. Meline, 6772 Hollywood, L. A. Owner, L. B. Martin. Location, Lucerne ave., between 4th and 5th streets. Will contain twelve rooms, four baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, tile bath rooms, open fire places, furnace heat, vacuum cleaning and hot water

gn. Mantels brick and tile. Exterior covered with cement plaster on lath. Plans being prepared.

SCHOOL.—1 story and base, frame, not stated. Brawley, Imperial Co. Architect Albert C. Martin, High-Bldg., L. A. Owner, Roman Catholic Church. Designed for a parochial school and will cover an area of 69 1/2 feet. Interior finish pine with tile floors. Exterior cement plaster on lath. Plans complete and being taken. Father Burbach in charge.

SCHOOL.—1 story and base, frame plaster, \$25,000. Corona, Riverside Cal. Architect, Leo Kroonen, Contractor, San Jacinto School District. Will contain nine class rooms and an auditorium. Interior finish, with maple floors in class rooms. Heating system, modern plumbing and program clocks. Exterior finished with cement plaster on metal lath. Plans being prepared.

STORE.—1 story and base, brick, not stated. Architects, Morgan & Morgan Van Nuys Bldg., L. A. Owner, William Garland. Location near 16th street, covering an area of 60 by 60 feet. Arranged for three stories. Interior finished in pine and wood. Patent store fronts. Exterior faced with pressed brick. Plans complete and figures being taken.

STORES AND OFFICES.—2 story base, Class C construction. Cost not stated. Los Angeles, Cal. Architect, George W. Harding, Washington, L. A. Owners, Pioneer Truck Co., Location, Alameda street near 1st, covering an area of 30 by 75 feet. Interior finish pine and hardwood. Patent store fronts and marble floors. Exterior faced with pressed brick and terra cotta. Plans being prepared.

STREET PAVING.—Cost not stated. Riverside, Riverside Co., Cal. Engineer, City Engineer, Riverside. Owners, City of Riverside. Preliminary plans were taken by the Council for improvement of North Main street from First street to the city limits. Plans were ordered prepared for work. Bids for the work will soon be called for.

ROAD CONSTRUCTION.—Cost not stated. Riverside, Riverside Co., Cal. Engineer, County Surveyor, Riverside. Plans and specifications have been adopted and have been ordered for the construction of the highway from Perris to Elsinore a distance of 9.23 miles. Plans will be opened on September 8th 3 p. m. Further information may be had from the County Surveyor at Riverside.

Contracts Awarded.

RESIDENCE.—2 story attic and base, frame and brick. Cost not stated. Los Angeles, Cal. Architects, Bischoff & Son, Wilcox Bldg., L. A. Owner, Ralph Williams. Contractor, John Andrews, Jr., 1011 Hollingsworth St., L. A. Contract price not stated. (CHURCH) 1 story, reinforced concrete, \$12,985. Niland, Imperial Co., Architect, Norman F. Marsh, Central Bldg., L. A. Owners, Niland School District. Contractor, J. Simon

Fluor, Santa Ana. Contract price, \$12,985.

SCHOOL.—2 story and base, brick, \$32,750. Los Angeles, Cal. Architect, W. C. Pennell, Baker-Detwiler Bldg., L. A. Owners, City of Los Angeles. Contractor, Frank R. May, Security Bank Bldg., L. A. Contract price, \$32,750.

SCHOOL.—1 story and base, brick and hollow tile. Redondo Beach, Los Angeles Co., Cal. Architect, L. B. Pemberton, Auditorium Bldg., L. A. Owners, Redondo Beach School District. Contractor, W. M. Bell, Redondo Beach. Contract price, \$21,579.

SCHOOL.—1 story and base, frame, \$18,346. Chula Vista, Ventura Co., Cal. Architect's name not given. Owners, Chula Vista School District. Contractor, J. A. Chisholm, and R. W. Jackson, Chula Vista. Contract price, \$18,346.60. Flumming, Schultheiss Bros., Chula Vista, \$1,566.

STORE.—1 story and base, brick, \$30,000. Los Angeles, Cal. Architects, Morgan-Walls & Morgan, Van Nuys Bldg., L. A. Owner, L. A. Lothian. Contractor, J. A. Crook, Douglas Bldg., L. A. Contract price, \$30,000.

PORTLAND AND OREGON.

APARTMENT HOUSE.—2 story and base, brick and stone, \$25,000. Marshfield. Owner, A. C. Going. Will cover an area of 50 by 145 feet with stores on first floor. Interior finish pine and hardwood veneer. Wall beds, tile in baths, steam heat and hot water system. Exterior faced with cut stone and brick. Plans being prepared.

RESIDENCE.—2 story and base, reinforced concrete, \$100,000. Portland, Ore. Architects, Whitehouse & Foulhoux, Portland. Owner, T. B. Wilcox. Contractors, McHolland Bros., Portland. Contract price, \$100,000.

SCHOOL.—2 story and base, reinforced concrete, \$22,928. Portland, Ore. Architect, F. A. Harnore, Supt. of School Properties, Portland. Owners, City of Portland. J. F. Shen, Portland, presented the lowest bid for the construction of the new Franklin School at \$22,928 with an alternate of \$4,050. He will probably be awarded the contract. Three other close bids were received.

LIBRARY.—1 story and base, hollow tile, \$2,000. Pendleton, Ore. Architects Johnson & Mayer, Commercial Bldg., Portland. Owners, City of Pendleton. Design is in the classic style with exterior faced with pressed brick and terra cotta. Interior finish pine and hardwood with maple floors. Steam heat, metal book stacks and metal window sash and frames. Plans complete and figures being taken.

Contracts Awarded

LODGE HALL.—4 story and base, brick and steel, \$90,000. Portland, Ore. Architects, Houghtaling and Douglass, Henry Bldg., Portland. Owners, Elks Hall Association. Contractors, Le Bon & Le Bon, 129 Simpson street, Portland. Contract price, \$90,000.

SEATTLE AND WASHINGTON

BRIDGES.—Two, steel and concrete. Cost not stated. Aberdeen, Wash. Engineer, C. E. Fowler, Central Bldg., Seattle. Owners, City of Aberdeen. Bids are now being taken by the Aberdeen officials for the construction of one 260 foot and one 116 foot steel span bridges. Bids will be opened at Aberdeen on September 8th by the City Clerk. The bridges will have a 20 foot roadway and five foot sidewalks. L. D. Kelsey is engineer at Aberdeen.

LODGE HALL.—3 story and base, brick and steel, \$125,000. Seattle, Wash. Architect, George W. Lawton, Alaska Bldg., Seattle. Owners, Seattle Masonic Hall Association. Location southwest corner Harvard and Pine streets. Arranged exclusively for lodge purposes. Interior trim pine and hardwoods with pine and hardwood floors. Steam heat, elevator service and vacuum cleaning. Exterior faced with pressed brick and terra cotta. Plans complete and owners awaiting a loan.

LODGE HALL.—3 story and base, brick and steel, \$150,000. Seattle, Wash. Architect, George W. Lawton, Alaska Bldg., Seattle. Owners, Masonic Temple Association. Location, southeast corner Pine and Harvard streets. Interior arranged for the exclusive use of the owners. Interior finish pine and hardwoods. Steel frame, brick, exterior walls, faced with pressed brick and terra cotta. Plans being figured.

Contracts Awarded

RAILROAD CONSTRUCTION, \$118,500. Alaska. Engineer, Alaska Railroad Engineers, Alaska Bldg., Seattle. Owners, United States Government Contractors, Colorado Fuel and Iron Co., Denver, Colo., 1950 tons of steel rails. Contract price, \$118,500.

NOTES FROM THE HAWAIIAN ISLANDS.

[A. P. Taylor, correspondent, Honolulu, July 30.]

New Bulkhead Wharves.

The Board of Harbor Commissioners is preparing specifications for the new bulkhead wharves to be built in Honolulu at the foot of Fort street. These wharves will be designed to accommodate cargoes discharged at the rate of 2,100 to 3,000 tons in 24 to 36 hours. Cargoes of this size are brought from Oriental ports by the Pacific Mail and Toyo Kisen Kaisha steamers, these vessels remaining in port on an average of 24 hours or less. This will complete a system of wharves from the Navy wharves to the Oceanic Steamship Co.'s pier.

Gain in Bank Deposits.

Banks and trust companies of Honolulu during the year ended June 30, 1915, have shown the greatest gain in combined resources for any 12 months' period in their history. The increase in bank deposits for the 6 months' period to December 31, 1915, was \$1,978,208, followed by the further increase of \$3,520,153 for the first six months of 1915. The total bank deposits for 1914-15 amounted to \$9,808,041 in 1913-14 the total was \$1,409,600.

STATE HIGHWAY BIDS.

Only four sets of bids were opened by the State Highway Commission on August 23rd for constructing Division 3, Route 3, Section A of the State Highway in Siskiyou County. F. H. Green of Eureka presented the low bid at \$1,600. No award was made. Following is a complete list of the bids received:

Siskiyou Co., Div. 2, Route 3, Sec. A.
P. J. Lechner, Alameda.....\$23,994
Moffett & Mead, S. F..... 24,750
F. H. Green, Eureka..... 22,600
Pac Coast Con. Co., Fresno..... 27,300

Engineer's Estimate, \$27,834.38.

Materials furnished by the State: Reinforcing steel, Portland cement, coarse and fine aggregate and curb base. Total, \$16,678.35.

FIRE-RESISTING LUBRICATING OIL.

One of the new offerings cataloged by a concern devoting its main efforts toward the production of fire-proof paint, is what is termed fire-resisting lubricating oil. It would appear from the description that a lubricating oil is selected and simply treated with a fire proofing liquid, the same liquid that is added to the lead, zinc and linseed oil mixture to make fireproof paint.

It is claimed that lubricating oil so treated will prevent hot boxes if used before starting. This puts a new angle to the hot-box problem, for undoubtedly the combustible nature of the oil is one of the things that increases the element of danger from hot journals. With a lubricating oil made fire-resisting and practically non-combustible, the nightmare of fire resulting from a hot box should practically disappear.

The Woodworker.

BUSINESS ADVERTISING IN 1748.

Judging from many advertisements in the early New York newspapers, the numbers of buildings were very little used. Business houses were usually designated by a characteristic sign or by the locality to other well known residents. An example of the latter is seen in the following from the New York Gazette of December, 1748. Smith's Fly was at the foot of Maiden Lane.

"Henry Hansen, who lately kept his store next Door to Mr. John Groesbeek's, is now removed to Capt. Richard Langdon's, in Smith's Fly opposite to Col. De Peyster's, Treasurer, where he now keeps his Store. He has likewise imported in the last Ships from London, a fresh Assortment of European Goods."

ECONOMY AND WAR.

All of the warring nations of Europe are on a forced economy basis, made necessary by the immense requirements of the war. To begin with, the absence of millions of bread-winners in the army forces all who are dependent on the absent soldiers to live on little, because they have the most meager means, or none at all, to provide the necessities of life. Beyond that are the men whose business or

labor has been restricted by the war so that they are earning much less than in times of peace. Even those who are in comfortable circumstances know not what disaster the war may bring on them, and therefore they are husbanding their resources.

Beyond the circle of these classes are the well-to-do who do not need to economize, but are affected by the spirit of the times or the appeals of the government.

With all these influences at work it may be considered certain that the great majority of the people of Europe are consuming less of the necessities and using fewer of the luxuries of life than in normal times.

There are not so many commodities available for use. With millions of producers away to the war and the labor of millions of others diverted from normal production to the making of war munitions, it is evident that the supply of goods and services ordinarily available in times of peace is greatly curtailed. Under such circumstances it is doubtful whether the appeals of are either necessary or effective in inducing any greater frugality than naturally arises from existing conditions.

The statement has been made that by strict economy and saving the people of the warring nations can almost pay the cost of the war. The statement, of course, is an exaggeration, but it is a fact, none the less, that wars never prove as burdensome to a people as would be judged from the immense expense and accumulation of debts arising from them. This is because of economies in living, diversion of labor and capital from peaceful pursuits to those of war, and finally because of greater efficiency of the entire working population and machinery of production, enforced by necessity.

This explains the enormous resources that become available for war, and affords a reason why war on a huge scale can be carried on long after the predicted period for exhaustion to occur. Many persons thought that Europe would have to quit fighting within a year because of sheer inability to furnish the means for carrying on a conflict on such a gigantic scale, but war loans for 15 billion dollars have been issued in the first year of the conflict, and there are no signs yet of material or financial exhaustion.

The pity of it all, aside from the loss of life and the suffering of the soldiers and their loved ones, is that hundreds of millions of persons must be denied necessities and pleasures of living while their governments are destroying property on a scale without precedent in a vicious effort to settle by force a controversy that never should have reached such a stage.—Kansas City Star.

ROAD BUILDING IN SCHOOLS.

Plan to Interest Oklahoma Boys in Good Roads Movement.

The good road educational movement is to reach the country boy in Oklahoma through the rural schools, as the result of advocacy of such a plan by Colonel Sidney Suggs of Ardmore, state

highway commissioner, who has secured the indorsement and co-operation of other prominent state officials.

The plan as outlined by Colonel Suggs is to organize a good roads and tree planting club in every rural school in the state, have the county or state highway engineer visit the schools, following the organization of the clubs, and proceed to lay out one-fourth or one-half mile of road leading from the school house. In every instance the school club shall assist in the survey, the laying out of the road, in securing the easements from the abutting property owners. The club boys shall carry the chain, set the grade stakes, learn just how plans and profits are made and be taught that this piece of good road will be used for generations to come.

Only the building of a common dirt road will be undertaken at the start by the boys. They will be taught that if they desire in the future to put gravel or macadam on the road that they have in the well-built dirt road a foundation already prepared for such an improvement. In this manner, too, they may be taught to use such materials as are most suitable and convenient at the time and the nearest at hand.

NEW GOVERNMENT PUBLICATIONS.

The Superintendent of Documents, Washington, D. C., announces that he received in stock during the week ended August 7, the following new United States Government publications of a business character, which he will sell at the nominal prices affixed:

**Durability of Cement Drain tile in Al-
sois.** Standards Bureau of Techno-
logic, Paper 41.—Study of the manufac-
ture of drain tile, installation of drain-
tile, testing, results of tests, etc.
Price, 35 cents.

**Vitrified Brick Pavement for Country
Roads.** Agriculture Department Bulle-
tin 246.—Practical information con-
cerning raw materials, manufacture,
physical characteristics, construction,
cost and maintenance. Price, 10 cents.

**Portland Cement Concrete Pavement
for Country Roads.** Agriculture De-
partment Bulletin 249.—Practical and
important work on materials, struc-
tural methods, organization, cost, and
maintenance, with summary of con-
clusions. Price 15 cents.

SAVING LEMON BY-PRODUCTS IN CALIFORNIA.

A subsidiary company to the California Fruit Growers' Exchange has selected Corona, Riverside county, as the site of a factory for the manufacture of citrate of lime, lemon oil, lemon emulsion, and other by-products.

The new company is capitalized at \$100,000 and its shareholders are all lemon growers.

An Italian fruit seller became greatly annoyed at people stopping at his stand and trying his fruit by feeling of it; so he placed the following sign in front: "If You must pincha da fruit, pincha da coccanul."—Christian Register.



Building & Engineering News

10 Cents Per Copy
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Published every Wednesday
Fifteenth Year No. 36.

Publication Office
560 Mission St.

San Francisco Cal., September 8, 1915

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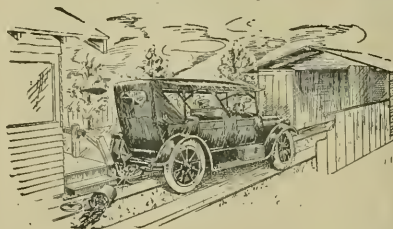
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Benj. G. McDougall, Architect.
ST. LUKE'S CHURCH, S. F.

South and east cement walls waterproofed with Imperial Water Proofing.
Color effect produced with Imperial Concrete Finish to match stone work
of street fronts



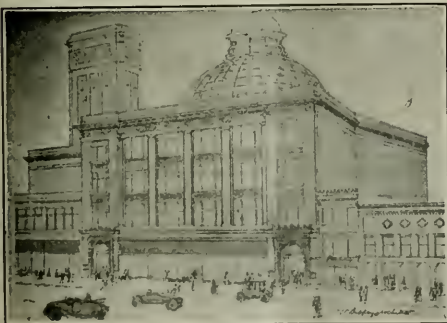
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Righetti & Headman, Architects.

Interior walls dampproofed with Imperial Damp Proofing. Exterior walls waterproofed with Imperial Water Proofing. Color effects with Imperial Pigments.



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C. W. Dickey, Architect.

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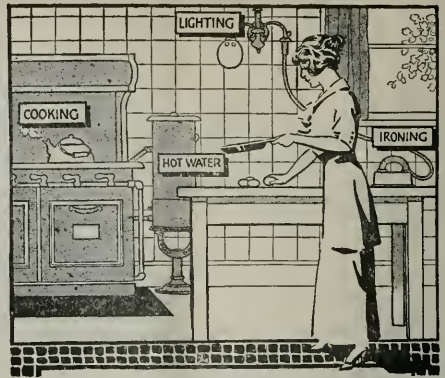
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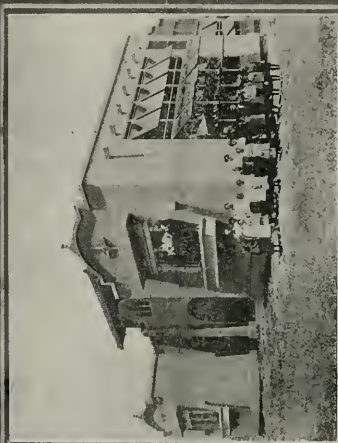
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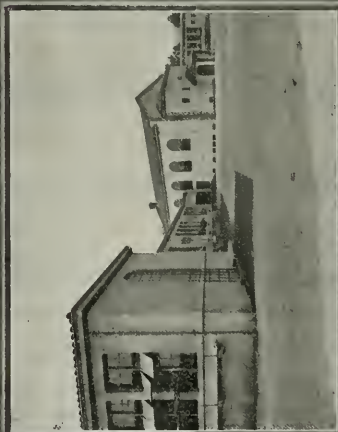
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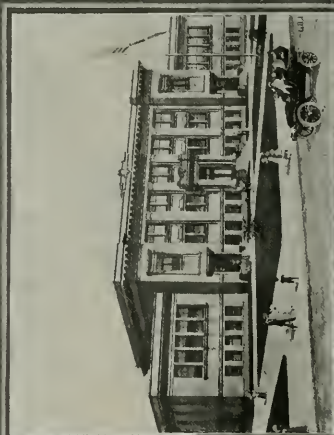
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Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
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Issued Weekly, \$3.00 per year

San Francisco, September 8, 1915

Fifteenth Year, No. 36

The election for the three million dollar Marin County Municipal Water District bonds carried four to one, and the county will soon have its own water system.

The county plans to purchase the North Coast Water Company, which serves water to Mill Valley, Belvedere and Tiburon, and the Marin Water and Power Company, which supplies the towns of San Rafael, San Anselmo, Fairfax, Larkspur, Corte Madera and San Quentin.

The passage of the bonds also provides for the purchase of nearly all of the north and west slopes and a portion of the south slope of Mount Tamalpais. Among other things, it means that the mountain will be preserved as a public park.

In order to obtain permanent improvements of local streets the City Council of the City of Alameda decided that in the next tax rate there will be a special fund of fifty cents on each \$100 valuation, or about \$100,000. This will be utilized in new street work, but the Council has not yet decided on what thoroughfares the money will be expended.

The use of ordinary tax fund for new street work is, to say the least, a lack of business judgement, ten year bonds is the most suitable way of paying for new work, taxes are meant for running expenses and maintenance charges.

The design of the ocean beach esplanade has been completed by City Engineer O'Shaughnessy, who reports that bids will soon be invited for the construction of the first unit, which is to be built along the beach for 650 feet from a point near the terminus of Cabrillo street.

An appropriation of \$50,000 has been made by the Supervisors for the first section. The City Engineer estimates the cost of its construction at \$48,500. The intention is to build an additional section each year. The Chamber of Commerce, which initiated the project, figured the cost of an esplanade for the whole length of the beach at \$1,000,000.

A reinforced concrete seawall will be built to check the waves. This wall is to have a concave curve to counteract the force of the breakers.

Broad concrete steps will descend from the wall to the sand, and in front of these steps interlocking piles of reinforced concrete will be driven into the sand to a point fifteen feet below mean tide, as a protection against the underscour of the seas. The main wall will be supported by pedestal piles, which will be driven ten feet apart.

The wall is to have an ornamental top, and between this coping and the Great Highway will be an artificial stone walk, twenty-five feet wide. The walk will have a slight slope, so that water may run off it through scupper holes in the wall.

From the walk concrete stairways will lead to the sand. The stairways are to be placed 150 feet apart. The Park Commission is to co-operate in the construction of the esplanade, and will ornament it with plants and flowers.

As we understand the design of the wall, it is to have a parapet with a curved face toward the ocean, and this is, in our opinion, the weakest part of the design, if it is not a very considerable distance above the high water plane, as is evidenced by experience with similar designs in Europe. The curved section has nothing to recommend it but the "looks." Long flat slopes are used in

Holland, which country has been battling with the sea for centuries, and the methods developed there are the outcome of long years of experience.

Initial steps for the control of Southland streams were taken by the Board of Supervisors in appointing James W. Reagan engineer of the Los Angeles County Flood Control District at a salary of \$3,000 a year.

Under resolutions drafted by Supervisor Hamilton, Engineer Reagan is instructed to investigate and submit plans, with cost, of conserving flood waters and protecting menaced lands and the harbor.

The appointment of Engineer Reagan was the climax of a superheated meeting, in which personalities were so freely thrown about that Supervisor Norton surprised the gallery by asking for fewer insinuations and more business.

As a member of the recently-dissolved County Board of Engineers, flood control, Engineer Reagan submitted a minority report to the Board of Supervisors, in which he attacked the scheme to divert the Los Angeles River from the harbor to Alamitos Bay through the medium of a dam at Dominguez junction and an outfall channel. Instead, he suggested that the waters of the Los Angeles River be thrown into the channel of the San Gabriel River and the combined flow carried to Alamitos Bay through a dredged channel across the Clearwater divide.

The submission of this minority report elicited the censure of both Chairman Pridham of the Board of Supervisors and Supervisor Woodley, the head of the flood control committee. In the balloting they maintained a solid front of opposition to the appointment of Mr. Reagan.

Engineer Reagan was connected with the Harriman lines many years in a confidential capacity. During eight of these years he was directly under Col. Epes Randolph, President of the Southern Pacific of Mexico, and an engineer of international note. Two letters in which Col. Randolph warmly commended the attainments of Mr. Reagan were read by Supervisor Hamilton.

"His views on the subject are sound," said Col. Randolph, referring to Mr. Reagan and the county's flood control problems, with which he is acquainted. "If carried out in accordance with his suggestion, the work will be accomplished to your entire satisfaction."

Among the important work Mr. Reagan did for the Harriman lines was the surveying and construction of a large part of the Southern Pacific of Mexico and the survey work for the line which E. H. Harriman was planning on the East Coast of Mexico at the time of his death. In addition to railroad work, Mr. Reagan has had much experience in drainage and other engineering work, in both this country and Africa. His home is at Long Beach.

Under the resolutions of Supervisor Hamilton, by which Mr. Reagan was chosen engineer, the board is to await the maturing of final flood control plans before doing anything towards providing the money.

"The Los Angeles County Flood Control Association," says the final paragraph, "will, in the future as in the past, be taken into consultation; and the citizens of the county generally will be accorded every opportunity to criticize the plans and propose amendments thereto before final action shall be taken."

The Los Angeles Advancement League appointed a committee of fifty to work for the alternative plan it advocates for flood control. This plan calls for diversion of the waters of the San Gabriel River to a large storage basin and the utilization of this water for irrigation.

Metropolitan Building Exhibit.

LOS ANGELES, CAL.

By George Nelson, C. E.

The Metropolitan Exhibit of building materials and appliances is today an institution in the life of the architects, builders and owners in the City of Los Angeles, and it was left to a young and pretty woman, Miss M. L. Schmidt, to conceive the idea and develop it and bring it to a successful conclusion, for it is an unqualified success vouched for both by its present exhibitors and those firms not yet exhibiting, but clamoring for space as yet unavailable in its present location.

A little over a year ago Miss Schmidt conceived the idea that an exhibit of materials, appliances and furnishings used in the construction and equipment of office buildings, flat buildings and apartment houses, and last but not least,

The exhibit is being extensively patronized by architects and builders, who take their clients in to show them the many modern and up-to-date materials, appliances and furnishings on the market and an exhibit here, giving the owner a birdseye view, so to speak, of the extensive and varied line he can have to select from. People, who are planning to build, be it apartments or bungalows, come here to study all the newest and most modern inventions in the art of making the human habitation and its environments sanitary, comfortable and artistic, and



Miss M. L. Schmidt, Founder of the Exhibit.

in the construction of the multitude of independent Southern California homes, would be of practical benefit to architects, builders and owners, and in addition possess a highly and not easily estimated educational value for the whole population of Southern California. The young lady did not hesitate to carry her ideas into practical execution, and the sixth floor of the Metropolitan Building on the corner of Fifth and Broadway was rented and material men, manufacturers, architects and inventors importuned to take space, and so successful has the enterprise proven itself and that now after only a year's existence, the growing demand for exhibit space is forcing Miss Schmidt to plan larger accommodations.

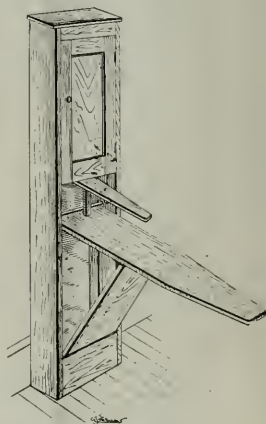
The exhibit is very artistically arranged, and the visitor instantly gains the impression that the whole arrangement was originated and carried out by a young woman with a highly developed artistic taste and a well educated mind. An artistic catalogue of exhibitors with full page ads containing illustrations and descriptions of the different exhibits distributed to visitors.



Interior View of Exhibit.

the exhibitors all testify to the good results they derive.

Most of the building materials are arranged in panels or wall partitions showing actual construction and use of materials. There are walls of ordinary brick, of in-



Eveready Ironing Board.

terlocking hollow tile, of pressed brick, of enameled brick, of vitrolite, of artificial stone. Roofing of all kinds are shown both in the samples and on models of Swiss

Chalets and Bungalows. Multicolored enameled tile and marble and artificial stone and skagliola are shown in different grate and mantel piece arrangements.

Several metal lath and plastering methods are used in models and also many ways of waterproofing and fire-

ash and garbage elevators and refrigerators. Improvements in windows and doors are shown in the exhibit of the Simplex window, the Whitney window, the Shelby window, the Hippolite window and the Ideal window. Windows and doors furnished with the Monarch Metal



Help-Her Improved Sanitary Kitchen Sink and Refuse Separator.

proofing walls and roofs. The waterproofing method by the Cement Gun is elaborately shown, and the various waterproofing compounds and chemicals are extensively and practically displayed for open inspection by visitors. Sil. O. Cel. and its many forms and qualities are shown in actual building sections.

The interior finishing is represented by the several kinds of wall board, such as Beaver Board, Amiwud, Compo-board and sanitary wall and floor finishes, by white

Weather Strips, the disappearing roller screens and the Hippolite Screens, the Venetian Blinds. A decided improvement in bath room fixtures is exhibited by "The Improved Sanitary Fixture Company" in their "Boudoir" Bath and the "Help Her" sanitary kitchen sink.

The heating and ventilating and lighting of buildings is remarkably well shown by a number of exhibits that can be put in actual operation and the running of the furnaces, etc., are shown to visitors. The Monrovia Solar



Peerless Nook Seat Folding Bed Exhibit.

enamel tile and by Vitrolite and Opalite. Paints, varnishes, floor waxes and tints are also lavishly exhibited. The built-in features of furniture, which is gaining ground rapidly in all of our modern buildings, is well represented by wall beds of all kinds, ironing boards, ice chests, kitchen cabinets, davenport beds as well as other furniture and utensils such as washing machines,

Heater is also on exhibit here, installed in a small cottage. Electrical fixtures of a manifold variety are displayed in a section for themselves, and all the leading manufacturers are represented by the Southern California electrical contractors and dealers. A bountiful supply of catalogues and descriptive literature is kept constantly on hand at each exhibit.

Lessons from the Exposition.

Collected by George Nelson, C. E.

The Foxboro Exhibit of Indicating and Recording Instruments.

(Continued from Sept. 1, 1915.)



Indicating Electric Pyrometers.

(Portable Type.)

These instruments are made especially for Portable Work. They are made in such a way that when transporting from place to place, the pointer is lifted from its bearing so that it is in no way affected by jars or vibration.

Although the instrument is robust in construction and will stand considerable hard usage, it is very sensitive and can be depended upon for accuracy.

Many engineers doing power plant efficiency work, and also in other fields where high temperatures are important are using this instrument with great success.

You should investigate this Pyrometer before placing your order, as it is the most improved type of Portable Pyrometer now on the market. It can be supplied for any range up to 3,000 degrees Fahr.



Portable Thermographs.

8-inch Size, 11x5x12 inches.....Weight, 8 lbs.

10-inch Size, 13x5x14 inches.....Weight, 10 lbs.

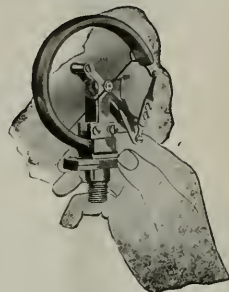
12-inch Size, 15x5x16 inches.....Weight, 12 lbs.

There are many requirements in the Engineering Field for Portable Recording Thermometers, and to meet this demand, we are manufacturing a very complete line of instruments for this work.

The rugged construction of our instruments make them very satisfactory for this class of work, and they have been universally adopted by efficiency and consulting engineers.

The above illustration is our Portable Self-contained instrument for ordinary room temperatures. This instrument can be made, however, in the long distance type for recording any temperature from -60 to 800 degrees Fahr.

This instrument comes complete with all necessary accessories for operation, can be picked at a moment's notice and is ready for service.



Model "A" Independent Gauge Movement.

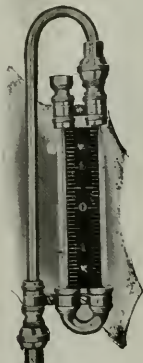
Our Model "A" independent non-corrosive movement is considered the highest standard of gauge construction.

The entire movement is independent of the case.

The Plates and Segments are made of bronze; Pinions and Arbors of German silver.

The Bourbon Tube is made of special non-corrosive composition, and will not set.

These indicating Gauges are made in all sizes up to 24 inches, for any pressure up to 20,000 pounds per square inch.



Syphon Gauges.

These instruments are for measuring the low pressures of gases on the well-known "U" type principle.

All metal parts are made of brass and heavily nickel-plated so that the instrument is durable and presents a handsome appearance.

The glass legs are so held at both the top and bottom so that they are not subjected to strains. The stuffing boxes at the ends of these glass legs are made in such a manner that all leakage is prevented, and if a glass should by any possibility be broken, a new one can be very easily inserted.

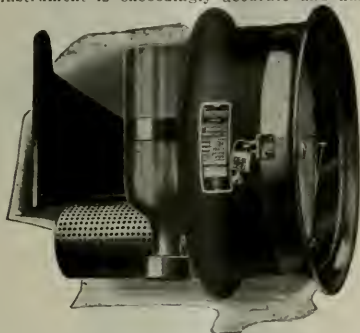
The Boxwood Scale is accurately divided and clearly numbered and held firmly in place so that slipping is impossible. A black metal scale with white figures can be supplied if desired.

This Gauge is made in any size from 4 to 24 inches water.

Recording Hygrometers.

These Hygrometers are built upon the same principle as our Recording Thermometers except that they have two pens—one to record the dry bulb temperatures, and the other the wet bulb temperatures. The instrument traces upon the chart two distinct records and reading the difference between them at any one point and consulting the chart sent with the instrument, the humidity of the air can be quickly ascertained.

This instrument is exceedingly accurate and has nothing about it which will quickly deteriorate.



It is made in both the self-contained and long distance types for any ranges between freezing and boiling points of water.

If desired for test purpose, it can be supplied in a portable carrying case.

They are being used extensively in mines, textile mills, schools and places where the need of proper humidity is being realized as never before.

Stationary Tachometers and Tachographs. (Dr. Horn System.)

We have the most complete line of Tachometers and Tachographs in the world. Wherever accurate speed measurement is required, you will find the Dr. Horn instruments.

Instruments to both indicate and record can be supplied.



The cut shows our "C-23" Tachograph which is especially adapted for indicating and recording engine speed.

We have Tachographs for recording percentage of fluctuations, Tachographs for recording number of feet per minute of paper being made by paper machines, also Tachographs for mine hoist apparatus, to record the complete data of the operations of the hoist.

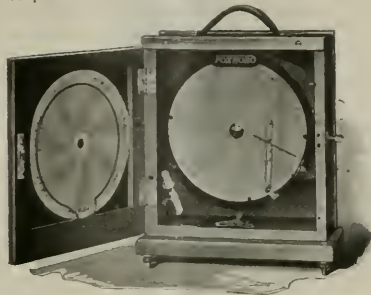
Portable Recording Gauges.

- 8-inch Size, 11x5x12 inches.....Weight, 8 lbs.
- 10-inch Size, 13x5x14 inches.....Weight, 10 lbs.
- 12-inch Size, 15x5x16 inches.....Weight, 12 lbs.

For field service a portable instrument is necessary and must be constructed in such a way as to withstand the hard usage that it is liable to be subjected to.

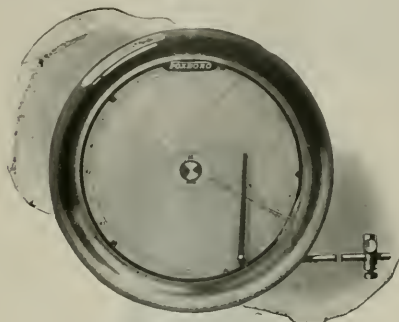
"Foxboro" Portable Recording Gauges are especially

adapted for this work, as their improved actuating tubes do not have to be clamped while being transported from place to place.



They will withstand and can be depended upon at all times to give authentic records.

For gas work, we have designed a special Recorder with "U" Gauge in the same case. This makes an ideal outfit for gas companies.

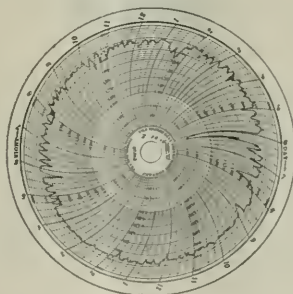


Mechanical Time Recorders.

These instruments are constructed to record the time and amount, by direct attachment, of certain mechanical actions, such as the operation of slice gates, dampers, gate valves, governors, etc.

Absolutely dependable.

Made to fit all conditions.



Charts.

Special attention has been paid to the design of all "Foxboro" Charts.

They are made in three sizes for 8, 10 and 12-inch instruments.

They have long open scales, clear cut unbroken lines, night and day plainly designated by solid and skeleton type.

All our charts are made from figures given to thousands of an inch, with the result that our instruments are extremely accurate and can be depended upon for authentic records.

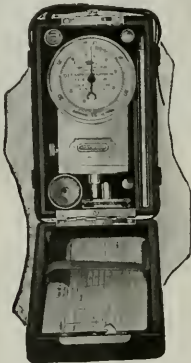


Temperature Controllers—Interior Construction.

This illustration has been inserted to show the simplicity of the Foxboro Controllers.

The air control valve is operated by our helical tube, which has proven so successful in "Foxboro" Recording Thermometers.

There is absolutely nothing in this construction that can get out of order, or cause any serious trouble. Simplicity is the keynote. Accuracy is the result.



Portable Tachometers.

(Dr. Horn System.)

These Tachometers are the most accurate, compact and durable on the market. Thousands of them are daily proving their efficiency. They are single spindle, multi-speed Tachometers and are absolutely Dead Beat.

The Dr. Horn system is considered standard the world over. Every large engineering concern in the world is using these instruments for test purposes.

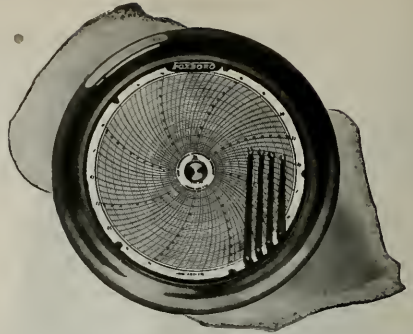
Any range from 25 to 20,000 R. P. M. can be supplied.

The instrument complete in leather carrying case with all accessories weighs 17 ounces. By far the most satisfactory instrument for direct reading of speeds that has ever been constructed.

Electric Time Recorders.

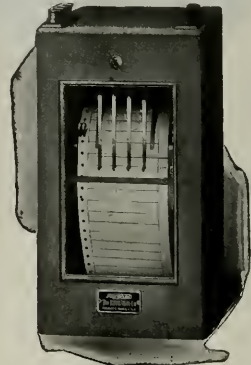
(Round Chart Type.)

Our electrical Time Recorders are similar to the Mechanical Time Recorders except that they can be operated at a long distance by electricity, and only show the duration of certain operations, and not the amount of mechanical motion.



They are adaptable for recording machine operations and are very easy instruments to install.

Above is shown the round chart type, which can be fitted with one to twelve pens as required.



Electrical Time Recorders.

(Tape Chart Type.)

This instrument is similar to the one illustrated on the preceding page, except that instead of the chart being round it is rectangular, and is recommended where close time observations are necessary.

Chart speed of 1 to 6 inches an hour may be obtained if desired.

The instrument may be equipped with any number of pens up to 8.

It is especially adapted for Hydraulic Presses and Moulding Machines.

**Subscribe for the
Building and Engineering News.**

ADVANCE NEWS

Classified according to Character of Work



Devoted to the Architectural, Engineering, Building and Industrial Activities of the Pacific Coast.

Circulates among the leading Architects, Engineers, Surveyors, Contractors and Municipal Authorities on the Pacific Coast.

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APARTMENT HOUSES.

SAN FRANCISCO—Apartment house and store, 3 story and base, frame, \$19,500. Architect, P. Righetti, Phelan Bldg., S. F. Owner, F. Tomasini. Location, southeast corner of Judah and 8th avenue, covering an area of 51½ by 100 feet. Arranged for two stores and fourteen suites of two and three rooms. Interior finish pine and elm panels with some hardwood floors. Central heating system, hot water system and vacuum cleaning. Wall beds and private bath rooms. Tile floors and wainscot in baths. Exterior covered with cement plaster on metal lath. Plans complete and figures under advisement.

OAKLAND, CAL.—Apartment house and stores, 2 story and base, frame, \$30,000. Architect, Merrill Newsom, 1748 Broadway. Oakland. Owner, A. F. Verum. Location, 35th avenue and Boulevard. Will contain stores on first floor and a number of two and three room apartments on upper floor. Interior finish, pine and elm with some hardwood floors. Steam heat and hot water system, wall beds and private baths. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans being prepared.

MARTINEZ, CONTRA COSTA CO., CAL.—Apartment house and stores, 2 story and base, frame, \$10,000. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, James Prosser. Location, Martinez, covering an area of 50 by 100 feet. Will contain stores on first floor and two and three room suites above. Interior finish, pine throughout with some hardwood floors. Central heating system oil burning furnace, patent store fronts and wall beds. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

LOS ANGELES, CAL.—Apartment house, 2 story and base frame. Cost not stated. Architects, Buchanan & Brockway, Chamber of Commerce Bldg., L. A. Owner, Dr. H. Rinehart. Location, Park street near Los Angeles avenue. Arranged for bungalow court, and will contain three two-story and eight one-story buildings. Interior finished in pine and hardwood with hardwood floors. Central heating system, hot water system, wall beds and vacuum cleaning. Bath rooms finished in tile. Exteriors covered with shingles and cement plaster on metal lath. Plans being prepared.

SAN FRANCISCO—Apartment house, 3 story and base. Class C construction. Cost not stated. Architect, C. A. Meussdorffer, Humboldt Bank Bldg., S. F. Owner, C. A. Meussdorffer. Location, Jones near Sutter with a frontage of 30 feet. Will contain 20 suites of two and three rooms. Interior finish pine and hardwood with some hard-

wood floors. Wall beds, steam heat, automatic elevator and hot water supply. Tile floors and wainscot in baths. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$10,000. Architects, L. M. Weismann & Phillip Schwerdt, Pacific Bldg., S. F. Owner, Rosa Unfried. Location, west Church north of 20th street, covering an area of 25 by 86 feet. Will contain six suites. Interior finish pine and elm panels. Steam heat and hot water system, wall beds. Bath rooms finished in tile. Exterior covered with shiplap. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$10,000. Architect, W. H. Crim, Jr., 425 Kearny street. Owner, John McCormick. Location northwest corner Cabrillo and 5th avenue. Will contain four suites. Interior finish pine and elm panels, some hardwood floors. Tile bath rooms. Hot water system and wall beds. Exterior covered with cement plaster on metal lath. Plans being figured.

LOS ANGELES, CAL.—Apartment house, 3 story and base, brick and frame, \$20,000. Architect, Edgar H. Dorr, 1425 Winfield street, L. A. Owner, W. J. Dorr. Location, 1425 Winfield Court, covering an area of 50 by 90 feet. Will contain 42 suites of two and three rooms. Interior finish pine and hardwood with some hardwood floors. Steam heat, hot water system and wall beds. Bath rooms finished in tile. Exterior covered with brick veneer. Plans being prepared.

PASADENA, LOS ANGELES CO., CAL.—Apartment house, 3 story and base, frame. Cost not stated. Architect, Arthur S. Heineman, 831 San Fernando Bldg., L. A. Owner's name withheld. Location, South Los Robles avenue. Will contain a total of 20 suites of two and three rooms. Interior finish pine and hardwood. Wall beds, steam heat and hot water system. Tile in bath rooms. Exterior covered with cement plaster on metal lath. Plans being prepared.

Contracts Awarded.

SEATTLE, WASH.—Apartment house, 3 story and base, brick veneer, \$50,000. Architect, W. J. Jones, Central Bldg., Seattle. Owner, J. P. Jones. Contractor, Central Realty Co., Pantages Theatre Bldg., Seattle. Contract price, \$50,000.

SAN FRANCISCO—Apartment houses, 2, 1 story and base. Class C construction, \$36,000 and \$34,000 each. Architects, Smith & Stewart, 244 Kearny street, S. F. Owners, Smith & Stewart, 244 Kearny street, S. F. Contractor, J. B. Relte, 110 Jessie street, S. F. Contract price, \$36,000 and \$34,000.

BATH HOUSES.

PASO ROBLES, SAN LUIS OBISPO CO., CAL.—Bath house addition, frame and concrete. Cost not stated. Architect none. Owner, E. J. Burlingham, Paso Robles. E. J. Burlingham, the new proprietor of the Sparks Bathing House, is planning to make several additions to the present building. An addition will be made on the rear of the present building for a plunge, which will be 25x75 feet, and a depth of from 3 to 7 feet, and which will probably be of concrete and tile construction. The proposition of adding two stories, making the structure three stories for bath rooms and apartments is also being considered.

BONDS

PASO ROBLES, SAN LUIS OBISPO CO., CAL.—Bonds of \$40,000 have been voted for the erection of a new school building. An architect will be selected immediately to design plans for the proposed structure.

EVERETT, WASH.—The construction of a pipe line from Sultin Basin, 24 miles, the main to be 32 inches in diameter, was authorized by vote at an election held on August 23rd. Bonds in the sum of \$60,000 were authorized to provide funds for the work.

VISALIA, TULARE CO., CAL.—Word has been received by the Visalia City Attorney to the effect that Blythe-Witter Company, purchasers of the municipal auditorium and sewer bond issues, that the sum of \$115,000 plus the \$10,055 premium will be sent to Visalia immediately. On receipt of the money the Trustees will call for bids for the construction of the proposed auditorium and sewer system.

REDONDO BEACH, LOS ANGELES CO., CAL.—The Executive Board of the Chamber of Commerce has endorsed the proposed \$3,000,000 good roads bond issue for Los Angeles County.

POMONA, LOS ANGELES CO., CAL.—Considerable rumor that an election will be called to vote bonds of \$50,000 for the caring of new roads, lights, etc., paving work, storm drains and culverts, is in circulation here.

PETALUMA, SONOMA CO., CAL.—The sale of the \$20,000 street improvement bonds has been awarded to the Sonoma County National Bank, Petaluma Swiss-American and Petaluma National Banks.

The proceeds of the sale will be used in covering the cost of street improvements to be made in Petaluma.

SAN RAFAEL, MARIN CO., CAL.—Complete returns show that the \$3,000,000 Marin Municipal Water District bond election held here last week carried by a vote of almost four to one.

Plans and specifications will be ordered shortly for extensions to the present system. The city of Richmond in Contra Costa County will be supplied with water from Marin County, the idea being to supply that city by means of two large mains reaching across the Narrows from McNear's Point to Point San Pablo.

SANTA MARGARITA, SAN LUIS OBISPO CO., CAL.—An election held in the Santa Margarita School District resulted in the bonds carrying by a vote of four to one. The proceeds of

the sale of the bonds, \$20,000, will be used in the construction of a school building. An architect will be selected immediately to prepare the plans.

SANTA BARBARA, SANTA BARBARA CO., CAL.—The special election held here last week to vote bonds of \$1,000,000 to complete the coast route system of highways through San Marcos Pass and join it with the highways through Kern County, failed to carry by about 200 votes. There were 3,442 in favor of the issue and 1,977 against.

A proposition to issue bonds for \$350,000 to build bridges connecting the various portions of the state highway system already constructed in the county, was approved, but proposals to issue bonds to build a County Hospital and a Detention Home were defeated.

The County Good Roads Association says the campaign to complete the coast road system will be continued.

SANTA CLARA, SANTA CLARA CO., CAL.—Tentative plans for an extensive bond issue for the paving of the main arteries into this city are being considered by leading merchants and taxpayers. Various propositions will be submitted to the Chamber of Commerce and to the Board of Town Trustees on September 13th, the date set for the hearing of protests on the recent paving project.

One of the propositions that is given favorable consideration includes the following plan:

The paving of a 24-foot strip on the San Francisco road from Scott's Lane to Lincoln street, on Lincoln street from the San Francisco road to Lexington street.

The paving of a 16-foot strip on the Homestead road from Gould street to Lincoln street. Saratoga avenue from the city limits to University avenue. Los Gatos road from the city limits to Lexington street. Washington street from the city limits to Franklin street. The Alameda from the city limits to Grant street. Grant street from the Alameda to Franklin street. Franklin street from Grant street to the S. P. depot. Lafayette street from the city limits to Franklin street.

The City Engineer's estimate on the work is \$85,000.

KENNETT, SHASTA CO., CAL.—Bonds of \$5,000 have been voted to help Shasta County construct the bridge across the Sacramento River opposite the depot. The county recently let a contract to the Portland Bridge Company for \$15,976.

OROVILLE, BUTTE CO., CAL.—After a lengthy hearing the Supervisors voted to organize drainage district No. 100 of Butte County. The district will consist of 18,000 acres.

AUBURN, PLACER CO., CAL.—The City Trustees have set September 21st as the day when the question of issuing bonds to improve the sewer system and the purchase of additional fire equipment will be voted upon.

RIVERSIDE, RIVERSIDE CO., CAL.—A petition has been presented to the City Council asking for the formation of an assessment district for the improvement of North Main street from first street to the city limits. It will be improved with a 20-foot concrete roadway, 1½ miles in length and will cost approximately \$22,000.

EL PASO, TEXAS.—An election has been called for October 8th to vote bonds of \$300,000 for the improvement of highways in El Paso County.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—A special election will be held on September 18th in the Templeton, Ascension, Bethel and Oak Dale school districts on the question of forming a joint union high school district.

SAN BRUNO, SAN MATEO CO., CAL.—The school needs have outgrown the present accommodations and a movement has been started to call a bond issue to vote the necessary funds for the erection of a new school. The Fifth Addition and the Belle Air Improvement Clubs are interested in the proposed issue.

PORTERVILLE, TULARE CO., CAL.—The \$62,000 paving bonds have been sold. The proceeds will provide funds for the paving of the city streets.

VISALIA, TULARE CO., CAL.—October 5 has been set by the City Council as the date for opening bids for the construction of the new outfall sewer system for which bonds in the sum of \$50,000 were recently voted. The engineer's estimate of the cost of the work has not been announced except in that it is expected to be well within the face of the bonds.

SACRAMENTO, CAL.—To make a canvass of the city schools to estimate the cost of real estate and buildings necessary in the proposed bond issue for new schools, the Board of Education, at a meeting last week, appointed a committee of four. Those named were: President of the Board E. J. Carragher, Superintendent of Schools C. C. Hughes, Architect Rudolph Herold and J. C. Carly, real estate man.

RIVERDALE, FRESNO CO., CAL.—The Board of Supervisors approved by resolution the issuance of a bond issue of \$25,000 in the Riverdale Joint High School District.

MARTINEZ, CONTRA COSTA CO., CAL.—Bids will be received by the County Treasurer until September 20th for the purchase of bonds amounting to \$11,000, recently voted by the Selby School District. The proceeds of the sale will finance the construction of a new school for the district.

FORTUNA, HUMBOLDT CO., CAL.—Bonds of \$24,000 will be sold by the County Supervisors on September 14th. Proceeds of the sale will be used in the construction of a high school.

MARTINEZ, CONTRA COSTA CO., CAL.—The survey for the proposed Mt. Diablo boulevard system to be constructed under the road district plan from funds to be voted at a bond election in the next few months, has been started by C. A. Leighton, chief engineer of the proposed project.

BRIDGES, DAMS AND HARBOR WORK.

OROVILLE, BUTTE CO., CAL.—Bridges, 14, timber, \$500 each. Engineer, County Surveyor, Oroville. Owners, Butte County. Permission has been granted Supervisor Evans to proceed with the construction of 14 small bridges in his district, the cost of each not to exceed \$500. The structures,

which will replace those pronounced a menace to the safety of the traveling public, are as follows: Six bridges on the Biggs-Princeton road; bridge over Dry Creek west of Nelson; the Crain bridge on the Shippee road; four bridges on the Daynon road; two small bridges on the Shippee road.

FAIRFIELD, SOLANO CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Fairfield. Owners, Solano County. Bids will be opened on September 7th for constructing a reinforced concrete arch bridge on County Road No. 388, over Pleasants Valley Creek, at the ranch of F. F. Firch, Vacaville Township, Road District No. 4.

HOQUIAM WASH.—Bridges, 2, reinforced concrete. Cost not stated. Engineer, City Engineer, Hoquiam. Owners, City of Hoquiam. The Council has adopted resolutions for a considerable amount of road work and two bridges. The estimated cost of the work is placed at \$161,055. Further information on this work may be had from the City Engineer.

Contracts Awarded.

PORTLAND, ORE.—Municipal dock landing, \$12,750. Engineer, City Engineer, Portland. Owners, City of Portland. Contractor, J. A. Backstrand, Chamber of Commerce Bldg., Portland. Contract price, \$12,750.

KINGSBURG, TULARE CO., CAL.—Bridge, reinforced concrete, \$15,650. Engineer, County Surveyor, Visalia. Owners, Tulare County. Contractors, Ohnson Bros., Kingsburg. Contract price, \$15,650.

VENTURA, VENTURA CO., CAL.—Culverts and bridge. Cost as follows. Engineer, county Surveyor, Ventura. Owners, Ventura County. Contractor, A. Pefley, Ventura, four culverts, \$4,700. Putman Stone Co., Pasadena, abutment for Saticoy bridge, \$10,811. Boardman Construction Co., Story Bldg., L. A., approach and fence, \$6,000.

Factories and Warehouses

SAN FRANCISCO—Machine shop, 1 story, brick, \$3,000. Architect, none. Owner, Thomas Butler, 1362 Hayes street. Location, 1362 Hayes street, covering an area of 50 by 57½ feet. Cement floor. Exterior stock brick. Plans complete and work to be done by Day Labor.

PORTERVILLE, TULARE CO., CAL.—Packing house, 1 story, frame. Cost not stated. Architect, O. H. Huber, Porterville. Owners, Mid-California Citrus Association. Will cover an area of 72 by 100 feet. Capacity six cars per day. Special machinery. Exterior rustic. Plans complete and work to be done under the direction of H. F. Brey.

BERKELEY, ALAMEDA CO., CAL.—Ice plant, 1 story, frame, \$3,000. Architect, none. Owner, H. J. Haney, 2034 Blake street, Berkeley. Location, south Blake street west of Shattuck avenue. Special machinery. Exterior shiplap. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Warehouse, 2 story and base. Class C construction, \$40,000. Architect, Walter D. Reed, Oakland Bank of Savings, Oakland. Owners, Crane Co. Location, 9th and Webster streets, covering an area of 110 by 100 feet. Interior finish pine. Metal window sash and frames. Elevator and special conveying equipment. Exterior faced with pressed brick. Plans complete and figures being taken.

OAKLAND, CAL.—Warehouse, 7 story and base, reinforced concrete, \$70,000. Architect, Edward Soule, Rialto Bldg., S. F. Owner, Martin Bekins. Location, southwest corner 22nd and San Pablo. Fireproof throughout. Special private vaults, metal window sash and frames, elevator and automatic sprinklers. Exterior faced with cement plaster. Plans complete and work to be done by Day Labor under the direction of owner.

FIRE REPORT.

TEHAMA, TEHAMA CO., CAL.—The entire business section of Tehama was threatened when a gasoline tank exploded destroying four buildings, causing a loss of \$24,000.

JAMESTOWN, TUOLUMNE CO., CAL.—The Hotel Nevills has been destroyed by fire at a loss of \$25,000. The structure was owned by the Jamestown Improvement Company, headed by T. S. Bullock. Whether or not the structure will be rebuilt is not known.

SAN FRANCISCO—Three two-story buildings, 2239, 2245 and 2247 Webster street were destroyed by fire last week causing a loss of \$15,000. Repairs will be made to these structures immediately.

GRASS VALLEY, NEVADA CO., CAL.—The Nevada County Narrow Gauge Railway shops, roundhouse, machine shop and turntable, and a number of locomotives were destroyed by fire here last week. The building loss is estimated at \$70,000. Preparations will be made to immediately put the plant in working condition.

PORTLAND, ORE.—Fire starting in the plant of the Portland Sash and Door Company, destroyed two blocks of buildings, bounded by Grand avenue, Union, East Mill and Stephens street. The damage is estimated at \$100,000.

MAXWELL, COLUSA CO., CAL.—The store of O. A. Burrows & Sons of Sites, Colusa County, was destroyed by fire recently, causing a loss of \$11,000.

OAKDALE, STANISLAUS CO., CAL.—The new constructed home of Louis Brichetto was destroyed by fire here last week, causing a loss of \$10,000.

SAN JOSE, SANTA CLARA CO., CAL.—Three fires, causing a loss of more than \$150,000, occurred here last week. The J. J. Johnson warehouse was destroyed at a loss of \$30,000; Averill Machine Works, loss \$20,000, and the Owen & Hunter Dairy, loss \$100,000.

Preparations for rebuilding the dairy plant will be started immediately.

TURLOCK, STANISLAUS CO., CAL.—Fire partly destroyed the plant of the Turlock Grape Juice Factory, causing a loss of \$12,000.

OROVILLE, BUTTE CO., CAL.—Fire starting in the engine room of the Oroville steam laundry destroyed that plant, a garage and livery stable. The loss is estimated at \$18,000. The three buildings were owned by Mrs. Jeff Kelly and Chas. Wotten.

RIVERBANK, STANISLAUS CO., CAL.—The Riverbank Hotel has been completely destroyed by fire here last week. The building was of frame construction.

SAN FRANCISCO—Fire completely destroyed the St. Francis Girls' Directory last Saturday morning. The structure was of frame construction and five stories in height.

FLATS

SAN FRANCISCO—Flats, 3 story and base, frame. Cost not stated. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner's name withheld. Location, Dolores near 15th. Will contain three flats of six rooms. Interior finish pine and elm panels and hardwood floors. Open fire places and tile mantels. Tile wainscot in bath rooms. Automatic water heaters. Exterior covered with shiplap and rustic. Plans being prepared.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, none. Owner, John A. Hoots & Son, 251 Kearny street, S. F. Location, west Belvedere south Rivoli, covering an area of 25 by 64 feet. Will contain four flats. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile mantels. Bath rooms finished in tile. Automatic water heaters. Exterior rustic and shiplap. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$6,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, H. Pollard. Location, Oak near Fillmore. Will contain two flats of six rooms each. Interior southern gum, pine and white enamel. Hardwood floors, tile baths. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

GARAGES

SAN FRANCISCO—Garage, 1 story reinforced concrete, \$2,000. Architect, A. C. Hampton, Olympic Club. Owner, A. P. Hampton. Location, south Frederick west Downey. Private garage, cement floor and special gasoline tank. Exterior cement plaster. Plans complete and work will be done by Day Labor.

GOVERNMENT WORK & SUPPLIES

San Francisco Circular No. 34.

The following bids were received by the depot quartermaster, San Francisco, Cal., under office circular No. 34, opened August 12:

1. Bid 1. Boesh Lamp Co., 1125 Mission street, San Francisco, Cal.

2. Keystone Bros., 120 Second street, San Francisco, Cal.

3. Union Coöperage Co., St. Louis, Mo.

4. Mark-Lally Co., 235 Second street, San Francisco, Cal.

5. F. S. Johnson Co., 576 Howard street, San Francisco, Cal.

6. Van Arsdale-Harris Lumber Co., Fifth and Brannan streets, San Francisco, Cal.

7. Reininger & Co., 420 Market street, San Francisco, Cal.

8. J. M. Josselyn & Co., 53 Sacramento street, San Francisco, Cal.

9. California Steam and Plumbing Supply Co., 671 Fifth street, San Francisco, Cal.

10. California Barrel Co., Monadnock Building, San Francisco, Cal.

11. J. E. Higgins Lumber Co., 423 Sixth street, San Francisco, Cal.

12. Baker & Hamilton, Fourth and Brannan streets, San Francisco, Cal.

13. White Bros., Fifth and Brannan streets, San Francisco, Cal.

14. H. E. Holmes & Co., 744 Folsom street, San Francisco, Cal.

15. W. T. Garratt & Co., 299 Folsom street, San Francisco, Cal.

16. H. C. Magnus & Co., 257 California street, San Francisco, Cal.

17. George Lawrence Co., Portland, Ore.

18. C. W. Marwedel, 76 First street, San Francisco, Cal.

19. Singer Sewing Machine Co., 142 Fourth street, San Francisco, Cal.

20. Levenson & Co., 325 Market street, San Francisco, Cal.

21. Koenig & Zanetti, 1280 Seventh avenue, San Francisco, Cal.

22. Pacific States Electric Co., 575 Mission street, San Francisco, Cal.

23. James H. Hardy, Channel and Fourth streets, San Francisco, Cal.

24. Western Pad & Nail Co., 176 Haight street, San Francisco, Cal.

25. Western Electric Co., 680 Folsom street, San Francisco, Cal.

26. A. W. Pike & Co., 711 Mission street, San Francisco, Cal.

27. C. J. Hendry Co., 46 Clay street, San Francisco, Cal.

28. National Brass & Copper Tube Co., 639 Mission street, San Francisco, Cal.

29. Marshall-Newell Supply Co., 142 Stewart street, San Francisco, Cal.

30. Brunswick & Balke, Collander Co., 767 Mission street, San Francisco, Cal.

31. Johnson & Joseph Co., 34 Sacramento street, San Francisco, Cal.

32. John A. Roebing's Sons Co., 724 Folsom street, San Francisco, Cal.

33. Larkin Asphalt Co., 4876 Eighteenth street, San Francisco, Cal.

34. Marshall-Wells Hardware Co., Portland, Ore.

35. Sugar Pine Lumber Co., 578 Sixth street, San Francisco, Cal.

36. Pacific Tool & Supply Co., Mission and Fremont streets, San Francisco, Cal.

37. Moise-Klinkner Co., 1212 Market street, San Francisco, Cal.

38. Handlan-Buck Mfg. Co., St. Louis, Mo.

39. Coffin-Reddington Co., 35 Second street, San Francisco, Cal.

40. Holbrook, Merrill & Stetson, Sixth and Bluxome streets, San Francisco, Cal.

41. Judson Mfg. Co., 819 Folsom street, San Francisco, Cal.

42. John Clark Saddlery Co., Portland, Ore.

43. Patrick & Co., 560 Market street, San Francisco, Cal.

44. Schwabacher & Frey Stationery Co., 549 Market street, San Francisco, Cal.

45. M. Greenberg's Sons Co., 225 Beale street, San Francisco, Cal.

46. W. E. Musket & Co., 518 Mission street, San Francisco, Cal.

47. Haas Wood & Ivory Works, 66 Clementina street, San Francisco, Cal.

48. Crane Company, Second and Brannan streets, San Francisco, Cal.

49. Pope & Talbot, Foot of Third street, San Francisco, Cal.

50. Dunham, Carrigan & Hayden Co., 140 Kansas street, San Francisco, Cal.

51. W. W. Montague & Co., 557 Market street, San Francisco, Cal.

52. Tacoma Mill Co., Tacoma, Wash.

53. Independent Pneumatic Tool Co., 61 Fremont street, San Francisco, Cal.

54. Waterhouse & Lester Co., 754 Howard street, San Francisco, Cal.

55. Electric Novelty Works, 333 Mission street, San Francisco, Cal.

56. Acme Lumber Co., Sixth and Channel streets, San Francisco, Cal.

57. Hart Wood Lumber Co., Fifth Berry streets, San Francisco, Cal.

58. Foucar, Ray & Simon, 512 Folsom street, San Francisco, Cal.

59. Wilson Bros. & Co., 325 Berry street, San Francisco, Cal.

60. Pacific Mill & Timber Co., Portland, Ore.

61. Eccles & Smith, 71 First street, San Francisco, Cal.

Item 1, 12 coolers, water, wood, 5 gal. Bid 3, \$5.91 ea; 38, \$5.91; 51, \$10.50.

2, 36 do, 10 gal—Bid 3, \$9.36 ea; 38, \$9.36; 51, \$18.

3, 1,500 lbs iron, Norway—Bid 12, \$3.35 cut; 34, \$4.50; 41, \$4.55; 50, \$4.05; 58, \$4.

4, 25 lbs pins, escutcheon—Bid 12, 37c lb; 50, 31c; 17, 55c; 18, 50c; 27, 45c; 29, 40c; 31, 32c; 36, 36c; 40, 52c; 46, 60c.

5, 500 ft pipe, wrought, 1 in—Bid 3, \$8.05; 100 ft, 9, \$8.30; 12, \$7.50; 50, \$8.10; 48, \$9.85; 29, \$9.95; 34, \$8.80; 40, \$8.30.

6, 24 reducers, hose—Bid 12, 84c ea; 50, 65c; 15, 72c; 29, 85c; 34, \$1.20; 36, 98c; 40, \$1.15; 45, 74c.

7, 12 in machine, valve-reseating—Bid 12, \$175; 29, \$175; 36, \$175; 46, \$187.50; 61, \$187.50.

8, 12 lbs sal ammoniac, lump—Bid 25, 20c lb; 36, 19c; 39, 15c.

9, 50 bolts, carriage, 1/4 in—Bid 12, \$2 per 100; 25, 32c; 31, 70c; 34, 75c; 50, \$2.10.

10, 50 do, 1/4 x 1 in—Bid 12, \$2 per 100; 25, 98c; 31, 80c; 34, 90c; 50, \$2.20.

11, 50 do, 1/2 x 2 in—Bid 12, \$2.50 per 100; 25, \$1.45; 31, \$1; 34, \$1.32; 50, \$2.60.

12, 50 do, 3/8 x 3/4 in—Bid 12, \$3 per 100; 25, \$1; 31, \$1.20; 34, \$1.50; 50, \$2.75.

13, 50 do, 3/8 x 1 in—Bid 12, \$3 per 100; 25, \$1.05; 31, \$1.25; 34, \$1.60; 50, \$2.95.

14, 50 do, 3/8 x 6 in—Bid 12, \$3.20 per 100; 25, \$1.20; 31, \$1.45; 34, \$1.80; 50, \$3.20.

15, 50 do, 3/8 x 6 in—Bid 12, \$3.50 per 100; 25, \$1.32; 31, \$1.85; 34, \$2.40, \$3.50.

16, 50 do, 3/8 x 8 in—Bid 12, \$4.20 per 100; 25, \$1.80; 31, \$2.30; 34, \$2.40; 50, \$4.15.

17, 50 do, 3/8 x 9 in—Bid 12, \$4.50 per 100; 25, \$1.95; 31, \$2.50; 34, \$2.60; 50, \$4.40.

18, 50 do, 1/2 x 2 in—Bid 12, \$3.50 per 100; 25, \$2.11; 31, \$1.70; 34, \$1.80; 50, \$3.50.

19, 50 do, 1/2 x 3 in—Bid 12, \$4 per 100; 25, \$2.29; 31, \$2.10; 34, \$2.10; 50, \$3.90.

20, 50 do, 1/2 x 3 1/2 in—Bid 12, \$4.20 per 100; 25, \$2.47; 31, \$2.25; 34, \$2.28; 50, \$4.10.

21, 50 do, 3/4 x 1 in—Bid 12, \$4.50 per 100; 25, \$1.90; 31, \$2.40; 34, \$2.45; 50, \$4.10.

22, 50 do, 1/2 x 5 in—Bid 12, \$5 per 100; 25, \$3.02; 31, \$2.70; 34, \$2.80; 50, \$4.80.

23, 50 do, 1/2 x 8 in—Bid 12, \$7 per 100; 25, \$4.11; 31, \$3.60; 34, \$3.80; 50, \$6.10.

24, 50 do, 3/4 x 10 in—Bid 12, \$8 per 100; 25, \$4.81; 31, \$4.25; 34, \$4.45; 50, \$6.90.

25, 50 do, 1/2 x 12 in—Bid 12, \$10 per 100; 25, \$5.57; 31, \$4.90; 34, \$5.15; 50, \$7.50.

26, 50 braces, bench—Bid 45, 90c ea; 55, 90c.

27, 50 brackets, curtain—Bid 45, 34c ea; 55, 30c.

28, 15 shits brass, 11x36 in—Bid 15, 10c lb; 18, 45c; 29, 41c; 34, 42c; 46, 43c.

29, 6 shits do, 12x24 in—Bid 15, 39c lb; 18, 40c; 28, 31c; 29, 35c; 34, 40c; 46, 50c.

30, 2 shits do, 12x24 in—Bid 15, 39c lb; 18, 40c; 28, 31c; 34, 40c; 56, 37c; 16, 51c.

31, 3 bbls cement, Portland—No bids.

32, 1 roll cloth, brass—Bid 32, 19 1/2c.

33, 24, 2 shits copper, planished—Bid 40, 32c lb.

35, 4 drills, twist, No. 110—Bid 12, 19c ea; 18, 30c; 36, 22c; 50, 20c; 61, 21c.

36, 12 do, No. 104A—Bid 12, 45c ea; 18, 70c; 36, 57c; 50, 50c; 61, 72c.

37, 2 elbows, pipe, street, 3/4 in—Bid 3, 2c ea; 9, 2c; 12, 3.5c; 29, 2.5c; 10, 2.5c; 48, 2.5c.

38, 24 do, 1/2 in—Bid 3, 3.2c ea; 9, 3.7c; 12, 4.5c; 29, 3.8c; 40, 3.8c.

39, 24 do, 3/4 in—Bid 3, 4.3c ea; 9, 5.7c; 12, 9c; 29, 7c; 40, 5.9c; 48, 7c.

40, 2 tees, street, 1/2 in—Bid 3, 4c ea; 9, 3.7c; 12, 4c; 29, 4.5c; 40, 4.8c; 48, 4.4c.

41, 24 unions, brass—Bid 3, 58c ea; 9, 29c; 18, \$1.10; 29, \$1.05; 45, 74c; 48, 70c.

42, 1 box glass, corrugated—No bids.

43, 50 handles, hatch—Bid 27, 13c ea; 31, 25c.

41, 100 hooks, curtain—Bid 1, \$1.50 doz; 45, \$1.08; 55, 72c.

45, 12 hasps, hinge—Bid 26, \$7.50 doz; 27, 40c ea; 31, \$2.75 doz.

46, 6 prs hinges, spring butt, 4 in—Bid 12, \$1.02 pr; 26, \$1.19; 31, \$1.15; 50, \$1.12.

47, 6 prs do, 5 in—Bid 12, \$1.30 pr; 26, \$1.49; 31, \$1.45; 50, \$1.40.

48, 12 prs hinges, butt, 2x2 in—Bid 12, 70c pr; 24, 44c; 27, 23c; 31, 40c; 45, 45c.

49, 12 prs do, 2 1/2 x 2 in—Bid 12, 80c pr; 26, 49c; 27, 35c; 31, 44c; 45, 51c.

50, 12 prs do, 3 1/2 x 3 1/2 in—Bid 12, \$1.20 pr; 26, \$1.09; 27, 65c; 31, 90c; 34, \$1.35; 45, \$1.25.

51, 12 hooks, cabin door—Bid 1, \$1 ea; 15, \$1.25; 26, \$1.40; 27, \$1; 31, 75c; 45, 75c.

52, 50 hooks, mess table, brass toggle bolt—Bid 12, \$1.75; 45, \$1.50 set.

53, 50 do, plain galv—Bid 1, \$1 ea; 45, \$1.50 set.

54, 6 bars iron rnd, 3/4 in—Bid 12, 6.75c lb; 27, 5c; 31, 5 1/2c; 34, 5 1/4c; 41, 6.15c; 50, 7.55c; 58, 7c.

55, 6 do, 1/2 in—Bid 12, 6c lb; 27, 4 1/2c; 31, 4 1/2c; 34, 4.95c; 41, 6.05c; 50, 6.6c; 58, 5.5c.

56, 6 do, 3/4 in—Bid 12, 4.5c lb; 27, 4 1/2c; 31, 4.5c; 34, 4.75c; 41, 4.45c; 50, 5.75c; 58, 4.9c.

57, 6 do, 1/2 in—Bid 12, 4.5c lb; 27, 4 1/2c; 31, 4 1/2c; 34, 4 1/2c; 41, 4.45c; 50, 5.75c; 58, 4.9c.

58, 6 do, 3/4 in—Bid 12, 4.5c lb; 27, 4 1/2c; 31, 4 1/2c; 34, 4 1/2c; 41, 4.45c; 50, 5.75c; 58, 4.9c.

59, 4 do, 1 in—Bid 12, 4.5c lb; 27, 4 1/2c; 31, 4 1/2c; 34, 4 1/2c; 41, 4.45c; 50, 5.75c ea; 58, 4.6c.

60, 4 bars iron, rnd, refined, 1/2 in—Bid 12, 2.1c lb; 34, 2.45c; 41, 2.2c; 58, 2.2c.

61, 2 do, 3/4 in—Bid 1, 2c lb; 34, 2.25c; 41, 2c; 58, 2c.

62, 4 bars iron, flat, galv, 3-16x1 1/4 in—Bid 12, 5.7c lb; 34, 5 1/4c; 41, 6.1c; 50, 6.9c; 58, 6 1/4c.

63, 4 do, 1/4 x 1 1/4 in—Bid 12, 6.5c lb; 31, 4.95c; 41, 5.8c; 50, 6.7c; 58, 6c.

64, 6 do, 1/2 x 1 1/4 in—Bid 12, 5.5c lb; 34, 4.95c; 41, 5.8c; 50, 6.7c; 58, 6c.

65, 6 do, 3/4 x 2 in—Bid 12, 5.5c lb; 34, 4.95c; 41, 5.8c; 50, 6.7c; 58, 6c.

66, 4 do, 3/4 x 1 1/2 in—Bid 12, 5.4c lb; 34, 4.75c; 41, 5.6c; 50, 6.5c; 58, 5 3/4c.

67, 150 shs iron, hand, 4x1 in—Bid 12, 5.8c lb; 34, 5.45c; 41, 6.30c; 50, 7.2c; 58, 6.5c.

68, 2 bars iron angle—Bid 12, 5.7c lb; 34, 5.35c; 41, 5.7c; 50, 6.1c.

69, 10 shs steel, galv, 36x120 in—Bid 12, 3.9c lb; 34, 4.75c; 40, 4.05c; 50, 4.1c; 58, 4.4c.

70, 10 shs do, 36x96 in—Bid 12, 4.4c lb; 34, 5.25c; 40, 4.5c; 50, 4.55c; 58, 4.8c.

71, 50 ft lacing, belt—Bid 18, \$1.25 per 100 ft; 26, 35c; 50, 60c; 54, 80c.

72, 200 shs lead, sheet, 6-lb—Bid 27, 10c lb; 30, 9c.

73, 200 shs do, 8-lb—Bid 27, 10c lb; 30, 9c.

74, 12 locks, wardrobe—Bid 12, \$4.60 doz; 26, \$4.40; 29, \$4.80.

75, 1,000 lin ft moulding, ash—Bid 12, \$2.75 lot; 47, \$39.50; 57, \$27.

76, 500 ft lumber, ash, 4x12 in—Bid 12, \$39.50; 57, \$105.

77, 500 ft do, 1x12 in—Bid 13, \$124.50 M; 57, \$105.

78, 300 ft do, 1 1/4 x 16 in—Bid 13, \$149.50 M; 57, \$105.

79, 200 ft do, 1 1/2 x 16 in—Bid 13, \$149.50 M; 57, \$105.

80, 200 ft do, 2x10 in—Bid 13, \$134.50 M; 57, \$105.

81, 192 ft do, 2x18 in—Bid 13, \$149.50 M; 57, \$105.

50, 2, 600 ft do, 3x12 in—Bid 13, \$14.
51, 50, 57, \$105.
52A, 400 ft do, 3x6 in—Bid 13, \$14.
50, 57, \$105.
53, 60 ft lumber, hickory—Bid 13,
\$120.
54, 1, 600 ft lumber, spruce—Bid 6, \$35.
55, 35, \$37.50; 57, \$32; 59, \$37.50; 60,
\$25.
56, 299 ft lumber, sugar pine, 1x8 in—
Bid 6, \$65 M; 11, \$72; 33, \$75; 57, \$110.
56, 204 ft do, 1x12 in—Bid 6, \$75 M;
11, \$77.35; 57, \$75; 57, \$110.
57, 293 ft do, 1x16 in—Bid 6, \$75 M;
11, \$82; 35, \$77.57; 110.
58, 299 ft do, 2x4 in—Bid 6, \$110 M;
11, \$114; 35, \$150; 57, \$110.
59, 2,000 ft lumber, Oregon pine, 1x6 in—
Bid 6, \$15 M; 23, \$13.94; 49, \$12.99;
52, \$10; 56, \$14.25; 57, \$15.90; 59, \$15.
60, \$8.
91, 1,000 ft do, 2x6 in—Bid 6, \$16 M;
23, \$13.94; 49, \$13.90; 52, \$9; 56, \$14.25;
57, \$15.90; 59, \$15; 60, \$8.
91, 600 ft do, 2x6 in—Bid 6, \$16 M;
23, \$13.94; 49, \$13.90; 52, \$9.50; 56, \$14.25;
57, \$15.90; 59, \$15; 60, \$8.
92, 500 ft do, 4x4 in—Bid 6, \$16 M;
23, \$13.94; 49, \$13.90; 52, \$10; 56, \$14.25;
57, \$15.90; 59, \$15; 60, \$9.
93, 299 ft do, 2x4 in—Bid 6, \$15 M;
23, \$13.94; 49, \$13.90; 52, \$10; 56, \$14.25;
57, \$15.90; 59, \$15; 60, \$9.
94, 600 ft do, 1x12 in—Bid 6, \$36 M;
23, \$26.97; 49, \$21.80; 52, \$30; 56, \$31.25;
57, \$32.50; 59, \$30; 60, \$20.
95, 600 ft do, 2x12 in—Bid 6, \$35 M;
23, \$26.97; 49, \$21.80; 52, \$30; 56, \$25;
57, \$27; 59, \$32; 60, \$25.
96, 300 ft do, 2x3 in—Bid 6, \$33 M;
23, \$26.97; 49, \$21.80; 52, \$30; 56, \$25;
57, \$27; 59, \$30; 60, \$20.
97, 300 ft do, 2x4 in—Bid 6, \$33 M;
23, \$26.97; 49, \$21.80; 52, \$30; 56, \$25;
57, \$27; 59, \$30; 60, \$20.
98, 300 ft do, 2x4 in—Bid 6, \$33 M;
23, \$26.97; 49, \$21.80; 52, \$30; 56, \$25;
57, \$27; 59, \$30; 60, \$20.
99, 600 ft do, 3x14 in—Bid 6, \$46 M;
23, \$31.97; 49, \$34.50; 52, \$32.50; 56, \$40;
57, \$42.50; \$37.50; 60, \$20.
100, 300 ft lumber, flooring—Bid 6,
\$30 M; 23, \$27.98; 49, \$23.60; 52, \$32.50;
56, \$28.25; 57, \$30; 59, \$30; 60, \$22.
101, 200 lbs oakum, W. O. Davis—
Bid 8, 9, 76 lbs; 17, 9.5c; 29, 10c; 31, 9.4c;
31, 11c; 51, 11c.
102, 6 parts a iron hammer, barrels,
Boyer—Bid 61, \$8 ea.
103, 6 do, handles, Boyer—Bid 61,
\$7.75 ea.
104, 6 do, barrels, Thor—Bid 53,
\$14.62 ea.
105, 6 do, handles, Thor—Bid 53,
\$12.59 ea.
106, 6 do, barrels, Thor—Bid 53,
\$12.59 ea.
107, 6 do, handles, Thor—Bid 53,
\$12.59 ea.
108, 100 dowels, birch, 1x24 in—Bid
11, \$1.25 per 100; 12, \$2; 13, 75c.
109, 100 do, 2x24 in—Bid 11, \$1.10
per 100; 12, \$2; 13, 75c.
110, 100 do, 2x24 in—Bid 11, \$1.70
per 100; 12, \$2; 13, \$1.
111, 24 bands, brass, hose—Bid 43,
2c ea.
112, 21 plates, brass, padlock—Bid 1,
50c ea; 43, 20c; 55, 25c.
113, 3 plates, name, egg rods—Bids
1, 7, 16 and 21, \$1 ea; 37, \$1.15; 45, 90c.
114, 5 do, vegetable root—Bids 1, 7,
16 and 21, \$1 ea; 37, \$1.55; 43, \$1.25; 45,
\$1.10.
115, 6 do, fruit root—Bids 1, 7, 16
and 21, \$1 ea; 37, \$1.25; 43, \$1.10; 45,
90c.
116, 6 do, cold storage—Bids 1, 7, 16
and 21, \$1 ea; 37, \$1.15; 43, 1.10; 45,
90c.
117, 12 do, meat root—Bids 1, 7, 16
and 21, \$1 ea; 37, \$1.15; 43, 1.10; 45,
90c.
118, 3 do, fish root—Bids 1, 7, 16
and 21, \$1 ea; 37, \$1.25; 43, 1.25; 45,
90c.
119, 3 do, lee root—Bids 1, 7, 16 and
21, \$1 ea; 37, \$1.15; 43, 1.10; 45, 90c.
120, 100 lbs, butter—Bids 1, 7, 16
and 21, \$1 ea; 37, \$1.25; 43, \$1.25; 45,
90c.
121, 123, 2,500 plugs, sugar pine—
No bid.
124, 10 lbs rivets, clinch, 5/8 in—Bid
8, 3 1/2 lb; 27, 15c; 31, 12c.
125, 10 lbs do, 3/4 in—Bid 8, 1 1/2 lb; 27,
15c; 31, 12c.
126, 100 lbs sockets, wall, curtain—Bid 1,
50c ea; 43, 50c; 55, 50c.
127, 10 lbs rivets, turners—Bid 12, 8c
bid 31, 10c; 50, 10c

125. 20 rivets, brass rod—Bid 1, 12c
126. 15, 22c; 18, 24c; 15, 63c; 55, 10c.
127. 100 lbs do, button head—Bid 1, 12c
128. 15, 23c; 45, 15c 10d.
129. 50 screws, lag, galv.—Bid 12, \$1
per 100; 25, \$1.05; 31, \$1.30; 51, \$2; 50,
\$3.
131. 2 gro screws, machine, No. 8—
Bid 12, 45c gro; 18, 63c; 29, 40c; 34, 50c;
36, 50c; 61, 78c.
132. 2 gro gro, No. 10—Bid 12, 75c
gro; 18, 87c; 31, 66c; 34, 80c; 36, \$1.59;
61, 84c.
133. 2 gro do, No. 14—Bid 12, \$1.55
gro; 18, \$2.04; 29, \$1.28; 31, \$1.50; 36,
\$2.03; 61, 85c.
131. 1 gro do, No 21—Bid 12, \$3.90
gro; 18, \$5.40; 29, \$3.37; 31, \$5.40; 36,
\$9.10; 61, \$4.05.
135. 2 gro do, No. 10—Bid 12, 75c
gro; 18, 87c; 29, 66c; 34, 80c; 36, \$1.59;
61, 84c.
136. 2 gro do, No. 14—Bid 12, \$1.35
gro; 18, \$2.04; 29, \$1.28; 34, \$1.50; 36,
\$2.03; 61, \$1.55.
137. 2 gro gro, machine, brass, No. 8—Bid 12,
90c gro; 18, 72c; 29, 67c; 34, 70c; 36,
74c; 61, 85c.
138. 4 gro do, No. 10—Bid 12, 65c
gro; 18, 78c; 29, 70c; 34, 75c; 36, 79c;
61, 84c.
139. 4 gro do, No. 14—Bid 12, 80c
gro; 18, 99c; 29, 90c; 34, 90c; 36, \$1.02;
61, \$1.16.
140. 1 gro do, No. 21—Bid 12, \$2.30
gro; 18, \$3.53; 29, \$2.60; 31, \$2; 36, \$2-
93; 61, \$3.32.
141. 1 plates, staple—No bids.
142. 5 lbs washers, iron $\frac{1}{2}$ in—Bid
12, 12c lb; 18, 35c; 31, 17c; 34, 10c; 41,
12.50; 50, 10c.
143. 10 lbs do, $\frac{3}{4}$ in—Bid 12, 10c lb;
18, 35c; 31, 15c; 34, 9c; 41, 95c; 50, 10c.
144. 10 lbs do, $\frac{1}{2}$ in—Bid 12, 8c lb;
18, 35c; 31, 12c; 34, 8c; 41, 7.55c; 50,
8.5c.
145. 1 wheels, baggage truck—Bid
1, \$9.50 ea.
146. 4 shts zinc, No. 20—Bid 34, 30c
lb; 40, 27.4c.
147. 100 lbs nails, wire, common—
Bid 8, 53c lb; 12, 14c; 27, 41-10c; 31,
4.3c; 34, 4.2c; 50, 4.2c.
148. 100 lbs do, finishing, 6d—Bid 12,
5.9c lb; 31, 5.35c; 34, 4.35c; 50, 4.15c.
149. 100 lbs do, finishing, 2d—Bid
12, 5.8c lb; 27, 5c; 31, 5.75c; 33, 4.35c;
50, 4.35c.
150. 10 anvil, loop—Bid 5, \$1; 17, \$1-
08; 12, \$1.
151. 1 bbl asphaltum—Bid 27, \$7.50
bbl; 33, \$4.50.
152. 24 batteries, "Columbia"—Bid
22, 35c ea; 25, 35c; 34, 30 $\frac{1}{2}$ c; 48, 25c;
50, 35c; 54, 35c.
153. 1 bit, twist drill, 3-16 in—Bid
18, 70c ea; 26, 57c; 61, \$1.
154. 4c do, $\frac{1}{2}$ in—Bid 18, \$1; 36, 74c;
61, 84c.
155. 18 lbs borax, lump—Bid 12, 7c
lb; 39, 6 $\frac{1}{2}$ c; 50, 4 $\frac{1}{2}$ c; 54, 6c.
156. 2 gro buttons, cushion, black—
Bid 54, 40c gro.
157. 2 gro do, russet—Bid 51, 50c gro.
158. 50 yds canvas, white cut—Bid
31, 32c yr.
159. 50 yds do, olive drab—No bids.
160. 20 clips, hammer—Bid 5, 15c doz;
17, 29c; 31, 20c; 42, 32c.
161. 100 lbs cloth, enamel—Bid 5,
14c yd; 17, 42c; 51, 44c; and 48c.
162. 50 gro crayons, metal workers—
Bid 12, \$5.50 gro; 36, \$2.25; 50, \$3.50;
54, \$2.49.
163. 12 crocks, stoneware—Bid 20,
61c ea.
164. 1 duplicator, "Neostyle"—Bid 44,
\$15.
165. 36 frames, street lamp—Bid 1,
\$3 ea.
166. 1 set, grommet, for No. 2 grom-
mets—Bid 8, \$1.28 ea; 27, \$1.75; 31,
\$1.75; 34, \$1.75.
167. 1 do, for No. 4 grommets—Bid
27, \$2 ea; 31, \$1.45.
168. 18 hammers, farriers—Bid 50,
\$1.15 ea; 51, \$1.19.
169. 100 lbs iron, Swedish, 5-16x2 $\frac{1}{2}$ in—
Bid 12, \$3.90 cwt; 34, \$3; 48, \$5.
170. 16 bars do, 3x3 $\frac{1}{2}$ in—Bid 12,
\$1.10 cwt 31, \$5.58, \$1.50.
171. 6 bars do, 3x1 in—Bid 34, \$5
cwt.
172. 10 bars do, $\frac{1}{2}$ x1 $\frac{1}{2}$ in—Bid 34, \$5
cwt.
173. 1,000 links, repair, 1 in—Bid 12,
70c gro; 12, \$1.50, 50, 50c
174. 1,000 links, 5, 15 lb in—Bid 12, \$1.50
gro; 42, \$2; 50, 50c.

ro. 175, 1 lb. do. do. % in-Bid 12, \$1.80
42, \$6; 50, \$6, \$1.85
176, 1,000 do. 7-16 in-Bid 12, \$2.70
ro. 12, \$1.50 50, \$2.45.
177, 66 prs lns, check-Bid 2, \$4.40
pr. 178, 100 prs, \$3.30; 12, \$1.50.
179, 100 prs do. 10 in-Bid 2, \$6.90
pr. 5, \$6.65; 17, \$1.20; 42, \$7.15.
179, 24 prs do. russet-Bid 5, \$9 pr;
17, \$3.55; 42, \$7.75.
180, 24 prs do. 20 in-Bid 5, \$6.25 pr;
17, \$3.15; 42, \$7.40.
181, 252 ft lumber, hickory-Bid 11,
\$134 M: 13, \$134.50.
182, 240 ft do. oak, 4x10-Bid 11,
\$134 M: 13, \$139.50.
183, 240 ft do. 2x8 in-Bid 11, \$114
M: 13, \$124.50.
184, 252 ft do. 2x6 in-Bid 13, \$175 M;
185, 252 ft do. 3x12-Bid 11, \$134 M;
13, \$139.50.
186, 100 ft lumber, white pine, 1/2x13
in-Bid 14, \$60 lot: 11, \$114.50.
187, 240 ft do. 1x16-Bid 6, \$65 lot;
11, \$21.50.
188, 261 ft lumber, poplar, 1/2x16 in-Bid
11, \$25.50 lot; 13, \$39.60.
189, 141, 240 ft do. 4x18 in-Bid 11, \$20-
50 lot: 13, \$19.23.
190, 1 machine, sewing, "Rig Shuttle"
-Bid 17, \$195; 19, \$90.
191, 5 doz pprs nails, lining, No. 12-Bid
17, \$14.50; 19, \$40.
192, 6 doz papers nails, tufting, 1 1/2
in-Bid 54, \$1.20 doz papers.
194, 5 doz papers do, 1 1/2 in -
no bids.
195, 3 doz needles, for "Big Shuttle"
machine-Bid 17, 50 doz.
196, 24 needles, saddlers', machine,
No. 2-Bid 2, 75c doz; 5, 75c; 17, 70c;
34, 75c; 42, 72c.
197, 24 do. No. 3-Bid 2, 75c doz; 5,
75c; 17, 70c; 34, 75c; 42, 72c.
198, 24 do. No. 4-Bid 2, 75c doz; 5,
75c; 17, 70c; 34, 75c; 42, 72c.
199, 1 doz needles, saddlers', cloth,
No. 6-Bid 19, 50c doz.
200, 1 doz do. No. 5-Bid 19, 50c doz.
201, 1 doz do. No. 4-Bid 19, 50c doz.
202, 1 doz do. leather-Bid 17, 50c
doz; 19, 50c.
203, 1 doz do. No. 7-Bid 17, 50c doz;
19, 50c.
204, 1 doz do. No. 8-Bid 17, 50c doz;
19, 50c.
205, 36 pans, bake, for No. 5 range-
Bid 1, \$2.25 ea; 40, 78c.
206, 18 ft chain, for horse-clipping
machine-Bid 2, \$1.56 lot; 12, \$4; 17,
\$3.50; 42, \$6.62.
207, 18 ft shaft, flexible, do-Bid 2,
\$7.14 lot; 12, \$6.70; 17, \$7.45; 50, \$4.32.
208, 6 eccentric rolls, do-Bid 2, 5c
ea; 12, 5c; 17, 9c; 50, 7c.
209, 60 pans, tension, do-Bid 2, 5c ea;
12, 4c; 17, 5c; 50, 4c.
210, 48 plates, bottom, do-Bid 2, \$1-
27 ea; 12, \$1.12; 17 and 50, \$1.18.
211, 48 plates, upper, do-Bid 2, 88c
ea; 12, 74c; 17, 80c; 50, 80c.
212, 1 can paste, chain-Bid 18, 50c
per lb.
213, 5 kro eyelets, knob-Bid 2, 40c
gro; 5, 35c; 42, 50c; 54, 20c.
214, 2 pots, solder-Bid 18, 80c ea;
30, 50c; 42, 2c.
215, 2 cans powder, ink-Bid 2, 90c
can; 5, \$1.
216, 432 sockets, harness-Bid 2, \$3-
40 gro; 17, \$5.50; 42, \$5.50.
217, 1 sharpener, pencil, Webster -
Bid 18, 80c.
218, 864 snaps, harness, double end
-Bid 2, \$4.95 gro; 5, \$5.25; 17, \$5.05; 34,
\$5.25; 42, \$4.80.
219, 864, do. open end-Bid 2, \$1.01
gro; 5, \$1.17; 17, \$4.15; 42, \$1.
220, 36 sockets, whip-Bid 54, \$3.50
doz.
221, 14 stamps, dating, band-Bid 7,
\$2 lot; 37, 1c ea; 43, 20c.
222, 288 staples, lame, polished-Bid
2, \$2.90 gro; 5, \$2.40; 12, \$2.15.
223, 5 bars, steel spring, 1/2x1 1/2 in-
Bid 34, \$1.25 cwt; 54, \$1; 11, 3.5c lb. 58,
5c.
224, 5 bars do. 1/2x1 1/2 in-Bid 34,
\$1.25 cwt; 54, \$1; 11, 3.5c lb. 58,
5c.
225, 10 bars steel, 1/2x1 1/2 in-Bid
12, \$1 1/2 cwt; 31, \$2.50; 41, \$2.65; 58,
\$3.
226, 10 bars do. 1/2x1 1/2 in-Bid 12,
\$1 1/2 cwt; 31, \$2.50; 41, \$2.65; 58,
\$3.
227, 10 bars do. 1/2x1 1/2 in-Bid 12,
\$1 1/2 cwt; 31, \$2.50; 41, \$2.65; 58,
\$3.
228, 10 bars do. 1/2x1 1/2 in-Bid 34,
\$1.00 cwt; 58, \$1.
229, 10 bars do. 1/2x1 1/2 in-Bid 34,
\$1.00 cwt; 58, \$1.
230, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
231, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
232, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
233, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
234, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
235, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
236, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
237, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
238, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
239, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
240, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
241, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
242, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
243, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
244, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
245, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
246, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
247, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
248, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
249, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
250, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
251, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
252, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
253, 10 bars do. 5-16x1 1/2 in-Bid 12,
\$1 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
254, 10 bars do.

231. 10 bars do, 5-16x1½ in—Bid 12, \$4 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
 232. 10 bars do, 5-16x1½ in—Bid 12, \$4 cwt; 34, \$2.50; 41, \$2.65; 58, \$3.
 233. 10 bars do, 5-16x1½ in—Bid 34, \$2.50 cwt; 58, \$3.
 234. 10 bars do, 5-16x1½ in—Bid 34, \$2.50 cwt; 58, \$3.
 235. 10 bars do, 5-16x2 in—Bid 34, \$2.50 cwt; 58, \$3.
 236. 10 bars do, 5-16x2½ in—Bid 34, \$2.50 cwt; 58, \$3.
 237. 10 bars do, 5-16x2½ in—Bid 34, \$2.50 cwt; 58, \$3.
 238. 10 oilstones, Washita — Bid 12, 45r ea; 38, 74c; 50, 37c; 54, 40c.
 239. 100 straps, breast—Bid 2, 1 ea; 17, 75c; 42, 78c.
 240. 24 do, black—Bid 2, \$2.65 ea; 17, \$2.95; 42, \$1.70.
 241. 60 do, pole—Bid 2, 90c and \$1.15 ea; 5, \$1; 17, 96c; 42, \$1.05.
 242. 200 do, halter—Bid 2, \$1.45 ea; 5, 75c; 17, 60c; 42, 75c.
 243. 200 do, hame, bottom—Bid 2, 24c ea; 5, 25c; 17, 21c; 42, 33c.
 244. 200 do, top—Bid 2, 26½c ea; 5, 23c; 17, 21c; 42, 34c.
 245. 100 traces, ambulance—Bid 2, \$3.30 ea; 17, \$2.75; 42, \$2.65.
 246. 12 spools thread, linen, No. 20, black—Bid 5, \$2.65 doz spools; 42, \$2.76; 17, 21c spool.
 247. 12 spools do, No. 20, white—Bid 5, \$2.65 doz spools; 42, \$2.76; 17, 21c spool.
 248. 12 spools do, No. 33, black—Bid 5, \$3.35 doz spools; 42, \$3.48; 17, 28c spool.
 250. 10 lbs wax, floor—Bid 20, 32c lb; 27, 40c.
 251. 12 centers, neckyoke—Bid 17, \$7.40 doz; 42, \$7.25.
 252. 3 bars iron, Swedish—Bid 12, \$3.90 cwt; 34, \$4.50; 41, \$4; 58, \$5.
 253. 1 bbl tar—Bid 8, \$9.90; 27, \$6 and \$9; 31, \$6.50, \$9 and \$13; 33, \$7.
 254. 6 prs pads, hoof—Bid 24, 52c pr; 54, 54c.
 255. 50 gals acid, carbolic, crude—Bid 39, 34c gal.
 256. 100 bbls, slack, lime—Bid 10, 70c ea.
 257. 2 bits, for Star auger—Bid 34, \$1.60 ea.
 258. 2 files, steel—No bids.
 259. 2 gates, blast—No bids.
 260. 10 pieces lumber, spruce, 1x14 in—Bid 6, \$45 lot; 57, \$14.96; 60, \$35.
 261. 10 pieces do, 1x16 in—Bid 6, \$45 lot; 57, \$14.96; 60, \$35.
 262. 6 pieces lumber, oak—Bid 11, \$14.50 lot; 13, \$14.40; 57, \$10.50.
 263. 2,000 ft lumber, Oregon pine, 1x3 in—Bid 6, \$16 M; 23, \$16.97; 52, \$14; 57, \$17.50; 60, \$8.
 264. 2,000 ft do, 1x4 in—Bid 6, \$15 M; 23, \$16.97; 52, \$13; 57, \$17.50; 60, \$8.
 265. 1,000 ft do, 1x3 in—Bid 6, \$16 M; 23, \$16.97; 52, \$14; 57, \$17.50; 60, \$8.50.
 266. 1 machine, hub boring—Bid 54, \$26.
 267. 3 prs pads, hoof, No. 2½—Bid 24, 68c pr.
 268. 4 prs do, No. 3—Bid 24, 68c pr.
 269. 4 prs do, No. 3½—Bid 24, 68c pr.
 270. 60 spokes, wagon—Bid 14, \$18 lot; 54, \$15.
 271. 2 parts for Victor bolt clipper, jaws, left—Bid 50, 90c ea.
 272. 2 do, right—Bid 50, 90c ea.
 273. 800 lbs iron, Norway, round—Bid 12, \$4.40 cwt; 14, \$5.25; 58, \$5.50.
 274. 600 lbs do, flat, ¾x1½ in—Bid 12, \$3.90 cwt; 24, \$4.75; 58, \$5.
 275. 1,000 lbs do, ¾x2½ in—Bid 12, \$3.90 cwt; 34, \$4.75; 58, \$5.50.
 276. 400 lbs do, ½x1½ in—Bid 34, \$4.95 cwt; 41, \$4.50; 58, \$5.
 277. 500 lbs do, ¾x1½ in—Bid 12, \$3.90 cwt; 34, \$4.75; 58, \$5.
 278. 12 yds cloth, green baize—Bid 30, \$3.60 yd.

Grand Junction, Colo., Post Office.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for the construction, complete of the U. S. post office, Grand Junction, Colo.:
 Item 1, limestone; 2, sandstone.
 G. W. Stiles Construction Co., Chicago, Ill., item 1, \$112,294.
 Geo. A. Whitmeyer & Sons, Ogden, Utah, item 1, \$108,006.
 Wm. O'Neill & Son Co., Faribault, Minn., item 1, \$112,819.

Norman Ker Co., New York city, item 1, \$121,000; 2, \$128,000.

King Lumber Co., Charlottesville, Va., item 1, \$96,140; 2, \$100,000.

Campbell Building Co. of Utah, Salt Lake City, Utah, item 1, \$107,500; 2, \$112,500.

Dieter & Wenzel Construction Co., Wichita, Kans., item 1, \$106,821.

G. A. Wiese, Omana, Neb., item 1, \$109,723.

M. Yeager — Son, Danville, Ill., item 1, \$108,943; 2, \$112,943.

Puget Sound Dredging.

The contract for dredging at the navy yard, Puget Sound, Wash., has been awarded to the Erickson Construction Co., Seattle, Wash., at 60c per cu yd.

Grand Junction, Colo., Models.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for furnishing plaster models for the U. S. post office at Grand Junction, Col.:
 C. W. Buhler, Washington, D. C., \$976.

J. Brys & F. Bruyninck Co., Washington, D. C., \$990.

Lombard & Ludwig, Washington, D. C., \$1,070.

E. C. Bairstow, Washington, D. C., \$1,150.

Emil Jung, Washington, D. C., \$1,200.

Pearl Harbor, Officers' Quarters.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for constructing officers' quarters at the Naval Station, Pearl Harbor, H. T.:
 Item 1, work complete; 2, deduct for omitting under floors, lattice between piers and under steps, concrete hearths, painting, varnish, etc.; 3, deduct from item 1, for omitting electric light fixtures.

Lord-Young Engineering Co., 12 Merchant street, Honolulu, item 1, \$27,254; 2, \$25,334; 3, \$24,838.

Ouler & Ingporsen, Honolulu, H. T., item 1, \$19,890; 2, \$3,227; 3, \$496.

San Francisco, Cal., Wharf Extension.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for the construction of an extension to the wharf at the Naval Training Station, San Francisco:

Item 1, work complete; 2, deduct if each interior 10-foot bay, by which the length of wharf may be shortened; 3, deduct for omitting the 10-pile dolphin.

Hyde, Harjes & Co., 110 Market street, San Francisco, Cal., item 1, \$9,341; 2, \$215; 3, \$266.

Mervy-Elwell Co., Oakland, Cal., item 1, \$10,975; 2, \$300; 3, \$350.

Tibbetts-Pacific Co., 16 California street, San Francisco, Cal., item 1, \$11,980; 2, \$250; 3, \$240.

Thompson Bridge Co., 105 Main street, San Francisco, Cal., item 1, \$9,980; 2, \$365; 3, \$318.

San Francisco Bridge Co., 14 Montgomery street, San Francisco, Cal., item 1, \$10,347; 2, \$300; 3, \$261.

C. E. Lambeth, 110 Jessie street, San Francisco, Cal., item 1, \$12,650; 2, 10x10 bay, \$90, 40x40, \$360; 3, \$400.

Healy Tibbetts Construction Co., 9 Main street, San Francisco, Cal., item 1, \$930; 2, \$200; 3, \$250.

San Francisco, Cal., Partition, Etc.

The contract for constructing partition, etc., in room No. 228 in the U. S. post office at San Francisco, Cal., has been awarded to Barrett & Hilp at \$525.

Sacramento, Cal., Repairs, Etc.

The contract for repairs and new platform addition to mailing vestibule at the U. S. post office, Sacramento, Cal., has been awarded to Mursell & Haley, Sacramento, Cal., at \$3,377.

Light-house Service, Cement.

The following bids were received by the light-house inspector, 16th district, Ketchikan, Alaska, for 200 barrels cement for Cape St. Elias Light Station:

Superior Portland Cement Co., Seattle, Wash., \$712.50; accepted.

W. F. John & Co., Seattle, Wash., \$759.65.

Galbraith, Bacon & Co., Seattle, Wash., \$777.90.

Balfour, Guthrie & Co., Seattle, Wash., \$890.

HALLS AND SOCIETY BUILDINGS

SAN FRANCISCO—Athletic Club, 4 story and base. Class A construction, \$100,000. Architects, Bliss & Faville, Balboa Bldg., S. F. Owners, Women's Athletic Club of San Francisco. Location, north Summer between Mason and Taylor. Complete steel frame, brick walls, cement floors and hollow tile interior partitions. Interior finish pine and hardwood. Metal window sash and frames. Steam heat, oil burning system, elevator service, concrete plunge and hot water supply. Exterior faced with pressed brick and terra cotta. Plans being prepared.

HOSPITALS.

REDWOOD CITY, SAN MATEO CO., CAL.—Home for children, 2 story and base. Class A construction. Cost not stated. Architect, Houghton Sawyer, Shreve Bldg., S. F. Owners, Drexler Home for Crippled Children. Complete steel frame, brick and terra cotta walls, hollow tile interior partitions. Interior finish pine and hardwood. Steam heat, oil burning furnace and hot water system. Exterior faced with pressed brick. Plans complete and figures to be called for at once.

SAN JOSE, SANTA CLARA CO., CAL. County hospital buildings, 1 story, frame. Cost not stated. Architect's name not given. Owners, Santa Clara County. Bids will be opened on September 27th for constructing a milking barn, milk room, cottage and hay barn at the Santa Clara County Hospital. Plans can be secured from the office of the County Clerk.

HOTELS.

YOSEMITE VALLEY, CAL.—Hotels and Inns, 1 and 2 story, frame. Cost not stated. Architects, Daniels & Wilhelm, Monadnock Bldg., S. F. Owners, Desmond Park Service Co., Underwood

Bldg., S. F. Hotel will contain 120 to 140 rooms, office, lounging rooms and dining rooms. There will be 15 small one-story inns, five of which will be erected this year and three a year following. Interior finish rustic. Exterior, stone and shakes. Plans complete and work to be done by Day Labor.

MARTINEZ, CONTRA COSTA CO., CAL.—Hotel and stores addition and alteration, frame, \$8,000 to \$10,000. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, L. M. La Sells. Work will consist of rearranging upper floor for rooms, interior trim, painting, plastering, electric work and plumbing. Plans being prepared.

SEATTLE, WASH.—Hotel, 7 story and base, reinforced concrete, \$125,000. Architect, J. O. Taft, 2334 10th avenue, Seattle. Owner, Robert E. Cavette, L. C. Smith Bldg., Seattle. Location, northwest corner 8th and Union streets covering an area of 66 by 105 feet. Will contain 39 two-room suites and 63 single rooms. Interior finish pine and hardwood. Steam heat, elevator service, hot water system and vacuum cleaning. Bath rooms finished in tile. Hollow tile partitions and metal window sash and frames. Exterior faced with buff pressed brick. Plans complete.

IRRIGATION PROJECTS

TERRA BELLA, TULARE CO., CAL.—Irrigation project, \$1,000,000. Engineer D. W. Albert, Yuba City. Owners, Terra Bella Irrigation District. In connection with the development of the Terra Bella Irrigation project, for which bonds of \$1,000,000 were recently voted, Messrs. T. W. McClenahan and A. W. Ballardie, of the McClenahan-Ballardie Contracting Co., 180 Jessie street, S. F., and D. W. Albert, a hydraulic engineer of Yuba City, are now in Terra Bella looking over the proposed work. A detailed investigation will be made with a view of bidding on the work. It is their purpose to put in a bid for the entire project, including the diversion dam, intake, ditch, reservoir dam, canals, etc., taking pay for same in bonds of the Irrigation district. Consulting Engineer Stephen E. Kieffer is preparing a final report, which will be submitted to the directors of the district shortly. Final action will probably be taken when the report is submitted.

OAKDALE, STANISLAUS CO., CAL.—Irrigation work. Cost not stated. Engineer, Chief Engineer, South San Joaquin Irrigation District, Oakdale. Owners, South San Joaquin Irrigation District. The directors of the South San Joaquin and Oakdale Irrigation Districts have recently returned from a trip into the mountains to investigate the reservoir sites. On returning it was suggested that a reservoir be constructed in the Ramsey reservoir site, owned by F. R. Pattee et al. It was also thought that the suggestion offered by the Utica Mining Co. for a dam built by the company was a good one. The proposal of the Utica Co. is that it and the district each pay half the cost of a \$1,250,000 reservoir at Spicer's Meadows, which would store 61,000 acre feet of water. The

dam would be 150 feet high. This dam site is wide, while at the Ramsey site a narrow dam would have to be built, perhaps 250 feet high. About 500,000 acre feet could be stored here. The dam would cost between \$750,000 and \$1,250,000. It is probable that a meeting will be called to discuss the proposed work.

LIBRARIES.

SAN FRANCISCO—Library, general construction, \$400,000. Architect, Geo. William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Bids opened at the last meeting of the Library Trustees show Sampson & Larsen low for the general construction of the new library at \$397,500. Lindgren & Co. were the next low at \$424,000. A complete list of the bids will be found under the heading of San Francisco in this issue.

RAILROAD CONSTRUCTION AND EQUIPMENT.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Railroad construction. Cost not stated. Engineer's name not given. Owners, South San Francisco Railroad and Power Co. Application has been filed with the Board of Trustees of the City of South San Francisco by the South San Francisco Railroad and Power Company for a franchise to construct and operate a single or double track standard gauge railroad in the city of South San Francisco, together with necessary curves, side tracks, switches, crossovers and turnouts.

SAN JOSE, SANTA CLARA CO., CAL.—Railroad construction. Cost not stated. Engineer, Engineering Dept. Peninsular R. R. Co., San Jose. Owners, Peninsular Railroad Co. Railroad engineers have started a survey for a railroad to be constructed by the Peninsular Company from the terminus of their present line at the eastern city limits to Kirk avenue on Alum Rock avenue.

RESIDENCES.

SAN FRANCISCO—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Albert Mattson., 3919 Folsom street, S. F. Location, east Cordova south Athens. Will contain five rooms, bath and sleeping porch. Interior finish pine throughout with some hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and in the hands of owner, who will do the work by Day Labor.

SAN FRANCISCO—Residence, 3 story and base, frame. Cost not stated. Architect, Alfred Henry Jacobs, 110 Sutter street, S. F. Owner's name withheld. Location, Washington near Maple. Will contain nine rooms, two baths, sleeping porches and basement garage. Interior finish, pine, hardwood and white enamel. Hardwood floors, furnace heat, hot water circulating system and open fire places. Mantels tile and brick. Bath rooms, tile wainscot and floors. Exterior cov-

ered with cement plaster on metal lath. Plans complete and figures being taken.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, J. H. Thorup, 281 26th avenue, S. F. Location, west 18th avenue north Balboa. Will contain six rooms, bath and sleeping porch. Interior finish, pine, hardwood veneer and white enamel. Hardwood floors, furnace heat and open fire places. Automatic water heater. Bath room finished in tile. Mantels tile and brick. Exterior covered with cement plaster on metal lath. Plans complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Residence, 3 story and base, frame, \$4,000. Architect, E. G. Bolles, 660 Market street, S. F. Owners, S. A. Born Building Co. Location, Ashbury Terrace. Will contain seven rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors in principal rooms. Furnace heat, open fire places, tile and brick mantels and automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$6,500. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, John J. McDonald. Location, Crocker Highlands. Will contain eight rooms, two baths, sleeping porches and separate garage. Interior finish pine and hardwood with white enamel. Hardwood floors in principal rooms. Furnace heat, hot water circulating system and open fire places. Mantels tile and brick. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$1,000. Architect, Hiram K. Lovell, Dalziel Bldg., Oakland. Owner, C. W. Boden. Location, Northbrae. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors in principal rooms. Furnace heat, open fire places, tile mantels and automatic water heater. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans being prepared.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, A. Stenborg, 2609 Inyo avenue, Oakland. Location, east 34th street between 15th avenue and Mathews. Will contain six rooms and bath. Interior finished in pine and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Tile wainscot in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residences, 2, 1 story and base, frame, \$2,000 each. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner, A. F. Werum. Location, 35th avenue. Will contain five rooms, bath and sleeping porch. Interiors finished in pine and redwood with some white enamel. Hardwood floors, open fire places and tile or

brick mantels. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster. Plans being prepared, and when complete will be done by Day Labor.

SAN LEANDRO, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$1,500. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner, E. L. Higgins. Location, San Leandro. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile mantel. Imitation tile in bath room. Exterior, rustic. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, A. T. Anderson, 7335 Lockwood avenue, Oakland. Location, east 37th street, north Randolph. Will contain five rooms, bath and sleeping porch. Interior finish, pine and white enamel. Hardwood floors in principal rooms. Open fire places and tile mantels. Automatic water heater. Bath room finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

CHINO, SAN BERNARDINO CO., CAL.—Residence, 1 and 2 story, reinforced concrete. Cost not stated. Architect, Myron Hunt, Hibernian Bldg., 14 A. Owner, E. M. Fowler, Pasadena. Location near Chino. Will consist of several buildings besides the residence which will be of reinforced concrete. Interior finish, pine and hardwood with hardwood floors and white enamel. Central heating system, open fire places and brick mantels. Hot water system. Bath rooms finished in tile. Exteriors cement plaster. Plans being figured.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$2,500 each. Architect, none. Owner, P. Nelson, 30 Presidio Terrace, S. F. Location, west 27th avenue, north of Irving. Will contain five rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Tile wainscot in bath rooms. Automatic water heaters. Exteriors cement plaster on metal lath. Work will be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,800. Architect, none. Owner, Oscar Lind, 4385 25th street, S. F. Location, east 19th avenue, north Balboa. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood veneer with hardwood floors. Furnace heat, open fire places and tile mantels. Bath room finished in tile. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$4,750. Architect, none. Owner, M. Fisher, 683 Mission street, S. F. Location, Claremont Court. Will contain eight rooms, two baths and sleeping porch. Interior finish pine and hardwood and white enamel. Hardwood floors, furnace heat, open fire places, hot water heater and tile baths. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 1½ story and base, frame, \$3,000. Archi-

tect, Joseph A. Leonard, 8½ Cerritos avenue, S. F. Owners, Urban Realty Co. Location, west Ashton Place south of Pico. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places, automatic water heater and furnace heat. Mantels tile and brick. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, J. S. Thomas, 2495 62nd avenue, Oakland. Location, north Laverne west 55th avenue. Will contain five rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place, brick mantel and automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster. Work will be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, H. A. Pleitner, 954 Fruitvale avenue, Oakland. Location, Fairview east Baker. Will contain five rooms and bath. Interior finish pine and hardwood. Hardwood floors, open fire place and tile mantel. Tile wainscot in bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1½ story and base, frame, \$3,000. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, C. Texdahl. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire places and tile mantels. Automatic water heater. Bath room finished in tile. Exterior cement plaster. Plans being prepared. Will be done by Day Labor.

ALAMEDA ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$2,500. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, C. C. Adams. Location, Waterside Terrace. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood. Hardwood floors. Open fire place, tile or brick mantel, automatic water heater. Bath room finished in tile.

ALBANY, ALAMEDA CO., CAL.—Residences, 2, 1½ story and base, frame, \$2,400 each. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, M. P. Brash. Location, Marin avenue. Will contain six rooms and bath. Interior finish pine. Hardwood floors, open fire places and tile mantels. Automatic water heaters. Tile in bath rooms. Exteriors covered with rustic and cement plaster. Plans being prepared. Will be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$3,600. Architect, James W. Plachek, Acheson Bldg., Berkeley. Owner, Mrs. E. Wilkie. Location, Cedar and Euclid. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood. Hardwood floors, furnace heat, open fire places, brick and tile mantels, automatic water heater. Tile in bath rooms. Exterior covered

with cement plaster. Plans being figured.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$3,000. Architect, none. Owner, F. N. Fabing, 3515 13th avenue, Oakland. Location, Elliot north E-33rd street. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire place, tile mantel and automatic water heater. Bath room finished in tile. Exterior cement plaster. Work will be done by Day Labor.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$2,500. Architect, none. Owner, George H. Hollidge, 5926 Taft avenue, Oakland. Location, Broadway south Manila. Will contain seven rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. Automatic water heater. Bath room tile. Exterior cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$3,000. Architect, none. Owner, R. C. Hillen, 430 Haight avenue, Alameda. Location, Rosal avenue east Lerida. Will contain six rooms, bath and sleeping porch. Interior finish pine and hardwood with white enamel. Hardwood floors, open fire place and tile mantel. Bath room tile. Automatic water heater. Exterior cement plaster. Plans complete will be done by Day Labor.

SAN MATEO, SAN MATEO CO., CAL.—Residence, 2 story and base, frame, \$25,000. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owner, E. J. Tohin. Will contain 14 rooms, baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat, open fire places, tile and brick mantels and hot water system. Bath rooms finished in tile. Exterior cement plaster and brick veneer. Plans being prepared.

SACRAMENTO, CAL.—Residence, 1 story, frame, \$1,500. Architect, none. Owner, H. F. Carstens, 215 Ochsen Bldg., Sacramento. Will contain five rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. Exterior cement plaster and rustic. Plans complete and work to be done by Day Labor.

Contracts Awarded.

LOS ANGELES, CAL.—Residence, 2 story and base, brick. Cost not stated. Architects, Morgan, Walls & Morgan, Van Nuys Bldg., L. A. Owner's name withheld. Contractor, Thomas C. Marlowe, Story Bldg., L. A. Contract price not given.

SCHOOLS.

SAN JACINTO, RIVERSIDE CO., CAL.—School, 1 story and base, frame and plaster. Cost not stated. Architect, Leo Kroonen, Corona. Owners, San Jacinto School District. Will cover an area of 114 by 114 and contain nine class rooms, office and auditorium. Interior finish pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior cement plaster. Plans complete. Bids to be opened on September 15th.

HANFORD, KINGS CO., CAL.—School addition, C frame. Cost not

ated. Architect's name not given. Owners, Hanford High School District. Bids are now being received for the construction of an addition to the present high school building manual training quarters until September 15th. Plans, specifications and full information regarding the work may be had from L. E. Hall, Clerk of the High School Board of Trustees.

BEAVERTON, ORE.—School, 2 story and base, hollow tile, \$20,000. Architects, Tourtelotte & Hummel, Rothchild Bldg., Portland. Owners, City of Beaverton. Will contain eight class rooms, gymnasium and offices. Interior finished in pine with maple floors. Central heating system, vacuum cleaning and program clocks. Exterior cement plaster. Plans being figured.

Contracts Awarded.

LOS ANGELES, CAL.—School, 2 story and base. Class C construction, \$25,999. Architect, Homer W. Glidden, Wright and Callender Bldg., L. A. Owners, Amella School District. Contractors, G. W. Gilbreth & Co., Hollingsworth Bldg., L. A. Contract price, \$25,999.

LOS ANGELES, CAL.—School, 2 story and base, brick, \$31,377. Architects, Walker & Vawter, Hibernian Bldg., L. A. Owners, City of Los Angeles. Contractors, F. O. Engstrom Co., 5th and Seaton streets, L. A. Contract price, \$31,377.

SEWERS, STREET WORK & WATER SYSTEMS.

SAN RAFAEL, MARIN CO., CAL.—Water system. Cost not stated. Engineer, County Surveyor, San Rafael. Owners, Marin County. The Municipal Water District bond election carried by a vote of 4 to 1. The bonds amounted to \$3,000,000. Plans for a considerable amount of work will be ordered in the near future. Laying of mains, ditching, etc., are among the improvements to be made on the newly acquired system.

MILL VALLEY, MARIN CO., CAL.—Retaining wall, reinforced concrete. Cost not stated. Engineers, Sloan & Robson, Nevada Bank Bldg., S. F. Owners, Mill Valley. Bids will be opened on September 14th for the construction of a reinforced concrete retaining wall for the Town of Mill Valley. The following are the approximate quantities of work and material: 14,120 pounds of reinforcing steel, 112 cubic yards of concrete, 140 lineal feet of drain tile, 275 lineal feet of 1½ inch galvanized pipe and fittings.

MARTINEZ, CONTRA COSTA CO., CAL.—Electric line construction. Cost not stated. Engineer's name not given. Owners, Great Western Power Co., S. F. Application has been filed with the County Supervisors by the Great Western Power Co. for a franchise to erect lines, distributing electricity along, across, upon, over, through and under certain parts of the roads in Contra Costa County.

SEBASTOPOL, SONOMA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Sebastopol. Owners, City of Sebastopol. Bids will be opened on September 11th for grading and rocking of Littlefield avenue, also bids for constructing cement curbs and gutters on said avenue, according to specifications.

CROCKETT, CONTRA COSTA CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer, Crockett. Owners, Town of Crockett. Main street of this city from the Southern Pacific station to the outskirts of the city is being torn up and will be macadamized. Supervisor J. P. Casey is in charge of the work.

FAIRFIELD, SOLANO CO., CAL.—Street improvement. Cost not stated. Engineer, Town Engineer, Fairfield. Owners, Town of Fairfield. Bids will be received up to September 14th for oil and gravel street improvements as follows: Two intersections in Texas street at Clay and Washington streets, each about 50 feet square.

McKITTRICK, KERN CO., CAL.—Pipe line construction. Cost not stated. Engineer, Engineering Dept. Valley Pipe Line Co., 313 Sansome street, S. F. Owners, Valley Pipe Line Co. It is reported here that the Valley Pipe Line Co., a subsidiary of the Royal Dutch Shell interests, is planning to build a pipe line from Coalinga to the tank farm located four miles south of McKittrick, and that the present intention is to begin the work of construction probably this fall. The distance between these two points is approximately 95 miles, and several months will be required for the distribution of the pipe, the ditching and the filling in. Further information will be given on this work when definite action has been taken by the owners.

STOCKTON, SAN JOAQUIN CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. In response to a petition presented by residents and property owners the City Council has directed the City Engineer to prepare plans for the improvement of North Aurora street from Weber avenue to Lindsay street. Bids on the work will soon be called for.

SACRAMENTO, CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The City Commission has passed a resolution calling for bids for the improvement of Front street south of N street to S street. Bids were also called for a granite block street fronting the new city wharf. Further information relative to this work may be had from the City Engineer of Sacramento.

GREENWOOD CREEK, MENDOCINO CO., CAL.—Tunnel construction, \$5,000. Engineer's name not given. Owners, L. C. White Lumber Co., Greenwood. The L. C. White Lumber Co. on Greenwood Creek has been ordered to build a tunnel 100 feet long through solid rock as the State Fish and Game Commission declare the company's plant is obstructing the free travel of fish.

STOCKTON, SAN JOAQUIN CO., CAL.—Disposal plant. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has passed an ordinance authorizing the purchase of five acres of land situated on the San Joaquin River about 1,000 feet north of the Santa Fe bridge. The city will use this site for the disposal site in connection with the new sewer system.

STOCKTON, SAN JOAQUIN CO., CAL.—Curbs, gutters and sidewalks.

Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans and specifications for curbs, gutters and sidewalks on Weber avenue between Monroe and Edison streets were adopted.

DAILY CITY, SAN MATEO CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer Kneese, Daily City. Owners, Daily City. City Engineer Kneese has been instructed by the City Trustees to prepare plans and specifications for the Ford street sewer and present them at the next meeting for approval. On approval bids will be called for.

SAN LEANDRO, ALAMEDA CO., CAL.—Furnishing rock and screenings. Cost not stated. Engineer, City Engineer, San Leandro. Owners, City of San Leandro. Bids will be opened on September 20th for furnishing rock and screenings for macadamizing purposes.

HALFWAY, ORE.—Water system, \$20,000. Engineer, Town Engineer, Halfway. Owners, Town of Halfway. Bids are now being taken for the new waterworks system for Halfway. The system will be capable of furnishing 100,000 gallons of pure mountain water per day, and will have a 150,000 gallon reservoir as an additional safeguard to provide water at all seasons of the year. Practically 12,000 feet of pipe will be laid. Bids close September 10. Plans were prepared by H. B. Wright, Boise, Ida.

FOREST GROVE, ORE.—Sewer system. Cost not stated. Engineers J. B. and R. E. Koon, Board of Trade Bldg., Portland. Owners, Forest Grove. Plans and specifications have been completed for the proposed sewer system for Forest Grove. Bids on the work close September 21st at 8 p. m. George G. Patterson is mayor of the city. An approximate list of quantities required to complete the system follows: 1,225 feet of 6-inch pipe, 55,315 feet of 8-inch pipe, 5,941 feet of 10-inch pipe, 1,576 feet of 12-inch pipe, 2,347 feet of 14-inch pipe, 6,329 feet of 16-inch pipe, 55,000 cubic yards excavation, 142 manholes, 52 lampholes, 34 flush tanks, 1 limboff tank suit and sludge bed complete.

REDWOOD CITY, SAN MATEO CO., CAL.—Sewers, sidewalks, etc. Cost not stated. Engineer, none. Owner, George H. Irving Co., First National Bank Bldg., S. F. The George H. Irving Co. is now taking bids for the construction of sidewalks, sewers and road work in their new subdivision at Redwood Highland. Plans can be seen at either their Redwood City office or at their offices in the First National Bank Bldg.

MARTINEZ, CONTRA COSTA CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Plans for the final link in the road to connect Martinez and Bay Point will be presented to the Board of Supervisors at their next meeting by County Surveyor Ralph C. Arnold. They will consist of specifications for the erection of the concrete overhead crossing at Leyton. This will go over the Southern Pacific tracks, and will be 62 feet wide with a length of 105 feet. On approval of the plans, bids will be called.

Contracts Awarded.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving, \$26,025.25. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, Ransome-Crummey Co., Oakland. Contract price, \$26,025.25.

SAN LEANDRO, ALAMEDA CO., CAL.—Street improvements. Cost as follows. Engineer, Town Engineer, San Leandro. Owners, Town of San Leandro. Contractor, D. U. Toffelmier, San Leandro, \$1,181.49 and \$378.85. F. J. Faria, San Leandro, \$2,444.50.

BERKELEY, ALAMEDA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractor, J. J. Sullivan, 1729 University avenue, Berkeley. Contract price not stated.

CORONA, RIVERSIDE CO., CAL.—Street paving, \$18,004.80. Engineer, City Engineer, Corona. Owners, City of Corona. Contractors, S. C. Contracting Co., Corona. Contract price, \$18,004.80.

SAUSALITO, MARIN CO., CAL.—Electrolier system, \$2,717. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Contractors, Pacific Fire Extinguisher Co., S. F. Contract price, \$2,717.

TULARE, TULARE CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer, Tulare. Owners, Town of Tulare. Contractors, Federal Construction Co., Sharon Bldg., S. F. Contract price not stated. Note: The contract covers paving of approximately 17 city blocks.

BERKELEY, ALAMEDA CO., CAL.—Sewer construction, \$20,000. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractors, Chambers & Heafey, Bacon Bldg., Oakland. Contract price, \$20,000.

STORES AND OFFICES.

SAN FRANCISCO—Stores and offices, 3 story and base. Class A construction, \$150,000. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner's name not given. Location, southwest corner California and Davis streets. Pile foundation, complete steel frame, exterior walls brick, concrete floors, hollow tile interior partitions, metal window sash and frames and patent store fronts. Interior finish hardwood, tile and metal. Steam heat, oil burning system, vacuum cleaning and three elevators. Exterior faced with pressed brick faced with terra cotta. Plans complete and figures being taken.

RICHMOND, CONTRA COSTA CO., CAL.—Store alteration and addition, frame, \$1,000. Architect, James T. Narbett, 701 Macdonald avenue, Richmond. Owner, A. Hinkelmann. Work will consist of new interior finish, electric work, plumbing and painting. Some exterior work is also specified. Plans are being prepared.

MARTINEZ, CONTRA COSTA CO., CAL.—Stores and offices, 2 story and base. Cost not stated. Architect, none. Owners, L. M. Lassell Co. Location, Castro and Thompson streets. Will contain stores on the first floor and offices above. Interior finish pine. Patent store fronts. Exterior covered with cement plaster on metal lath.

Plans complete and work to be done by Day Labor.

EUREKA, HUMBOLDT CO., CAL.—Office building, 1 story, reinforced concrete, \$10,000. Architect's name not given. Owners, City of Eureka. Eureka's water department will soon be housed in a reinforced concrete building, the matter having been taken up by the City Council at the last meeting. The structure will be located at the corner of D and 6th streets and will contain a number of offices.

SAN FRANCISCO—Stores and offices, 3 story and base. Class C construction, \$20,000. Architect, William Knowles, Hearst Bldg., S. F. Owners, William Ede Estate. Location, Van Ness avenue and Turk street. Will contain three stores and five office rooms. Interior finish pine and hardwood. Central heating system, metal window sash and frames. Exterior pressed brick trimmed with terra cotta. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL.—Stores and lofts, 3 story and base. Class C construction. Cost not stated. Architect, W. J. Saunders, Laughlin Bldg., L. A. Owner, F. W. Braun. Location, 582 South Main street. Will contain one store and two lofts. Interior finish pine. Elevator service, metal window sash and frames. Patent store fronts. Exterior pressed brick. Plans complete and work to be done by Day Labor.

Contracts Awarded.

EXETER, TULARE CO., CAL.—Stores and offices, 2 story and base, brick. Cost not stated. Architect, A. M. Bowser, 1007 Broadway, Oakland. Owner, E. R. Frey, Martinez. Contractors, Graham & Buckmaster, Exeter. Contract price not stated.

SEALED PROPOSALS**PROPOSALS FOR STRUCTURES.**

STRUCTURES, ETC.—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Malta, Mont., until 2 o'clock p. m., September 20, 1916, for structures, Nelson Reservoir, South Canal, Milk River project, involving about 25,000 cubic yards of excavation, 1,700 cubic yards of concrete, the placing of 115,000 pounds of steel reinforcement, the erection of 450 linear feet of metal flume and the placing in wooden structures of about 85,000 feet b. m., of lumber. The work is situated in the vicinity of Saco and Beaverton, Mont., on the Great Northern Railway. For particulars address the United States Reclamation Service, Washington, D. C.; Denver, Colo., or Malta, Mont. A. C. DAVIS, chief engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 961—Proposals for Electric Cable, Steel Cable, Swedes Iron Rope, Wire, Tool Steel, Galvanized Steel, Spring Steel, Drill Rods, Cast Iron Snubbing Posts, Chain, Manganeese Bushings, Soil Pipe, Pipe Fittings, S Traps, Valves, Cocks, Cock-Hole Covers, Shower Heads, Waste Strainers, Cleanouts, Basin Plugs, Flush Pipe Holders, Closet Pulls, Files, Drills, Taps, Reamers, Pipe Tongs, Wrenches, Tallow Fats, Engine Lubricators, Window lase, Oil Hose, Magnesia Pipe Coverings, Pipe Thread Compound, Blasting Caps, Detonators, Safety Fuse, Bristol Board, Copying Books, Paper, Lumber and Castles. Sealed proposals will be received at the

office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m., September 16, 1916, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 961) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. P. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Stable at Puget Sound" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., September 25, 1915, and then there publicly opened, for a stable at the naval hospital, navy yard, Puget Sound, Wash. Blank proposals and particulars may be obtained on application to the bureau or to the commandant of the navy yard, Bremerton, Wash. WM. M. SMITH, acting chief of bureau.

PROPOSALS FOR ENGINES.

ENGINES—Sealed proposals will be received at the office of the light house inspector, Portland, Ore., until 2 o'clock p. m., September 20, 1915, and then opened, for furnishing oil engines and compressors for Slip Point Light Station, Wash. Blank proposals and particulars may be obtained by addressing the above office.

NOTICE TO CONTRACTORS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., August 26, 1915.—SEALED PROPOSALS will be received at this office until 3 P. M. September 15, 1915, and then opened for Bronze and Wood Desks, for buildings under the control of the Treasury Department, in accordance with drawings and specifications, copies of which may be had at this office. JAS. A. WETMORE, Acting Supervising Architect. (*)

BIDS WANTED.

BIDS are desired for street work, sidewalks and sewers to be laid in Redwood Highlands, residential subdivision of Redwood City, San Mateo County. Plans, specifications and further information may be secured from GEORGE H. BLINN, Co., 321 First National Bank Bldg., San Francisco, or at Redwood City Office.

PANAMA CIRCULAR 962—Proposals for Motor-Driven Capstans, Switch boards, Cables and Miscellaneous Equipment for Dry Dock No. 1, Balboa Terminals.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m., September 13, 1916, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and general information relating to this circular (No. 962) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. Engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. P. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

Proposals for Oil Storage Plant.

OIL-STORAGE PLANT—Sealed proposals indorsed "Proposals for Storage Plants for Fuel Oil" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., October 16, 1915, and then there publicly opened, for furnishing and installing the piping, pumps, boilers, engine buildings and insulations for four fuel

at storage stations at Bremerton, Wash.; Mare Island, Cal.; San Diego, Cal. and Norfolk, Va. Plans and specifications may be obtained on application to the bureau when accompanied by a certified check to insure their return, or may be seen at the navy yards and station named or at the navy yard, New York, N. Y. WM. L. SMITH, acting chief of bureau.

Proposal for Building.

SEALED BIDS.—Sealed proposals in accordance with "Proposals for Marine Barracks, Mare Island," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. September 25, 1915, and then and there publicly opened, for a three-story and basement marine barracks building of reinforced concrete construction with steel rod trusses. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard, subject to a deposit of \$25 to insure their return, or may be seen at the navy yard, New York, N. Y. WM. L. SMITH, acting chief of bureau.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 O'clock, noon, Thursday September 16th, 1915, said bids when and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required to complete the "Tunk Tower" at the Industrial Home for Adult Blind, Oakland, California, in accordance with the plans and specifications heretofore, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the entire work, and must be submitted in forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Five (\$5.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Tank Tower, Industrial Home for Adult Blind, Oakland, California."

(Signed) W. F. McCLURE,
State Engineer. (*)

Proposal for Canal Supplies.

PANAMA CIRCULAR 963—Proposals for Manila Rope, Suction Hose, Packing, Asbestos Gaskets, Steel Reinforcing Bars, Ridge Roll, Sheet Brass, Bronze Bars, Yellow Metal, Babbit Metal, Boiler Tubes, Propellers, Vacuum Gauges, Steam Gauges, Grease Pumps, Dies, Reamers, Files, Twist Drills, Screws, Horseshoe Nails, Machetes, Vises, Hoes, Anvils, Car Bits, Tackle Blocks, Spring Hinges, Mule Shoes, Wagon Jacks, Dust Brushes, Wall Brushes, Soldering Coppers, Cutters, Rubber Bands, Paper, Pencils, and Lumber.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. September 10, 1915, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and general information relating to this circular (No. 963) may be obtained from this office or at the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. Engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; Houston, major corps of engineers, U. S. Army, general purchasing officer.

Associated Catalogues.

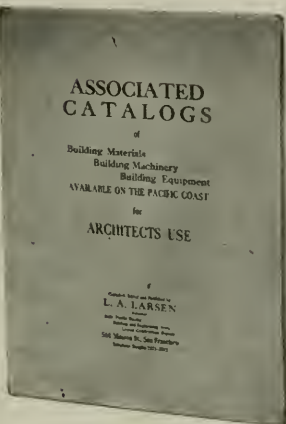


Here is where the Architect usually files the circulars, catalogues, announcements, etc., that come to his office. He can't take care of them. There are too many of them.

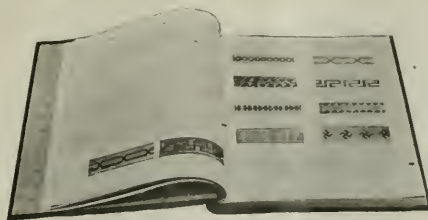


the Remedy:

Associated Catalogues is a collection of catalogues of Building Materials, Building Equipment and Building Machinery available on the Pacific Coast, bound in one volume, thoroughly indexed for instant reference for Architects use.



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San Francisco

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

RESIDENCE—1 story and base, frame, \$2,000. San Francisco. Architect, none. Owner, Albert Mattson, 2319 Folsom street, S. F. Location, east Cordova south Athens. Will contain five rooms, bath and sleeping porch. Interior finish, pine throughout with some hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and in hands of owner who will do the work by Day Labor.

RESIDENCE—1 story and base, frame. Cost not stated. San Francisco. Architect, Alfred Henry Jacobs, 110 Sutter street, S. F. Owner's name withheld. Location, Washington, near Maple. Will contain nine rooms, two baths, sleeping porches and basement garage. Interior finish, pine, hardwood and white enamel. Hardwood floors, furnace heat, hot water circulating system and open fire places. Mantels tile and brick. Bath rooms tile wainscot and floors. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

RESIDENCE—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, J. H. Thorup, 281 26th avenue, S. F. Location, west 18th avenue north Balboa. Will contain six rooms, bath and sleeping porch. Interior finish pine, hardwood veneer and white enamel. Hardwood floors, furnace heat and open fire places. Automatic water heaters. Bath room finished in tile. Mantels tile and brick. Exterior covered with cement plaster on metal lath. Plans complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE—3 story and base, frame, \$4,000. San Francisco. Architect, E. G. Bolles, 660 Market street, S. F. Owners, S. A. Born Building Co. Location, Ashbury Terrace. Will contain seven rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors in principal rooms. Furnace heat, open fire places, tile and brick mantels and automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—3 story and base, frame, \$19,500. San Francisco. Architect, P. Righetti, Phelan Bldg., S. F. Owner, Tomasini. Location, southeast corner of Judah and 9th avenue, covering an area of 51½ by 100 feet. Arranged for two stores and fourteen suites of two and three rooms. Interior finish, pine and elm panels with some hardwood floors. Central heating sys-

tem, hot water system and vacuum cleaning. Wall beds and private bath rooms. Tile floors and wainscot in baths. Exterior covered with cement plaster on metal lath. Plans complete and figures under advisement.

STORES AND OFFICES—3 story and base. Class A construction, \$150,000. San Francisco. Architects, O'Brien Bros., 210 Montgomery street, S. F. Owner's name not given. Location, southwest corner California and Davis streets. Pile foundation, complete steel frame, exterior walls brick, concrete floors, hollow tile interior partitions, metal window sash and frames and patent store fronts. Interior finish hardwood, tile and metal. Steam heat, oil burning system, vacuum cleaning and three elevators. Exterior faced with pressed brick with terra cotta. Plans complete and figures being taken.

APARTMENT HOUSE—5 story and base. Class C construction. Cost not stated. San Francisco. Architect, C. A. Meussdorffer, Humboldt Bank Bldg., S. F. Owner, C. A. Meussdorffer. Location, Jones near Sutter, with a frontage of 30 feet. Will contain 20 suites of two and three rooms. Interior finish pine and hardwood with some hardwood floors. Wall beds, steam heat, automatic elevator and hot water supply. Tile floors and wainscot in baths. Exterior faced with pressed brick trimmed with terra cotta. Plans

being prepared.

APARTMENT HOUSE—3 story and base, frame, \$10,000. San Francisco. Architect, L. M. Weissmann and Phillip Schwerdt, Pacific Bldg., S. F. Owner, Rosa Unfried. Location, west Church north of 20th street, covering an area of 25 by 86 feet. Will contain six suites. Interior finish pine and elm panels. Steam heat and hot water system, wall beds. Bath rooms finished in tile. Exterior covered with shiplap. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—2 story and base, frame, \$10,000. San Francisco. Architect, W. H. Crim, Jr., 425 Kearny street. Owner, John McCormick. Location, northwest corner Cabrillo and 5th avenue. Will contain four suites. Interior finish pine and elm panels, some hardwood floors. Tile bath rooms. Hot water system and wall beds. Exterior covered with cement plaster on metal lath. Plans being figured.

MACHINE SHOP—1 story, brick, \$35,000. San Francisco. Architect, none. Owner, Thomas Butler, 1362 Hayes street. Location, 1362 Hayes Hayes street, covering an area of 50 by 77½ feet. Cement floor. Exterior stock brick. Plans complete and work to be done by Day Labor.

FLATS—3 story and base, frame. Cost not stated. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner's name withheld. Location, Dolores near 15th. Will contain three flats of six rooms. Interior finish pine and elm panels and hardwood floors. Open fire places and tile mantels. Tile wainscot in bath rooms. Automatic water heaters. Exterior covered with shiplap and rustic. Plans being prepared.

FLATS—2 story and base, frame \$5,000. San Francisco. Architect, none. Owner, John A. Hoots & Son, 251 Kearny street, S. F. Location, west Belvedere south Rivoli, covering an area of 25 by 64 feet. Will contain four flats. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile mantels. Bath rooms finished in tile. Automatic water heaters. Exterior rustic and shiplap. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$6,000. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, H. Pollard. Location, Oak near Fillmore. Will contain two flats of six rooms each. Interior southern gum, pine and white enamel. Hardwood floors. Tile baths. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

GARAGE—1 story, reinforced concrete, \$2,000. San Francisco. Architect, A. C. Hampton, Olympic Club. Owner, A. P. Hampton. Location, south Frederick west Downey. Private garage, cement floor and special gasoline tank. Exterior cement plaster. Plans complete, work will be done by Day Labor.

ATHLETIC CLUB—4 story and base. Class A construction, \$100,000. San Francisco. Architects, Bliss & Faville, Balboa Bldg., S. F. Owners, Women's Athletic Club of San Francisco. Location, north Sutter between Mason and Taylor. Complete steel frame, brick walls, cement floors and hollow tile interior partitions. Interior finish pine and hardwood. Metal window sash and frames. Steam heat, oil burning system, elevator service, concrete plunge and hot water supply. Exterior faced with pressed brick and terra cotta. Plans being prepared.

LIBRARY—General construction, \$400,000. San Francisco. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Bids opened at the last meeting of the Library Trustees show Sampson & Larsen low for the general construction of the new library at \$397,500. Lindgren & Co. were the next low at \$424,000. A complete list

bids will be found under the
g of San Francisco in this issue.

DENCES—2, 2 story and base,
\$2,500 each. San Francisco. Archi-
none. Owner, P. Nelson. 30
Terrace, S. F. Location.
th avenue north of Irving. Will
a five rooms and bath. Interior
pine with some elm panels and
ood floors. Open fire places and
brick mantels. Tile wainscot
rooms. Automatic water heat-
Exterior, cement plaster on
lath. Work will be done by
labor.

DENCE — 2 story and base,
\$4,500. San Francisco. Archi-
none. Owner, Oscar Lind, 4385
street, S. F. Location, east 19th
e north Balboa. Will contain
rooms, bath and sleeping porch.
or finish pine and hardwood ve-
with hardwood floors. Furnace
open fire places and tile mantels.
rooms finished in tile. Auto-
water heater. Exterior cement
r. Plans complete and work to
ne by Day Labor.

DENCE — 2 story and base,
\$4,750. San Francisco. Archi-
none. Owner, M. Fisher, 683 Mis-
street, S. F. Location, Claremont
Will contain eight rooms, two
and sleeping porch. Interior
pine and hardwood and white
l. Hardwood floors, furnace
open fire places, hot water heat-
d tile baths. Exterior covered
ement plaster on metal lath.
complete and work to be done
Labor.

DENCE — 1½ story and base,
\$3,000. San Francisco. Archi-
Joseph A. Leonard, 85 Ceritos
e, S. F. Owners, Urban Realty
Location, west Ashton place south
co. Will contain seven rooms,
and sleeping porch. Interior fin-
ine, hardwood and white enamel
wood floors, open fire places, au-
c water heater and furnace heat.
els tile and brick. Bath room
ed in tile. Exterior covered with
at plaster on metal lath. Plans
lete and work to be done by Day
Labor.

DRES AND OFFICES—3 story and
Class C construction, \$20,000.
San Francisco. Architect, William
les, Hearst Bldg., S. F. Owners,
am Ede Estate. Location, Van
avenue and Turk street. Will
in three stores and five office
s. Interior finish pine and hard-
wood. Central heating system, metal
ow sash and frames. Exterior,
ed brick trimmed with terra
Plans complete and work to be
by Day Labor.

Contracts Awarded.

PARTMENT HOUSES — 2, 4 story
base. Class C construction, \$36,
and \$31,000. Architects, Smith &
art 211 Kearny street, S. F. Own-
Smith & Stewart, 24 Kearny
st, S. F. Contractor, J. B. Reite.
leasle street, S. F. Contract price,
00 and \$31,000.

Bids Opened For Main Library.

Larsen-Sampson Co. Low With Lind-
gren Co. Second. Contract to be
Awarded at Next Meeting.

Twenty-one sets of figures were
opened by the Library Trustees at a
special meeting held Friday for the
general construction of the main
library building to be erected in the
Civic Center from plans by Architect
George William Kelham, Sharon Bldg.

The low bid was presented by Larsen-
Sampson Co. at \$297,500 and the next
low bid by Lindgren & Co. at \$124,000.
Checks of the three low men were re-
tained and all others returned. A con-
tract will be awarded shortly. Fol-
lowing is a complete list of the bids as
opened:

General Construction, Library.

Caldwell & Son.....	\$158,600
Clinton Fireproofing Co.....	427,000
Grant Fee.....	447,000
Foster-Vogt Co.....	447,000
J. D. Hannah.....	479,000
W. D. Henderson.....	448,778
Alfred Kohn.....	468,000
Lange & Bergstrom.....	442,980
Larsen-Sampson Co.....	297,500
Lindgren & Co.....	124,000
Macdonald & Kahn.....	49,800
John Monk.....	454,094
P. H. Riley.....	487,906
Sound Constr. & Eng. Co.....	461,528
Van Sant-Houghton Co.....	331,900
Ward & Goodwin.....	474,311
H. S. Williams.....	448,900
Williams Bros. & Henderson.....	452,600
Western Eng. & Constr. Co.....	469,609
L. C. Wold.....	445,000
Masow & Morrison.....	467,990

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Amt.
2489	Anderson	Anderson	5000
2490	Anderson	Anderson	5000
2491	Pac. Brewg	Owner	30000
2492	Macles	Leigh	2000
2493	Macles	Leigh	2000
2494	Christensen	Christensen	1400
2495	Peters	Peters	4000
2496	Faccioco	Conrad	22000
2497	Marshall	Wilson	2620
2498	Basso	Grant	2235
2499	Acady Science	W'n Iron	1828
2500	Aydukovich	Owner	1450
2501	Same	Same	1450
2502	Widman	Widman	1965
2503	Weiss	Murdick	450
2504	Rossi	Lynch	500
2505	Martin	Sayre	400
2506	Natl Shirt	Ostlund	500
2507	Gutz	Robinson	500
2508	Butler	Butler	3000
2509	Gassner	Boyd	400
2510	Globe Realty	Barrett	2650
2511	Smith	Reite	2575
2512	Same	Same	22000
2513	Hart	McNabb	9140
2514	Dixson	Rosina	6250
2515	Lombardi	Pastorini	1975
2516	Berthiaume	King	345
2517	City Invest	Olis	28750
2518	Lenn	Nielsen	5120
2519	Springfield Ins.....	Meek	1050
2520	Pacific T. & T.....	Thornalley	500
2521	Seconover	Nelson	7765
2522	Born	Born	1000
2523	Filomena	Macdonough	1000
2524	Schmidt	Schmidt	1000
2525	Atwood	Atwood	1000
2526	Mattson	Mattson	2000
2527	Thornp	Thornp	2950
2528	Cerelli	Demartini	2900
2529	Risso	Dioguardi	8400

2530	Eureka Iron	Petterson	1690
2531	Dado	Schlake	2397
2532	Arnott	Arnott	1500
2533	Same	Same	1500
2534	Shoaf	Shoaf	500
2535	Coll	Coll	1800
2536	Sherry	Sherry	800
2537	Omen Oil Co.....	Owner	100
2538	Lester	Spencer	1000
2539	Mooney	Kelly	400
2540	Hewecke	Hewecke	450
2541	Scott	Scott	500
2542	Bates	Boyer	500
2543	Angelo	Angelo	1400
2544	Ray View Imp.....	Trost	400
2545	Yager	Yager	4000
2546	Yager	Yager	4000
2547	Gerard Invest.....	Owner	40000
2548	Same	Same	65000
2549	Linden	Linden	15000
2550	Mathony	Ringrose	1800
2551	Williamson	McGumply	2374
2552	Malcolm	Koschitzki	2500
2553	Union Iron	Deiselkamp	9500
2554	Moran	Mulcahy	2900
2555	Shotwell	Kern	1200
2556	Pippy	Marshall	1200
2557	Murdock	Leigh	2000
2558	Pauson	Duval	1500
2559	MacDonald	Booker	1650
2560	Christensen	Perry	1450
2561	Gillet	Nelson	2550

FLATS

(2489) E EIGHTEENTH AVE, 296 S
California. Two-story and basement
frame flats.
Owner.....O. E. Anderson, 207 10th
avenue, S. F.
Architect.....None.
Day's work. COST, \$5000

FLATS

(2490) E EIGHTEENTH AVE, 271 S
California. Two-story and basement
frame flats.
Owner.....O. E. Anderson, 207 10th
avenue, S. F.
Architect.....None.
Day's work. COST, \$5000

BREWERY

(2491) NOS. 677-679 TREAT AVENUE.
Four-story concrete brewery and a
two-story frame brewery building.
Owner.....Pacific Brewing and Malt-
ing Co, 675 Treat avenue,
San Francisco.
Architect.....C. A. Darmer, 675 Treat
avenue, S. F.
Day's work. COST, \$30,000

DWELLING

(2192) E THIRTY-SECOND AVE, 150
S Clement. Two-story and basement
frame dwelling.
Owner.....Gus Molles, 2365 Clement,
San Francisco.
Architect.....None.
Contractor.....Leigh & Schultz, 419 21st
avenue, S. F.
COST, \$2000

DWELLING

(2193) E THIRTY-SECOND AVE, 175
S Clement. Two-story and basement
frame dwelling.
Owner.....Leigh & Schultz, 419 21st
avenue, S. F.
Architect.....None.
Day's work. COST, \$2000

DWELLING

(2194) E TWENTY-SIXTH AVE, 243
S Anza. One story and basement
frame dwelling.
Owner.....N. Christensen, 518 26th
avenue, S. F.
Architect.....None.
Day's work. COST, \$1400

DWELLING

(2495) W SIXTEENTH AVE, 175 S

Lake. Two-story and basement frame dwelling.
Owner.....J. M. Peters, 1010 Balboa, San Francisco.
Architect...None.
Day's work. COST, \$1000

APARTMENTS
(2496) N SACRAMENTO 146-8 W Taylor N 120xW 27-6. All work for three-story frame apartments.
Owner.....Jos. Bacciocco, 838 Vallejo, San Francisco
Architect...A. J. Laib, Russ Bldg., San Francisco.
Contractor..Henry Conrad, 2854 Pine, San Francisco.
Filed Aug. 28, '15. Dated Aug. 25, '15.
Frame up and roof on\$125
Brown coated 425
Standing finish on 425
Completed and accepted 425
Usual 35 days 500
TOTAL COST, \$22,000
Bond, \$11,000. Sureties, Pacific Coast Casualty Co. Forfeit, none. Limit, 50 days. Plans and specifications filed.

DWELLING
(2197) N SETELE AVE, 10 feet W from SW corner lot 27, block 2815, Forest Hill Court, ptn lots 26, 27, block 2818. All work for two-story and basement frame dwelling.
Owner.....J. W. Marshall.
Architect...Millwain Bros., 473 14th, Oakland.
Contractor..Charles E. Wilson.
Filed Aug. 28, '15. Dated Aug. 26, '15.
Frame up and chimneys built...\$603
Exterior mill work in place, interior and exterior rough coat mortar on 603
Standing trim in place 604
Completed and accepted 905
Usual 35 days 905
TOTAL COST, \$3620
Bond \$1810. Sureties, Maryland Casualty Co. Forfeit, \$2. Limit, 90 days. Plans and specifications filed.

FRAME COTTAGE
(2198) SW EXCELSIOR AVE AND Naples 25x100; Ptn Lot 8 Blk 47, Excelsior Hl Ass'n. All work for one-story frame cottage.
Owner.....Salvatore Basso, 3550 Mission, San Francisco.
Architect...Plans by Contractor.
Contractor..John C. Grant.
Filed Aug. 30, '15. Dated Aug. 26, '15.
Frame up\$583.75
Brown coated 583.75
Completed 583.75
Usual 35 days 583.75
TOTAL COST, \$2355.00
Bond, none. Limit, 60 days. Forfeit, none. Plans and specifications filed.

STRUCTURAL STEEL
(2199) GOLDEN GATE PARK. Furnishing, delivery and erecting of structural steel frame, for support of glass over exhibition cases in Museum Building.
Owner.....California Academy of Sciences.
Architect...Lewis P. Hobart, Crocker Bldg., San Francisco.
Contractor..Western Iron Works, 141 Beale, San Francisco.
Filed Aug. 30, '15. Dated Aug. 23, '15.
On 15th of each month 75%
Usual 35 days 25%
TOTAL COST, \$1825

Bond, none. Limit, Sept 20. Forfeit, none. Plans and specifications filed.

FRAME DWELLING
(2500) E FORTY-SIXTH AVE 175 N Judah. One-story and basement frame dwelling.
Owner.....Lazar Aydukovich, 1233 Hollister, San Francisco.
Architect...None.
Day's work. COST, \$1450

FRAME DWELLING
(2501) E FORTY-SIXTH AVE 200 N Judah. One-story and basement frame dwelling.
Owner.....Lazar Aydukovich, 1233 Hollister, San Francisco.
Architect...None.
Day's work. COST, \$1450

FRAME DWELLING
(2502) N PALOU 25 E Phelps. One-story and basement frame dwelling.
Owner.....C. Widman, Premises.
Architect...None.
Day's work. COST, \$1965

FRAME DWELLING
(2503) S FELTON 120 E Berlin. One-story and basement frame dwelling.
Owner.....E. Weiss, 520 Charter Oak, San Francisco.
Architect...None.
Contractor..L. Murdrick, 520 Charter Oak, San Francisco.
COST, \$450

ALTERATIONS
(2504) NO. 233 POST. Alter store.
Owner.....P. Rossi, 255 Post, S. F.
Architect...None.
Contractor..Wm. C. Lynch, 1364 Webster, San Francisco.
COST, \$500

ALTERATIONS
(2505) SW CLEMENT & TWENTIETH Ave. Alter bakery.
Owner.....Anton Martin, San Jose.
Architect...None.
Contractor..C. C. Sayre, 541 26th Ave., San Francisco.
COST, \$100

ALTERATIONS
(2506) NO. 918 MARKET. Alter store.
Owner.....National Dollar Shirt Shop, Inc., 766 Market, S. F.
Architect...None.
Contractor..Ostlund & Johnson, 1901-5 Bryant, San Francisco.
COST, \$1000

SIGN
(2507) NO. 759 MARKET. Erect sign
Owner.....M. Guntz, California and Front, S. F.
Architect...None.
Contractor..Oscar Robinson, 57 Minna, San Francisco.
COST, \$500

BRICK SHOP
(2508) N HAYES No. 1362 (rear). One-story brick machine shop.
Owner.....Thos. Butler, 1362 Hayes, San Francisco.
Architect...None.
Contractor..Thos. Butler, 1362 Hayes, San Francisco.
COST, \$3000

STORE FITTINGS
(2509) STOCKTON bet. Clay and Sac-

ramento. Store fittings.
Owner.....Louis Gassner.
Architect...None
Contractor..Boyd, Kerr & McLean, essie, San Francisco.
COST,

"C" STORES
(2510) N MISSION 255 W Sixth 1xW 20. All work for one-story "C" brick stores.
Owner.....The Globe Realty Co., Kearny, San Francisco
Architect...None.

Contractor..Barrett & Hilp, 424 Sh Bldg., San Francisco.
Filed Aug. 31, '15. Dated Aug. 27, '15.
Roof on\$12
Completed and accepted 7
Usual 35 days 6
TOTAL COST, \$26
Bond, \$1325. Surety, Hartford Accident & Indemnity Co. Limit, 35 days. Forfeit, \$5. Plans and specifications filed.

CONCRETE APARTMENTS
(2511) S O'FARRELL 137-6 W 127-6xS 120 W A 61. All work for four-story and basement reinforced concrete apartment house.
Owner.....Thos. Smith and J. Stewart, 244 Kearny, San Francisco.
Architect...Smith & Stewart, Kearny, San Francisco
Contractor..J. B. Reite, 110 J. San Francisco.
Filed Aug. 31, '15. Dated Aug. 31, '15.
Concrete poured up to second story\$50
Concrete poured up to fourth story 50
Concrete construction finished 50
Building ready for plaster.. 50
Plaster finished and interior finish on 3rd and 4th floors.. 30
Building accepted 30
Usual 35 days 87
TOTAL COST, \$350
Bond, none. Limit, 100 days. Forfeit, none. Plans and specifications filed.

CONCRETE APARTMENTS
(2512) N ELLIS 112-6 E Jones 1xN 127-6. All work for four-story and basement reinforced concrete apartment house.
Owner.....Thos. Smith and J. Stewart, 244 Kearny, San Francisco.
Architect...Smith & Stewart, Kearny, San Francisco
Contractor..J. B. Reite, 110 J. San Francisco.

Filed Aug. 31, '15. Dated Aug. 31, '15.
Concrete poured to second story joists
Concrete poured to 4th story joists
Concrete construction finished.
Building ready for plastering..
Plaster done and interior finish on 3rd and 4th floors.....
Building accepted
Usual 35 days.....
TOTAL COST, \$3000

Bond, none. Limit, 100 days. Forfeit, none. Plans and specifications filed.

FRAME APARTMENTS
(2513) SE LAKE AND EIGHTH AVE S 84x E 28-6. All work for story frame apartments.
Owner.....Mary E. Hart, 1237 Sonie, San Francisco,

ect...E. H. Denke, 1317 Hyde,
San Francisco.
actor...A. T. McNabb.
Aug. 31, '15. Dated Aug. 7, '15.
floor joists set.....\$1770
losed and roof on and floors
..... 1770
coat of plaster on inside and
side 1770
ompleted and accepted..... 1770
al 35 days..... 2360
TOTAL COST, \$9440
\$4720. Sureties, H. L. and C. E.
art. Limit, 90 days. Forfeit,
Plans and specifications filed.

NE FLATS
NE GRANT AVE & WHITING
6x6E 70. All work for two-story
ne flats.
.....J. M. and Jane Dixon,
Premises.
ect...A. J. Bain, 380 Russ Bldg.,
San Francisco.
actor...C. Rosina.
Aug. 31, '15. Dated Aug. 25, '15.
ndation and frame complet-
.....\$1250
wn coated and outside finish
..... 812.50
ompleted and accepted..... 812.50
al 35 days..... 812.50
TOTAL COST, \$3250.00
\$1625. Sureties, Jos. Florio and
ope D. Antoni. Limit 60 days
Aug. 28. Forfeit, none. Plans
pecifications filed.

NE COTTAGE
SE HOLLISTER AVE AND
ings S 25xE 100, Bay Park Tct.
23 All work for one and one-
-story and basement frame
age.
.....Ferruccio Lombardi and
Sante De Santil, 466 Green,
San Francisco.
ect...Louis Mastropasqua. 580
Washington, S. F.
actor...L. Pastorini & A. Lindell.
15 Carr, San Francisco.
Aug. 31, '15. Dater Aug. 30, '15.
me up and roof on.....\$493.75
coat plaster on..... 493.75
ompleted and accepted..... 493.75
al 35 days..... 493.75
TOTAL COST, \$1975.00
none. Limit, 60 days from issuing
ct. Forfeit, \$2. Plans and specifi-
cations filed.

ODELING
NW GEARY AND COOK.
uber, rough hardware, labor, etc.,
remodeling of apartment and
e building.
r.....H. M. and Frances C.
Berthiaume.
ect...Chas. C. Frye and O. R.
Thayer, 120 Montgomery,
San Francisco.
actor...Charles J. King, Inc., 805
Baker, San Francisco.
Aug. 31, '15. Dated Aug. 25, '15.
ply for plastering.....\$300
ompleted and accepted..... 407
al 35 days..... 240
TOTAL COST, \$947
none. Limit, 30 days. Forfeit,
Plans and specifications, none.

ATORS
SW THIRD AND MARKET.
work for three electrically

driven elevators for Claus Spreckels
Building.
Owner.....City Investment Co.
Architect...None.
Contractor...Otis Elevator Co., Bay &
Stockton, San Francisco.
Filed Aug. 31, '15 Dated Aug. 26, '15.
Upon shipment of engines..... ½
Engines in permanent position... ¼
Completed and running..... ¼
TOTAL COST, \$23,750
Bond, \$14,375. Surety, Crocker National
Bank of San Francisco. Limit, forfeit,
none. Specifications only filed.

FRAME STORE AND FLATS
(2518) NW DOUGLASS & ELIZABETH
N 26-6xW 100. All work except
painting, finish hardware, electric
and gas fixtures and shades for two-
story frame store and flats.
Owner.....Abraham and Clara Lenn,
718 Douglass, S. F.
Architect...Wm. J. Anderson.
Contractor...H. W. Nielsen.
Filed Sept. 1, '15. Dated Sept. 1, '15.
Rough frame up.....\$1250
Plumbing roughed in and rough
coat plaster on..... 1250
Completed and accepted..... 1250
Usual 35 days..... 1250
TOTAL COST, \$5120
Bond, \$2560. Surety, The Aetna Accident
& Liability Co. Limit, 90 days.
Forfeit, \$3. Plans and specifications filed

OFFICE FITTINGS
(2519) NO. 154 SANSOME. All work
for interior fittings of office.
Owner.....Springfield Fire & Marine
Insurance Company.
Architect...Benj. G. McDougall, Shel-
don Bldg., San Francisco.
Contractor...T. A. Meek Co., 1157 Mis-
sion, San Francisco.
Filed Sept. 1, '15. Dated Aug. 25, '15.
Bet. 1st and 10th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$1050
Bond, none. Limit, 30 days. Forfeit,
\$25. Plans and specifications filed.

REPAIRS
(2520) NW RUSSIA AND LONDON.
Guarantee by said contractor to re-
pair or replace without cost any
faulty labor or materials furnished
in building for period of 12 months.
Bond guaranteeing same, \$500. South-
western Surety Insurance Co, Surety.
Owner.....The Pacific Telephone and
Telegraph Co., 333 Grant
Ave., San Francisco.
Architect...None.
Contractor...W. G. Thornalley, 565 16th
Oakland.
Filed Sept 1, '15. Dated Aug. 9, '15.
TOTAL COST, \$—
No plans and specifications filed.

FRAME STORES & APARTMENTS
(2521) W MISSION 163-6 N 17th N
23-6xW 98. All work including
panelling of vestibule above marble
wainscot with elm 3 ply panels for
three-story frame stores and apart-
ments.
Owner.....Frank M. Scoonover, 5
Montgomery, S. F.
Architect...Charles E. J. Rogers,
Kohl Bldg., San Francisco.
Contractor...A. D. Nelson, Nevada Bank
Bldg., San Francisco.
Filed Sept. 1, '15. Dated Aug. 27, '15.

Foundation walls completed. - \$ 230
Enclosed, roof on and brown
coated 2500
Completed and accepted..... 3072
Usual 35 days..... 1942
TOTAL, COST, \$7765

Bond, \$3882.50. Surety, Southwestern
Surety Ins. Co. Limit, 75 days from
Aug. 27. Forfeit, \$10. Plans and speci-
fications filed.

FRAME RESIDENCE
(2522) S SIDE E ½ LOT 1, Ashbury
Terrace. Three-story and basement
frame residence.
Owner.....S. A. Born Bldg. Co., 650
Market, San Francisco.
Architect...E. G. Bolles, 650 Market,
San Francisco.
Day's work. COST, \$1000

ALTERATIONS
(2523) NO. 40 RANDALL. Raise and
alter dwelling.
Owner.....Lucie & Filomena, Prem.
Architect...None.
Contractor...Macdonough & Costello, 90
St. Marys Ave, S. F.
COST, \$1000


FRAME DWELLING
(2524) E ANDERSON 150 N Powhattan
One-story and basement frame dwlg.
Owner.....John Schmidt, 91 Ellis-
worth, San Francisco.
Architect...None.
Contractor...John C. Schmitz, 91 Ellis-
worth, San Francisco.
COST, \$1000

ALTERATIONS
(2525) NO. 122 DEL MAR. Provide
basement.
Owner.....Mrs. E. Atwood, Premises.
Architect...None.
Day's work. COST, \$1000

FRAME DWELLING
(2526) E CORDOVA 37-5 S Athens.
One-story and basement frame dwlg.
Owner.....Albert Mattson, 3919 Pol-
som, San Francisco.
Architect...None.
Day's work. COST, \$2000

FRAME DWELLING
(2527) W EIGHTEENTH AVE 50 N
Balboa. Two-story and basement
frame dwelling.
Owner.....J. H. Thorup, 281 26th Ave.,
San Francisco.
Architect...None.
Day's work. COST, \$2950

FRAME FLATS
(2528) S CHESTNUT 40 W Grant Ave.
All work except shades, lighting
fixtures, finish hardware, plumbing,
painting and electric work for three-
story frame flats.
Owner.....G. and John Cerelli, NW
Lombard and Chestnut,
San Francisco.
Architect...None
Contractor...Frank Demartini and
Louis Segale, 558 Green-
wich, San Francisco.
Filed Sept. 2, '15. Dated Aug. 31, '15.
Frame up and roof on.....\$725
Brown coated 725
Completed and accepted..... 725
Usual 35 days..... 725
TOTAL COST, \$2900
Bond, \$1500. Sureties, Jas. Lagomar-



Structural Steel Contractors

**Works at
HARRISON ST.,
bet. 8th & 9th
San Francisco**

Telephone Market 337

sino and David De Martini. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLINGS

(2529) N MAYNARD 375-W Craut W 100 N 90 E 25 N 10 E 75 S 100. All work for four two-story and basement frame dwellings.

Owner.....Joseph Rizzo.
Architect...C. O. Chusen, Hearst Bldg., San Francisco
Contractor...L. Dioguardi, 715 Garden, San Francisco.

Filed Sept. 2, '15. Dated Aug. 30, '15.
Frame up\$2100
Brown coated 2100
Completed and accepted..... 2100
Usual 35 days..... 2100
TOTAL COST, \$8400

Bond, \$1200. Surety, U. S. Fidelity & Guaranty Co. Limit, 60 days. Forfeit, none. Plans and specifications filed.

NOTE:--Dwellings to be erected on following locations N Maynard 375, 400, 425 and 450 W Craut.

FRAME STORE

(2530) SW ELEVENTH 100 NW Harrison W 30 SW 94 SE 30 NE 88-11 m or l. All work for one-story frame store.

Owner.....Eureka Iron & Wire Wks., 12th near Mission, S. F.
Architect...Koenig & Christiansen, 914 Humboldt Bank Bldg., S. F.
Contractor...Peterson & Persson, 110 Jessie, San Francisco.

Filed Sept. 2, '15. Dated Sept. 2, '15.
Frame up\$630
Completed and accepted..... 630
Usual 35 days..... 436
TOTAL COST, \$1690

Bond, none. Limit, 25 days. Forfeit, \$10. Plans and specifications filed.

FRAME FLATS

(2531) E SEVENTEENTH AVE 50 N California N 21-5 N 78 deg E 57-6 S 33-7 W 57-6. All work for two-story and basement frame (2) flats

Owner.....Jesse M. and Eugenie Dado, 1292 Turk, San Francisco.
Designer...E. A. Schkade.
Contractor...E. A. Schkade, 210 20th, San Francisco.

Filed Sept. 2, '15. Dated Sept. 2, '15.
2nd floor joists in place.....\$ 700
Enclosed and roof completed... 700
Plastering completed 700
Completed 700
Usual 35 days..... 1197
TOTAL COST, \$3997

Bond, none. Limit, 65 days after notification. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

(2532) N MEDA 100-6 W Olsego. One-story and basement frame dwelling.

Owner.....Jas. Arnoit & Son, 517 Noe, San Francisco.

Architect...None.
Day's work..... COST, \$1500

FRAME DWELLING

(2533) N MEDA 55-6 W Olsego. One-story and basement frame dwelling.

Owner.....Jas. Arnoit & Son, 517 Noe, San Francisco.

Architect...None.
Day's work..... COST, \$1500

ALTERATIONS

(2534) NO. 3531 SAN BRUNO. Raise and alter dwelling.

Owner.....E. E. Shoaf, Premises.
Architect...None.

Day's work..... COST, \$500

FRAME DWELLING

(2535) N NAYLOR 66-6 E Prague. One and one-half-story and basement frame dwelling.

Owner.....Mrs. M. Coll, 214 27th, S. F.
Architect...None.

Day's work..... COST, \$1800

ADDITION

(2536) NO. 1413 McKinnon Ave. Add five rooms.

Owner.....Frank Sherry, Premises.
Architect...None.

Day's work..... COST, \$800

CLASS "A" SUPPLY STATION

(2537) NW NINETEENTH AND Valencia. One-story Class "A" supply station.

Owner.....Union Oil Co., Cr. Architect
Architect...O'Brien Bros., 240 Montgomery, S. F.

Day's work..... COST, \$400

ELEVATOR

(2538) NO. 1031 MARKET. Install elevator.

Owner.....Nathan and Wm. Lester, San Jose, Cal.

Architect...W. H. Weeks, 75 Post, San Francisco.

Contractor...Spencer Elevator Co., 126 Beale, San Francisco.
COST, \$1000

ALTERATIONS

(2539) NOS. 251-53, 259 and 261 Mission. Alter dwellings, steps, etc.

Owner.....John Mooney, 251 Missouri San Francisco.

Architect...None.
Contractor...P. J. Kelly, 658 Elizabeth, San Francisco.

COST, \$400

ALTERATIONS

(2540) NO 186 BONVIEW. Alter dwlg

Owner.....Edwin J. Hewelcke, Prem.
Architect...None
Day's work..... COST, \$450

ALTERATIONS

(2541) NO. 309 SEVENTH AVE. A garage.

Owner.....Geo. Scott, 617 Clear San Francisco.

Architect...None.
Day's work..... COST, \$

ALTERATIONS

(2542) NO. 2767 CLAY. Alter gar

Owner.....Geo. E. Bates, Premier Architect...None.
Contractor...Bohler & Sons, 2407 Cornelia, San Francisco.

COST, \$

FRAME DWELLING

(2543) E ELLSWORTH 50 N Eugene One and one-half-story and basement frame dwelling.

Owner.....C. Angelo, 185 Ellsworth San Francisco.

Architect...G. Terranova, 185 E worth, San Francisco.

Day's work..... COST, \$1

ALTERATIONS

(2544) W OAKDALE 75 N Lake. Al church.

Owner.....Bay View Imp. Club, Pr Architect...None.

Contractor...Robt. Trost, 26th a Howard, S. F.

COST, \$

FRAME FLATS

(2545) S LAKE 87-6 W 12th Ave. T story and basement frame flats.

Owner.....Mrs. Grace Yager, 1 Clay, San Francisco.

Architect...None.
Contractor...W. W. Yager, 1239 Po S. F.

COST, \$40

FRAME FLATS

(2546) S LAKE 107-6 W 12th Ave. T story and basement frame flats.

Owner.....Mrs. Grace Yager, 1 Clay, San Francisco.

Architect...None.
Contractor...W. W. Yager, 1239 Po S. F.

COST, \$10

BRICK APARTMENTS

(2547) E LEAVENWORTH 44 S Gear Four-story and basement brick (2) apartments.

Owner.....Gerard Investment Co., 1 Sutter, San Francisco.

Architect...Rousseau & Rousseau, 1 Sutter, San Francisco.

Day's work..... COST, \$10,000

NOTE:--Work just started.

BRICK APARTMENTS

(2548) SW BUSH AND JONES. Four-story and basement brick (27) apartments.

Owner.....Gerard Investment Co., 1 Sutter, San Francisco.

Architect...Rousseau & Rousseau, 1 Sutter, San Francisco.

Day's work..... COST, \$65,000

NOTE:--Work just started.

FRAME APARTMENTS

(2549) E SEVENTH 125 S Howard Three-story and basement frame (4) apartments.

Owner.....Wm. Linden, 1100 Dolores San Francisco.

Architect...Rousseau & Rousseau, 1 Sutter, San Francisco.

Day's work..... COST, \$15,000

REPAIRS

5501 S WASHINGTON 137-6 E Polk. Repair fire damage.
Owner.....Minnie Mahoney, 1268 Union, San Francisco.
Architect...None.
Contractor..Anderson & Ringrose, 320 Market, San Francisco.
COST, \$1800

ADDITION

5511 NO. 1732 CLEMENT. Add one-story frame to building, consisting of 2 flats of three and four rooms.
Owner.....Chester Williamson, Geary and Divisadero, S. F.
Designer...George McGlumphy, 2532 Geary, San Francisco.
Contractor..McGlumphy & Agee, 2532 Geary, San Francisco.
COST, \$2371

ALTERATIONS

552 NO. 2166 THIRTY-FOURTH Ave. Alterations and changes to frame dwelling.
Owner.....R. K. Malcolm, 901 Powell, San Francisco.
Architect...None.
Contractor..J. Koschnitzki, 1321 12th Ave., San Francisco.
COST, \$2500

ALTERATIONS

553 213 E END TWENTY-TH ST. Alter and add for polishing and joiner shop.
Owner.....Union Iron Works, 20th & Michigan, S. F.
Architect...None.
Contractor..E. Deiselkamp, Care Union Iron Works, S. F.
COST, \$9500

BRICK MACHINE SHOP

554 S GROVE 100 W Polk. One-story brick machine shop.
Owner.....Eugene and George Moran and James Conlin Co.
Designer...R. H. Nass.
Contractor..Mulcahy Bros., 130 Jessie, San Francisco.
COST, \$2900

REPAIRS

555 SW HARRISON AND THIRD. Repair fire damage.
Owner.....Mrs. Minnie Shotwell.
Architect...None.
Contractor..Chas. J. Kern Co., 3885 18th, San Francisco.
COST, \$1200

ALTERATIONS

556 NO. 231 FRANKLIN. Construct mezzanine floor of dairy building.
Owner.....Col. G. H. Pippy, Prem.
Architect...None.
Contractor..Marshall & Stevens, 554 Howard, San Francisco.
COST, \$1300

FRAME DWELLING

557 E TWENTY-NINTH AVE 300 S Geary. Two-story and basement frame dwelling.
Owner.....Mrs. E. Murdock, 2032 Golden Gate Ave., S. F.
Architect...M. Sexton, Chronicle Bldg., San Francisco.
Contractor..Leigh & Schütz, 119 14th Ave., San Francisco.
COST, \$2000

TAR AND GRAVEL ROOF

(2558) NO. 2516 JACKSON. Tar and gravel and slate roof.
Owner.....F. Pauson, Premises.
Architect...G. Albert Landsburgh, 709 Mission, San Francisco.
Contractors..Oliver Duval & Son, 230 Balziel Bldg., Oakland.
COST, \$1500

FRAME LAUNDRY

(2559) E LANGTON 110 S Howard. Two-story and basement frame laundry.
Owner.....Mrs. B. S. Macdonald, 1130 11th Ave., S. F.
Architect...Jas. Booker, 12 Wolfe, San Francisco.
Contractor..Booker & Hanson, 12 Wolfe, San Francisco.
COST, \$1680

FRAME DWELLING

(2560) N WILDE 290 W Girard. One-story and basement frame dwlg.
Owner.....A. Christensen, 222 Raymond, San Francisco.
Architect...None.
Contractor..T. H. Parry, 222 Raymond Ave., S. F.
COST, \$1450

FRAME DWELLING

(2561) E NOE 30 N Twenty-first. One-story and basement frame dwlg.
Owner.....A. Gillet, Hill near Noe, San Francisco.
Architect...None.
Contractor..Emil Nelson, 214 Rivoili, San Francisco.
COST, \$850

LEASES.

Sept. 2, 1915—E MISSION bet. Excelsior and Brazil Ave; Nos. 4553 and 4555 Mission A G Chiotto to W T Clark and A G Garbaldi. 5 years. \$3600.
Sept. 2, 1915—NO. 977 MARKET. Eilers Music Co to Geo M Withens and R C Curryer. 1 year. \$4500, option to renew.
Sept. 2, 1915—SW SIXTEENTH AND Hoff; Nos. 3047-3049 16th. Ralph C Brown and Rhinette Morrell to George R Sufferer. 5 years. \$5820.
Sept. 2, 1915—SE MISSION 260 NE Excelsior Ave NE 10x SE 83-6 and use of W 1/2 cellar on lot in rear No. 150 London and option to renew. Agostino Tassara to Antonio Cunco. 6 years. \$40 per month.
Sept. 2, 1915—NO. 427 NINTH, E line bet. Harrison and Bryant. E A Davis to Gus Miller. 16 months. \$200 per month.
Sept. 2, 1915—N FIFTEENTH 60 W Valencia W 30xN 65. E J Behre to Frank Portman. 33 months. \$20 per month.
Sept. 3, 1915—NW CORNWELL AND Fourth Ave W 120 N 30 E 120 S 44. Chas V Cross to Richfield Oil Co. 10 years. \$50 per month.
Aug. 30, 1915—NO. 1607 1/2 VALLEJO. J A Hammond to Gelsomino Lucchese 25 months. \$8.50 per month.

INCORPORATIONS.

Gold Bar Mining Co. Capital Stock, \$75,000, subscribed, \$0, shares, \$0 each. Directors—J. J. McIntire, W N Lamb, W. Osborn, H. Faona, J W. Marshall

1 share each. Place of business, S. F.
Oregon Oyater and Chop House. Capital Stock, \$2000; subscribed, \$2, shares, \$1 each. Directors—Arminio E. Monti and J. Cognat Jr., 1 share each. Place of business, San Francisco.
—G. & M. Sales Co. Capital Stock, \$25,000; subscribed, \$70 shares, \$10 each. Directors—R. W. Green, H. A. Mallum, G. W. Hibbard, 1 share each. Place of business, San Francisco.
The California Veneer Concrete Co. Capital Stock, \$25,000; subscribed, \$3, shares, \$1 each. Directors—T. J. Cahill, C. Edenhudson, J. Fisher, 1 share each. Place of business, San Francisco.
Security Building Co. Capital Stock, \$200,000, subscribed, \$200; shares, \$100 each. Directors—H. H. Helbush, C. L. Wolf, P. G. Redding, 1 share each. Place of business, San Francisco.

NOTICE OF NON-RESPONSIBILITY.

SAN FRANCISCO COUNTY.

Sept. 2, 1915—NW CORNWALL AND Fourth Ave W 120 30 m or 1 E 120 S 44 m or 1. Chas V Cross as to improvements on leased property Aug. 25, 1915—LOT 28, BLK 6417 Crocker Amazon Tract. Crocker Estate Co. as to improvements on leased property.....
Sept. 1, 1915—SE FELTON 95 S W Girard SW 25xSE 75. Oscar Heyman & Bro as to improvements on leased property.....
Aug. 31, 1915—E FORTY-SECOND Ave 100 S Santiago (S) E 57-6 N 100 E 50 S 100 E 12-6 S 50 W 120 N 50. Jean M Corcoran, Helen M Kellock and Irene Corcoran as to improvements on leased property...

NOTICE OF NON-LIABILITY.

SAN FRANCISCO COUNTY.

Sept. 1, 1915—S HOWARD, bet. 3rd and 4th, No. 175 Howard. Ellen L Daly, Tr Estate John Murtha, dec'd. as to improvements on leased property.....

CANCELLATION OF BUILDING CONTRACT.

Sept. 1, 1915—W MISSION 163-6 N 14th N 23-6xW 98. Releasing Contract filed Aug. 23, 1915 Frank M Seomayor with A D Nelson. Cancelled.....Aug. 26, 1915

BUILDING OPERATIONS FOR AUGUST

Building activities throughout the City and County for the month of August, as shown by the Records of the Building Bureau of the Board of Public Works, are as follows:

Class	No. of Bldgs.	Am't.
Class "C"	12	\$210,310
Frames	156	573,831
Alterations	418	126,429
Harbor Com. Bldg.	1	18,887
Public Bldgs.	1	10,000
Total	588	\$970,090

CESSATION OF LABOR.

Sept. 1, 1915—NE CHURCH & ARMY N 30xW 97. Elizabeth Tripp and John G Tripp to John Corda. Work ceased.....Aug. 28, 1915

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED
 Aug. 27, 1915—W SCOTT PL 87-6 S Broadway W parallel with Broadway 56xS parallel with Scott Pl 25 T. or Frank Rossi to Paul De Martini.....Aug. 26, 26, 1915
 Aug. 28, 1915—N OAK, 157-6 W Van Ness avenue W 89-9 N 120 E 68-9 S 40 E 20 S 80. The Young Men's Institute Hall Association to F. Kiesel.....Aug. 20, 1915
 Aug. 28, 1915—W SEVENTEENTH avenue 53-11 N Clement N 25xW 120. Johnson & Johnson to whom it may concern.....Aug. 28, 1915
 Aug. 30, 1915—W GUERRERO 31-6 S Cumberland S 25xW 105. Giovanni Ferrari to Ratto & Ratto. Aug. 26, '15
 Aug. 30, 1915—W GUERRERO 76-6 S Cumberland S 25xW 105. Francisco Figoni to Ratto & Ratto. Aug. 26, '15
 Aug. 30, 1915—NW BUSH & MASON N 100xW 68-9. Henry A Voorman, Gdn Mary Voorman to Arthur Arlett.....July 13, 1915
 Aug. 30, 1915—E SIXTEENTH AVE 284-7 N Clement N 25xE 120. Jeanette Yates to whom it may concern.....Aug. 30, 1915
 Aug. 31, 1915—S BUSH 110 W Polk W 55x120 to Fern ave. Chas M Myrick to Wm A Rainey. Aug. 9, 1915
 Aug. 31, 1915—E GRANT AVE 68 S Chestnut, bet. Chestnut and Lombard, 16 on Grant Ave. John Canepa to Clementa Rosina.....Aug. 28, 1915
 Sept. 1, 1915—GOLDEN GATE PARK. California Academy of Sciences to C J Hillard Co. Aug. 30; Wm F Wilson, Aug. 30; Lydon & Bickel.....Aug. 30, 1915
 Sept. 1, 1915—NO. 2970 BROADWAY. Sidney M Ehrman to Fred L Preston.....Aug. 31, 1915
 Sept. 1, 1915—SW FIFTEENTH AVE and Irving S 100xW 27-6. William Koenig to whom it may concern.....Aug. 31, 1915
 Sept. 1, 1915—E SEVENTEENTH AVE 200 N California H C Keenan to whom it may concern.....Sept. 1, 1915
 Sept. 1, 1915—E SEVENTEENTH AVE 175 N California. H C Keenan to whom it may concern.....Sept. 1, 1915
 Sept. 1, 1915—NE NINETEENTH & Lexington Ave E 30xN 85. Henry Sipple to J Witzelsburger.....Aug. 31, 1915
 Sept. 1, 1915—N DORLAND 85 E Dolores E 25xN 65. Amendes T and Dora A Gantner to John J Binet Co.....Aug. 27, 1915
 Sept. 1, 1915—E EUREKA 258-6 S 18th E 125xS 27-6. Clement H Shepard to Petterson & Persson.....Aug. 31, 1915
 Sept. 1, 1915—W NINTH AVE 150 N Anza bet. Geary and Anza. Daniel J Mahoney to Nelson Bros.....Aug. 31, 1915
 Sept. 1, 1915—E DEVISADERO 75 N Fell N 25xE 112-6. Edward E Young to whom it may concern.....Aug. 30, 1915
 Sept. 2, 1915—SW CALIFORNIA AND Powell 206 on California by 275 on Powell. L H Sly to whom it may concern.....Aug. 26, 1915
 Sept. 2, 1915—S GEARY 95 W Fillmore W 87-6 S 137-6 E 45 N 6 E 12-6 N 131-6. Congregation Beth

Israel to D O Church.....Aug. 26, 1915
 Sept. 2, 1915—S GEARY 107-6 E 19th Ave 25x100. E Coleman to whom it may concern.....Aug. 30, 1915
 Sept. 2, 1915—N POST 164-3 E Hyde N 137-6xE 75-9. W H Bowen to whom it may concern.....Aug. 30, 1915
 Sept. 2, 1915—N GEARY 57-6 E 9th Ave E 25xN 100. Thomas Kilkenny to whom it may concern.....Sept. 2, 1915
 Sept. 2, 1915—S CARL 182-6 W Stanyan W 25xS 137-6. Josepha Prosek to Frank Prosek.....Sept. 1, 1915
 Sept. 2, 1915—LOT 42 Lyon & Hoag's Sub Lincoln Manor. E A Janssen to whom it may concern.....Sept. 2, 1915
 Sept. 2, 1915—LOT 27-6x120 on S Magnolia Ave 27-6 E Webster Adolfo Puccinelli to Liebert & Martinelli.....Sept. 1, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

Aug. 28, 1915—S McALLISTER, 106-3 W Lyon W 25xS 137-6. Savstrom & Peterson vs. California Co-operative Real Estate Company and L. Helbing.....\$208.75
 Aug. 28, 1915—S SACRAMENTO, 137-6 E Drumm E 108-8½ S 67-5 W 14-10 S 24-3 W 93-10½ N 91-8. Pope & Talbot vs. The Terminal Investment Co., Louis R. Holm Co.....\$273.38
 Aug. 28, 1915—S SACRAMENTO 137-6 E Drumm E 108-8½ S 65-5 W 14-10 S 24-3 W 93-10 N 91-8. California Plate and Window Glass Co. vs. The Terminal Investment Co. Louis R. Holm Co.....\$211
 Aug. 28, 1915—E SEVENTEENTH avenue 57-4½ S Rivera (R) S 25x E 134. Reinhart Lumber and Planing Mill Co. vs. E. R. and Bessie G. Hayden.....\$544.33
 Aug. 28, 1915—S SACRAMENTO 137-6 E Drumm E 108-8½ S 67-8 W 20 S 24 W 88-½ N 91-8. Reinhart Lumber and Planing Mill Co. vs. Louis R. Holm Co., Louis R. Holm, Terminal Investment Co., and Pope Estate Co.....\$507.77
 Aug. 28, 1915—SW ELLIS and Larkin S 49xW 87-6. Munster & Bornholdt vs. Mary C. and Joseph E. Kennedy.....\$4021.20
 Aug. 30, 1915—E FLORIDA 59-9% N Army N 30xE 75. John's Hanger Co vs Wm Miller and G W Peek.....\$92
 Aug. 30, 1915—N GEARY 134-8 E Cook E 25xN 100. M Bertolino vs Jane Doe Ziegler and John Doe Ziegler.....\$498.57
 Aug. 30, 1915—N RIVERA 40 E 18th Ave E 35 N 96-3 W 35 S 98-3. Redwood Manufacturers Co vs Wilhelmina Taylor, A J and J E Lundy.....\$498.57
 Aug. 30, 1915—S FELL 100 E Steiner 50x137-6; No. 867 Fell. Herbert C Cameron vs Thomas F and Isabella J Murray.....\$32125.85
 Aug. 31, 1915—N GEARY 80-4 W Blake W 25xN 100. J P Lorden Mill Co vs Geo and Amelia Ziegler, Wm Larsen and S F Bldg Co.....\$378.63
 Sept. 1, 1915—W NINETEENTH AVE 100 S Lake S 27-6xW 120. James Cantley vs S F Bldg Co.....\$36
 Sept. 2, 1915—N OAK 157-6 W Van Ness Ave W 89-9 N 120 E 68-9 S 40 E 21 S 80. Taylor & Co vs Ward & Goodwin and Young Men's In-

stitute Hall Ass'n.....\$525.52
 Sept. 2, 1915—E SEVENTEENTH AV 57-4½ S Rivera S 25xE 134. George N Zaro vs E R & Bessie C Hayden.....\$308

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

RECORDED AMOUNT
 Aug. 10, 1915—E KANSAS, 100 S 22nd E 100xS 25. Jas. E. Lemon Lime and Cement Co. to Emanuel Schieve
 Aug. 27, 1915—N SUTTER, 100 W Powell. Bay Development Co., James L. Brown Co., Enterprise Electric Works, Hooper Lumber Co., Standard Crushed Rock Co., Britton & Co.; S. F. Drayage Co. to O. G. Sage, administrator estate Milton D. Grosh, deceased, Elizabeth G. Larzelere and Louise M. Sage.....
 Aug. 31, 1915—SE GEARY AND Parker Ave E 31-4½xS 125. Jas H Daly, Reinhart Lumber & Planing Mill Co and Hart-Wood Lumber Co to Thos R Curtis.....
 Aug. 31, 1915—SE GEARY AND Parker Ave E 31-4½xS 125. E H Gates to Thos R Curtis.....
 Aug. 31, 1915—SE GEARY AND Parker Ave E 31-4½xS 125. Jas J Harrison to Thos R Curtis.....
 Aug. 31, 1915—SE GEARY AND Parker Ave 31-4 on Geary by 125. Oliver Capell to Thomas R Curtis
 Aug. 30, 1915—W FOURTEENTH AV 135 S Geary S 25xW 105. M Stulsaft Co to Jos Deasy and A E Roeder.....
 Aug. 28, 1915—LOT 13, BLK 2509 on Yorba W 40th, 2514 Yorba. C Wickbourn to Luigi Baffico.....
 Aug. 27, 1915—E NEBRASKA, 100 S Powhattan S 25xE 100 ptn lot 21, Blk 3, Barman. The Greater City Lumber Co. to Wm. and Anna M. Wagner.....

OAKLAND AND ALAMEDA COUNTY

RESIDENCE — 2 story and base, frame, \$6,500. Oakland, Cal. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, John J. McDonald. Location, Crocker Highlands. Will contain eight rooms, two baths, sleeping porches and separate garage. Interior finish pine and hardwood with white enamel. Hardwood floors in principal rooms. Furnace heat, hot water circulating system and open fire places. Mantels tile and brick. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.
RESIDENCE — 2 story and base, frame, \$4,000. Berkeley, Alameda Co. Cal. Architect Hiram K. Lovell, Dalziel Bldg., Oakland. Owner, C. W. Boden. Location, Northbrae. Will contain seven rooms, bath and sleeping porch. Interior finish pine hardwood and white enamel. Hardwood floors in principal rooms. Furnace heat, open fire places, tile mantels and automatic water heater. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans being prepared.

RESIDENCE — 1 story and base, frame, \$2,590. Oakland, Cal. Architect, none. Owner, A. Stenbro, 2609 Inyo avenue, Oakland. Location, east

14th street between 13th avenue and Matthews. Will contain six rooms and bath. Interior finished in pine and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Tile wainscot in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 1 story and base, frame, \$2,000 each. Oakland, Cal. Architect, Merrill Newsom 1748 Broadway, Oakland. Owner, A. F. Werum. Location, 35th avenue. Will contain five rooms, bath and sleeping porch. Interiors finished in pine and redwood with some white enamel. Hardwood floors, open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster. Plans being prepared and when complete work will be done by Day Labor.

RESIDENCE—1 story and base, frame, \$1,000. San Leandro, Alameda Co., Cal. Architect, Merrill Newsom, 748 Broadway, Oakland. Owner, E. L. Higgins. Location, San Leandro. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile mantel. Imitation tile in the bath room. Exterior rustic. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, A. T. Anderson, 7335 Rockwood avenue Oakland. Location, east 37th street north Randolph. Will contain five rooms, bath and sleeping porch. Interior finish, pine and white enamel. Hardwood floors in principal rooms. Open fire places and tile mantels. Automatic water heater. Bath room finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE AND STORES—2 story and base, frame \$30,000. Oakland, Cal. Architect, Merrill Newsom, 748 Broadway, Oakland. Owner, A. F. Werum. Location, 35th avenue and boulevard. Will contain stores on first floor and a number of two and three room apartments on upper floor. Interior finish, pine and elm with some hardwood floors. Steam heat and hot water system, wall beds and private baths. Bath rooms finished in tile. Exterior covered with cement plaster in metal lath. Plans being prepared.

ICE PLANT—1 story, frame, \$3,000. Berkeley, Alameda Co., Cal. Owner, J. H. Hane, 2034 Blake street, Berkeley. Location, south Blake street west Shattuck avenue. Special machinery. Exterior shiplap. Plans complete and work to be done by Day Labor.

WAREHOUSE—2 story and base, frame \$3 construction, \$40,000. Oakland, Cal. Architect, Walter D. Reed, Oakland Bank of Savings, Oakland. Owners, Crane Co. Location, 9th and Webster streets, covering an area of 110 by 100 feet. Interior finish pine. Metal window sash and frames. Elevator and special conveying equipment. Exterior faced with pressed brick. Plans complete and figures being taken.

WAREHOUSE—7 story and base, reinforced concrete, \$70,000. Oakland,

Cal. Architect, Edward Soule, Itaito Bldg., S. F. Owner, Martin Bekins. Location, southwest corner 22nd and San Pablo avenue. Fireproof throughout. Special private vaults, metal window sash and frames, elevator and automatic sprinklers. Exterior faced with cement plaster. Plans complete and work to be done by Day Labor under direction of owner.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, J. S. Thomas, 2495 62nd avenue, Oakland. Location, north Laverne west 55th avenue. Will contain five rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place, brick mantel and automatic water heater. Bath room finished in tile. Exterior covered with cement plaster. Work will be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, H. A. Pleitner, 954 Fruitvale avenue, Oakland. Location, Fairview east Baker. Will contain five rooms and bath. Interior finish pine and hardwood. Hardwood floors, open fire place and tile mantel. Tile wainscot in bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Work to be done by Day Labor.

RESIDENCE—1½ story and base, frame, \$3,000. Berkeley, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, C. Texdahl. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire places and tile mantels. Automatic water heater. Bath room finished in tile. Exterior cement plaster. Plans being prepared. Will be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,500. Alameda, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, C. C. Adams. Location, Water-side Terrace. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood. Hardwood floors. Open fire place, tile or brick mantel, automatic water heater. Bath room finished in tile. Exterior cement plaster. Plans being prepared. Will be done by Day Labor.

RESIDENCES—2, 1½ story and base, frame, \$2,400 each. Albany, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, M. P. Brasch. Location, Marin avenue. Will contain six rooms and bath. Interior finish pine. Hardwood floors, open fire places and tile mantels. Automatic water heaters. Tile in bath rooms. Exterior covered with rustic and cement plaster. Plans being prepared. Will be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,600. Berkeley, Alameda Co., Cal. Architect, James W. Plachek, Acheson Bldg., Berkeley. Owner, Mrs. E. Wilkie. Location, Cedar and Euclid avenues. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood. Hardwood floors, furnace heat, open fire places, brick and tile mantels, automatic water heater. Tile in bath rooms. Exterior covered with cement plaster. Plans being figured.

RESIDENCE—1 story and base, frame, \$3,000. Oakland, Cal. Architect, none. Owner, F. N. Fahning, 3515 13th avenue, Oakland. Location, Elliot north of E-33rd street. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire place, tile mantels and automatic water heater. Bath room finished in tile. Exterior cement plaster. Work will be done by Day Labor.

RESIDENCE—1½ story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, George H. Hollidge, 5926 Taft avenue, Oakland. Location, Broadway south Manila. Will contain seven rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. Automatic water heater. Bath room tile. Exterior cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$3,000. Oakland, Cal. Architect, none. Owner, R. C. Hillen, 430 Haight avenue, Alameda. Location, Rosal avenue east Lerida. Will contain six rooms, bath and sleeping porch. Interior finish pine and hardwood with white enamel. Hardwood floors open fire place and tile mantel. Bath room tile. Automatic water heater. Exterior cement plaster. Plans complete, will be done by Day Labor.

FURNISHING ROCK AND SCREENINGS—Cost not stated. San Leandro, Alameda Co., Cal. Engineer, City Engineer, San Leandro. Owners, city of San Leandro. Bids will be opened on September 20th for furnishing rock and screenings for macadamizing purposes.

Contracts Awarded.

SEWER CONSTRUCTION—\$20,000. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractors, Chambers & Heafey, Bacon Bldg., Oakland. Contract price, \$20,000.

STREET IMPROVEMENTS—Cost as follows. San Leandro, Alameda Co., Cal. Engineer, Town Engineer, San Leandro. Owners, Town of San Leandro. Contractor, D. U. Toffelmier, San Leandro, \$1,181.49 and \$878.85. F. J. Faria, San Leandro, \$2,444.50.

STREET IMPROVEMENT—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractor, J. J. Sullivan, 1729 University avenue, Berkeley. Contract price not stated.

STREET PAVING—\$18,004.50. Corona, Riverside Co., Cal. Engineer, City Engineer, Corona. Owners, City of Corona. Contractors, S. C. Contracting Co., Corona. Contract price, \$18,004.50.

Building Contracts Awarded

Oakland

No.	Owner.	Contractor	Amt.
1712	Kiel	Chubb	2500
1713	Stenbro	Stenbro	5500
1714	Coit	Coit	1200
1715	Coit	Coit	1200
1716	Hawley	Muller	6000
1717	Davis	Bernhardt	1000
1718	Harvey	Harvey	400
1719	Black	Haley	1600
1720	Black	Haley	1600
1721	Black	Haley	1600
1722	Mullen	Smith	2200

1723	Trophy	Reed	400	N Noble, Oakland. One-story, live-
1724	Casella	Casella	400	room dwelling.
1725	Owen	Litton	1400	Owner.....J. W. Davis, 838 Chester,
1727	Anderson	Anderson	2000	Oakland.
1729	Hiler	Asuma	2307	Architect...None.
1730	Moore	Peterson	23555	Contractor...J. Bernhardt, 6257 Law-
1733	Focha	McOscar	1275	rence, Oakland.
1737	Streiff	Nichols	2450	COST, \$1000
1743	Hawley	Pearson	800	
1746	Russell	Nichols	400	
1747	Gilbert	Farris	450	
1748	Porgens	Otis	400	
1749	Rogers	Rogers	1500	ALTERATIONS
1750	Spencer	Spencer	1000	(1718) 616 AILEEN, Oakland. Alter-
1751	Nayone	Campomenosi	1600	tations.
1752	Armanin	Campomenosi	1800	Owner.....Seth Harvey, premises.
1754	Key Route	Union Sign	16500	Architect...None.
1755	Same	Same	30000	Contractor...Chas. Harvey John street,
1759	Behrens	McLean	300	Oakland.
1760	Truman	Koski	500	COST, \$400
1761	Helmke	Helmke	500	
1762	Fisher	Courtwright	400	
1763	Gregory	Champney	1000	
1764	Lard	Lard	400	DWELLING
1765	Reinhart	Scott	400	(1719) N CHAPMAN 235 E Peterson,
1767	Hillen	Hillen	3000	Oakland. One-story 5-room dwlg.
1768	Hollidge	Hollidge	2500	Owner.....Wm. Black, 1525 San Pablo
1769	Dowell	Blabon	3287	Ave., Oakland.
1770	Koerber	Koerber	400	Architect...None.
1771	Shedd	Shedd	1000	Contractor...A. L. Haley, 1525 San
1772	Lundgrun	Lundgrun	450	Pablo Ave., Oakland.
1773	Kennedy	Knight	400	COST, \$1600
1775	Morse	Smith	2000	
1776	Maher	Griffin	2000	
1779	Gall	Silva	4000	
1780	Shredded Wht.	Del Luchi	3081	
1781	Mulgrew	Grimmins	1130	

GARAGE

(1712) N SIXTY-FIRST ST, 100 W	Grove, Oakland. One-story brick
garage.	
Owner.....A. W. Kiel, 332 Franklin,	Oakland.
Architect...None.	
Contractor...C. Chubb, 1426 Linden,	Oakland.

COST, \$2500

DWELLING

(1713) N E-THIRTY-FOURTH ST.,	between 13th avenue and Mathews
avenue, Oakland. One-story 5-room	dwelling.
Owner.....A. Stenbro, 2609 Inyo ave-	nuce, Oakland.
Architect...None.	
Day's work.	COST, \$2500

DWELLING

(1714) W WEBSTER, 125 N 41st, Oak-	land. One-story, 4-room dwelling.
Owner.....C. B. Coit, 306 14th street,	Oakland.
Architect...None.	
Contractor...Roger Coit, 306 14th street,	Oakland.

COST, \$1200

DWELLING

(1715) W WEBSTER, 160 N 41st	street, Oakland. One-story 4-room
dwelling.	
Owner.....C. B. Coit, 306 14th street,	Oakland.
Architect...None.	
Contractor...Roger Coit, 306 14th street,	Oakland.

COST, \$1200

STORES

(1716) SE HOBART and Telegraph,	Oakland. One-story brick stores.
Owner.....Hawley Investment Co.,	Syndicate Bldg., Oakland.
Architect...C. W. Dickey, Central	Bank Bldg., Oakland.
Contractor...F. A. Muller, Syndicate	Bldg., Oakland.

COST, \$6000

DWELLING

(1717) W SIXTY-FOURTH AVE, 220

DWELLING

(1720) N CHAPMAN 175 E Peterson,	Oakland. One-story 5-room dwlg.
Owner.....Wm. Black, 1525 San Pablo	Ave., Oakland.
Architect...None.	
Contractor...A. L. Haley, 1525 San	Pablo Ave., Oakland.

COST, \$1600

DWELLING

(1721) N CHAPMAN 295 E Peterson,	Oakland. One-story 5-room dwlg.
Owner.....Wm. Black, 1525 San Pablo	Ave., Oakland.
Architect...None.	
Contractor...A. L. Haley, 1525 San	Pablo Ave., Oakland.

COST, \$1600

DWELLING

(1722) N THORNHILL ROAD, ½ mile	W Moraga Road, Oakland. One-
story 7-room dwelling.	
Owner.....G. Mullen.	
Architect...None.	
Contractor...O. G. Smith, 4402 Brook-	dale Ave., Oakland.

COST, \$2200

GARAGE

(1723) NO. 312 WARWICK, Oakland.	Garage.
Owner.....W. Brophy, Premises.	
Architect...None.	
Contractor...C. W. Reed, 2534 Pleasant,	Oakland.

COST, \$400

ALTERATIONS

(1724) NO 861 FORTY-THIRD, Oak-	land. Alterations.
Owner.....J. Casetta, Premises.	
Architect...None.	
Day's work.	COST, \$400

DWELLING

(1725) NO. 1620 THIRTY-NINTH AVE,	Oakland. One-story 5-room dwelling.
Owner.....L. Owen, 1618 39th Ave.,	Oakland.
Architect...None.	
Contractor...R. B. Litton, 2326 26th	Ave., Oakland.

COST, \$1400

DWELLING

(1727) N E-THIRTY-SEVENTH 40 W	Randolph, Oakland. One-story five
room dwelling.	
Owner.....A. T. Anderson, 7335 Lock	wood, Oakland.
Architect...None.	
Day's work.	COST, \$200

DWELLING

(1729) N HOPKINS 155 E The Ala	meda, Oakland. One-story 5-room
dwelling.	
Owner.....F. Hiller, 2309 Bowditch	Berkeley.
Architect...None.	
Contractor...L. Asuma and J. Miller, 76	60th, Oakland.

COST, \$2300

FRAME DWELLING

(1730) SW FARRAGUT & KING AVES	W 150xSE 211.5, Piedmont. All work
for two-story and basement and attic	frame dwelling and garage.
Owner.....Elizabeth B. Moore, Pied-	mont.
Architect...Albert Farr, 68 Post, S. F.	
Contractor...Alfred Peterson, 1201 19th	Oakland.

Filed Aug 30, '15. Dated Aug. 28, '15.

Payments once a month..... 75%

Usual 35 days..... 25%

TOTAL COST, \$23,555

Bond, \$11,880 Surety, Massachusetts
Bonding & Insurance Co. Limit, 126
days. Forfeit, \$20. Plans and specifica-
tions filed.

DWELLING

(1733) NE NINETY-SEVENTH AVE	and "A," Oakland. One-story three-
room dwelling.	
Owner.....John A. Focha, 210 Dab-	ner, San Leandro
Architect...None.	
Contractor...W. H. McOscar, 3149	Brookdale, Oakland.

COST, \$1275

FRAME DWELLING

(1737) N FORTIETH 100 E Broadway	35x50, Oakland. All work for two-
story frame dwelling.	
Owner.....Mrs. M. E. Streiff, 4000	Broadway, Oakland.
Architect...None	
Contractor...Leo L. Nichols, 1764	Broadway, Oakland.
Filed Aug. 31, '15. Dated Jan 30, '15.	
Date of contract.....	\$1850
Frame up	300
Brown coated	300

TOTAL COST, \$2450

Bond, none. Limit, 90 days after Feb.
1. Forfeit, none. Plans and specifica-
tions filed.

ALTERATIONS

(1745) NO. 244 TWENTY-NINTH,	Oakland. Alterations.
Owner.....Stewart S. Hawley, Prem.	
Architect...None.	
Contractor...Ben Pearson, 2403 Grant,	Berkeley

COST, \$800

ALTERATIONS

(1746) NO. 10625 PONTIAC, Oakland.	Alterations.
Owner.....W. H. Russell, Premises.	
Architect...None.	
Contractor...H. J. Nichols, 1325 93rd	Ave., Oakland.

COST, \$400

ALTERATIONS
 7) NO. 3421 ELM, Oakland. Alter.
 er.....Mrs. Gilbert, Premises.
 Architect...None.
 Contractor...J. W. Farris, 709 Washing-
 ton, Oakland.

COST, \$450

ALTERATIONS
 8) NO. 1014 BROADWAY, Oakland
 Alterations.
 er.....J. W. Forgens, Colusa Co.
 Architect...None.
 Contractor...Otis Elevator Co., 318 Dal-
 ziel Bldg., Oakland.

COST, \$400

REMODELING
 49) W THIRTY-EIGHTH 27½ S
 ans, Oakland. One-story 5-room
 dwelling.
 er.....F. O. Rogers, 2036 Franklin
 Oakland.
 Architect...None.
 Contractor's work.

COST, \$1500

REMODELING
 50) S FIFTY-NINTH 75 E Dover,
 Oakland. One-story 4-room dwlg.
 er.....G. W. Spencer, San Leandro
 Architect...None.
 Contractor's work.

COST, \$1000

REMODELING
 51) W VICENTE 44 N 56th, Oak-
 land. One-story 5-room dwelling.
 er.....M. Navone, 5244 Boyd Ave.,
 Oakland.
 Architect...None.
 Contractor...E. Campomenosi, 5174
 Miles Ave., Oakland.

COST, \$1600

REMODELING
 752) W MILES AVE 70 S Clifton,
 Oakland. One-story 5-room dwlg.
 er.....J. Armanim, 5164 Miles
 Ave., Oakland.
 Architect...None.
 Contractor...E. Campomenosi, 5174
 Miles Ave., Oakland.

COST, \$1800

INTERLOCKING PLANT
 754) PIER TERMINAL & TRESELE
 in San Francisco Bay. All work for
 Interlocking plant.
 er.....San Francisco, Oakland
 Terminal Railways, 22nd &
 Grove, Oakland

Architect...None.
 Contractor...Union Signal Constr. Co.,
 Swissvale, Penn.

Filed Sept. 1, '15 Dated Aug. 1, '15.
 As materials arrive\$7000
 Balance, per day..... 50
 TOTAL COST, \$16,500

Bond, \$9000. Surety, National Surety
 Co. Limit, 3 months. Forfeit, none.
 Plans and specifications filed.

(755) AUTOMATIC BLOCK SIGNAL
 on above.
 Contractor...Union Signal Constr. Co.,
 Swissvale, Penn.

Filed Sept. 1, '15. Dated Aug. 2, '15.
 As materials arrive.....\$12,000
 Balance, per day..... 100
 TOTAL COST, \$30,000

Bond, \$16,000. Surety, National Surety
 Co. Limit, 3 months. Forfeit, none.
 Plans and specifications filed.

DWELLING
 (1759) W THIRTY-FIFTH AVE 250
 N Penniman, Oakland One-story 5-
 room dwelling.
 Owner.....Henry Behrens, 3301 35th
 Ave., Oakland.
 Architect...None.
 Contractor...E. W. McLean, 3101 35th
 Ave., Oakland.

COST, \$1800

ALTERATIONS
 (1750) NO. 1569 JACKSON, Oakland.
 Alterations.
 Owner.....Mrs. M. Truman, Premises
 Architect...None.
 Contractor...Koski Bros., 35 Ramona
 Ave., Oakland.

COST, \$500

ALTERATIONS
 (1761) NW SECOND AND WEBSTER,
 Oakland. Alterations.
 Owner.....C. Helmke, 2950 Webster,
 Oakland.
 Architect...None.
 Day's work.

COST, \$500

ALTERATIONS
 (1762) NO 5693 KEITH AVE., Oakland
 Alterations.
 Owner.....Chas. Fisher, Premises.
 Architect...None.
 Contractor...T. D. Courtwright, 1624
 Woolsey, Berkeley.

COST, \$400

ALTERATIONS
 (1763) NO. 712 FILBERT, Oakland.
 Alterations.
 Owner.....Miss J. Gregory, Oakland.
 Architect...None.
 Contractor...Champney Bros., 5222
 Dover, Oakland.

COST, \$1600

ALTERATIONS
 (1764) NO 2736 THIRTEENTH AVE.,
 Oakland. Alterations.
 Owner.....Jas. W. Lard, Premises.
 Architect...None.
 Day's work.

COST, \$400

ALTERATIONS
 (1765) NOS. 1232-34 SEVENTH AVE.,
 Oakland. Alterations.
 Owner.....W. B. Reinhart, 7th Ave &
 E-14th, Oakland.
 Architect...None.
 Contractor...G. A. Scott, 685 23rd, Okd.

COST, \$400

DWELLING
 (1767) N ROSAL AVE 300 E Lerida,
 Oakland. One-story 6-room dwlg.
 Owner.....R. C. Hillen, 430 Haight
 Ave., Alameda.
 Architect...None.
 Day's work.

COST, \$3000

DWELLING
 (1768) E BROADWAY 200 S Manila,
 Oakland One and one-half-story 7-
 room dwelling.
 Owner.....Geo. H. Hollidge, 5926 Taft
 Ave., Oakland.
 Architect...None.
 Day's work.

COST, \$2500

FRAME DWELLING
 (1769) W VALLIE VISTA AVE 40 S
 Bonham Way 40x150, being Lot 123
 Snyder's Piedmont Terrace-by the
 Lake Tract, Oakland. All work for

two-story frame dwelling and
 garage.
 Owner.....W. J. Dowell, 515 Bellevue
 Ave., Oakland
 Architect...C. I. Petersen.
 Contractor...C. M. Blabon, 3424 Chaun-
 ce, Oakland.

Filed Sept. 2, '15. Dated Sept. 1, '15.
 Owner pays all bills.....

TOTAL COST not to exceed \$3397.50
 Bond, none. Limit, 90 days after Sept.
 1. Forfeit, \$10. Plans and specifica-
 tions filed.

NOTE:—Contractor to get \$337.50.
ALTERATIONS
 (1770) NO. 5496 COLLEGE AVE.,
 Oakland. Alterations.
 Owner.....F. C. Koerber, Premises.
 Architect...None.
 Day's work.

COST, \$400

DWELLING
 (1771) W TAYLOR 125 S Marin, Al-
 bany. One-story 4-room dwelling.
 Owner.....W. A. Shedd.
 Architect...None.
 Day's work.

COST, \$1000

ALTERATIONS
 (1772) W CORNELL 44 S Main, Al-
 bany. Alterations.
 Owner.....Gustaf Lundgrun.
 Architect...None.
 Day's work.

COST, \$450

ADDITION
 (1773) COR. BEACON & KENWYN,
 Oakland. Two-story 2-room addition.
 Owner.....Mrs. J. D. Kennedy, Prem.
 Architect...None.
 Contractor...F. W. Knight, 557 22nd,
 Oakland

COST, \$400

DWELLING
 (1775) S FLEMING AVE 620 W Semi-
 nary, Oakland. One-story 6-room
 dwelling.
 Owner.....F. F. Morse, Cor. Fleming
 and Seminary, Oakland.
 Architect...None.
 Contractor...O. G. Smith, 4402 Brook-
 dale, Oakland.

COST, \$2000

DWELLING
 (1776) N CALIFORNIA 200 W Maple,
 Oakland. Two-story 6-room dwlg.
 Owner.....D. Maher, SE Cor. 12th &
 E-15th, Oakland.
 Architect...None.
 Contractor...C. M. Griffin, 746 5th Ave.,
 Oakland

COST, \$2000

CHURCH
 (1779) S E-NINTH 179 E 23rd Ave.,
 Oakland. One-story church.
 Owner.....Rev. J. Galli, 1102 7th, Okd.
 Architect...None.
 Contractor...Silva & Lauzane, 2869 Ford
 Oakland.

COST, \$4000

REINFORCED CONCRETE FACTORY
 (1780) LOTS 8 TO 24, incl and ptn
 Lots 4, 5, 6, 7 and 25 to 32, incl. Map
 R. J. McMullen's Sbdvn Blk 576, Oak-
 land. Roofing and sheet metal work
 for four-story reinforced concrete
 factory.

Owner.....Pacific Coast Shredded
 Wheat Co.
 Architect...Hobart & Cheney, Crocker
 Bldg., San Francisco.

Professional Directory

George Nelson, C. E.

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Developments 503 Grant Bldg.
Construction Los Angeles, Cal.

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dertaken and reports rendered.

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San Francisco, California

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Attorney-at-Law

Phone Garfield 2856

Phelan Bldg. San Francisco

Contractor..De Luchi-Shufelt Co., 832
San Pablo Ave., Oakland.
Filed Sept. 2, '15. Dated Aug. 12, '15.
Monthly payments of..... 75%
Usual 35 days..... 25%
TOTAL COST, \$3081
Bond, \$1540.50. Surety, Commonwealth
Bonding & Casualty Co. Limit, 60
days after November 1. Forfeit, \$10.
Specifications only filed.

FRAME DWELLING

(1781) NW NINTH AND CYPRESS,
Oakland. All work for one-story
frame dwelling.

Owner.....J. J. Mulgrew, 1015 E-11th,
Oakland.

Architect...M. L. Newsom, 1748 Broad-
way, Oakland.

Contractor..J. Grimmins and C. Sadler,
3033 Magnolia, Oakland.

Filed Sept. 2, '15. Dated Sept. 1, '15.

Frame up\$282.50
Brown coated 282.50
Completed and accepted..... 282.50
Usual 35 days..... 282.50
TOTAL COST, \$1130.00

Bond, none. Limit, 45 days. Forfeit,
none. Plans and specifications filed.

Building Contracts Awarded

Berkeley.

No.	Owner	Contractor	Amt.
1726	Havens	Armstrong	1000
1728	Hiller	Asuma	2382
1731	McCargar	Bischoff	7000
1732	Rothede	Roust	1100
1734	Ericsson	Ericsson	1000
1735	Dice	Dice	1500
1736	Dice	Dice	1500

1744	Heron	Carlson	5700
1753	Blair	Legault	1000
1756	Larsen	Thompson	1000
1757	Klanenberg	Gronroos	1000
1758	Same	Same	1000
1766	Haney	Haney	3000
1774	Gay	Carlson	2250
1777	Williams	Kidder	5000
1778	Bkly Dev	Mason	3000
1782	Maxwell	Boehr	14500

ALTERATIONS

(1726) NOS. 2201-03-05 SHATTUCK
Ave., Berkeley Alterations and re-
pairs.

Owner.....John Havens.

Architect...None.

Contractor..F. E. Armstrong, 2249

Hearst Ave., Berkeley.

COST, \$1000

DWELLING

(1728) N HOPKINS 192½ E The Ala-
meda, Berkeley. One-story 6-room
dwelling.

Owner.....H F. Hiller, 2309 Bowditch
Berkeley.

Architect...None.

Contractor..L. Asuma and J. Miller, 760
60th, Oakland.

COST, \$2382

DWELLING

(1731) W EL CAMINO REAL 180 N
Uplands being Lot 33 Blk 4 Oak
Ridge, Claremont, Berkeley. All
work for two-story 13-room dwelling

Owner.....Jesse B. and Addie G. Mc-
Cargar, 5720 Oak Grove,
Oakland.

Architect...None.

Contractor..John A. Bischoff, 6045
Harwood Ave., Oakland.

Filed Aug. 30, '15. Dated Aug. 19, '15.
Frame up and roof on.....\$137
Interior plastered 137
Completed 137
Usual 35 days..... 137
Balance as per terms of deed of
trust

TOTAL COST, \$700

Bond, none. Limit, 90 days. Forfeit
none. Plans and specifications filed.

DWELLING

(1732) NO. 2628 BENVENUE AVE
Berkeley. One-story 5-room dwlg.

Owner.....Mr. Rothede, Premises.

Architect...None.

Contractor..A. Roust, 6508 Raymon
Berkeley.

COST, \$1100

DWELLING

(1734) SE BANCROFT AND BRUC
Berkeley. One-story 4-room dwlg.

Owner.....Carl Ericsson, 1200 M
sonic Ave., Berkeley.

Architect...None.

Day's work.

COST, \$1000

DWELLING

(1735) N ASHBY 30 E Brown, Be
keley. One-story 5-room dwelling

Owner.....B. A. Dice, 429 13th, Okl

Architect...None.

Contractor..J. M. Dice, 429 13th, Okl

COST, \$1500

DWELLING

(1736) NE ASHBY AND BROWN, Be
keley. One-story 5-room dwelling

Owner.....B. A. Dice, 429 13th, Okl

Architect...None.

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Contractor...J. M. Dice, 429 13th, Okd.
COST, \$1500

BUCK STORES
7141 E SHATTUCK AVE 200 S University Ave, Berkeley. One-story brick stores.
Owner.....E. A. Heron,
Architect...John Hudson Thomas, 1st National Bank Bldg., Bkly.
Contractor...H. Carlson, 1627 Barker, Berkeley.
COST, \$3700

FRAME DWELLING
7531 NW THE UPLANDS AND E1 Camino Real, being Lot 35 Blk 4, Oak Ridge, Claremont, Berkeley. All work except carpenter work and supervision to be supplied and paid for by owner. Carpenter work includes all wood work except mill work and hardwood floors, for two-

story and basement frame dwelling.
Owner.....Margaret L. Blair, Okd.
Architect...None
Contractor...Oliver Legault, 3136 West, Oakland.
Filed Sept. 1, '15. Dated Aug. 31, '15.
Frame up\$300.00
Brown coated300.00
Usual 35 days400.00
Owner also pays contractor \$56.50 to cover permits, etc.

TOTAL COST, \$1000
Bond, none. Limit, 90 days. Forfeit, \$5. Bonus, \$2. Plans and specifications filed.

DWELLING
(1756) N SIXTY-SECOND 315 E Grove, Berkeley One-story 5-room dwlg.
Owner.....Geo. A. Larsen, 1823 62nd, Berkeley.
Architect...None.
Contractor...E. A. Thompson, 666 60th, Oakland.
COST, \$1000

DWELLING
(1747) W BYRON 150 N Bancroft, Berkeley. One-story 4-room dwlg.
Owner.....H. Klanenberg, 2233 San Pablo Ave., Berkeley.
Architect...None.
Contractor...C. Gronroos.
COST, \$1000

DWELLING
(1758) W BYRON 150 N Bancroft, Berkeley. One-story 4-room dwlg.
Owner.....H. Klanenberg, 2233 San Pablo Ave., Berkeley.
Architect...None.
Contractor...C. Gronroos.
COST, \$1000

ICE PLANT
(1766) S BLAKE 107 W Shattuck Ave., Berkeley. One-story ice plant
Owner.....H. J. Haney, 2031 Blake, Berkeley.
Architect...None.
Day's work.
COST, \$3000

DWELLING
(1774) N HOPKINS 300 E The Alameda, Berkeley. One-story 6-room dwelling.
Owner.....A. W. Gay, 2016 Delaware, Berkeley.
Architect...None.
Contractor...H. Carlson, 1627 Parker, Berkeley.
COST, \$2250

DWELLING
(1777) W SANTA BARBARA 510 N

Indian Rock, Berkeley. Two-story 9-room dwelling.
Owner.....Dr. M. L. Williams and Dr. E. L. Mitchell, Berkeley Nat'l Bk. Bldg., Bkly.
Architect...Julia Morgan, Merchants' Exchange Bldg., S. F.
Contractor...Kidder & McCullough, 2975 Addison, Berkeley.
COST, \$5000

DWELLING
(1778) N MARIN AVE 251.5 The Alameda, Berkeley. One and one-half-story 7-room dwelling.
Owner.....Berkeley Development Co., 2107 Addison, Berkeley.
Architect...H. H. Gutterston, Foxcroft Bldg., San Francisco.
Contractor...Mason-McDuffie Co., Shattuck and Addison, Bkly.
COST, \$3000

FRAME APARTMENTS
(1782) N PRINCE 268.65 E College Ave E 71.11 N 112, Bkly. All work for two-story frame apartments.
Owner.....George F. Maxwell, 2722 Webster, Berkeley.
Architect...J. Henry Boehrer, Delger Bldg., Oakland.
Contractor...J. Henry Boehrer & Alfred Legault, Delger Bldg., Oakland.

Filed Sept. 3, '15. Dated Sept. 3, '15.
1st story joists on\$ 500
Roof sheathing on2000
Ready for lath2000
Plastered2000
Interior finish completed2000
Completed and accepted2375
Usual 35 days3625
TOTAL COST, \$14,500
Bond, \$7250. Surety, Southwestern Surety Insurance Co. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

Building Contracts Awarded Alameda.

1738	Schumacher	Owner	1200
1739	Fern	Borle	500
1740	Noble	Noble	1800
1741	Phillips	Pfrang	2150
1742	Cole	Kopf	2500
1743	Seitz	Norris	1500

DWELLING
(1738) NO. 2790 HARRISON AVE., Alameda. One-story 5-room dwlg.
Owner.....J. Schumacher, 930 Broadway, Alameda.
Architect...None.
Day's work.
COST, \$1200

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ALTERATIONS

(1739) NO. 2111 BUENA VISTA AVE., Alameda. Alterations.
Owner....B. Fero, Premises.
Architect...None
Contractor...C. A. Borie, 2117 Buena Vista Ave., Alameda.
COST, \$600

DWELLING

(1740) NO. 2528 NOBLE AVE., Alameda. One-story 5-room dwelling.
Owner....G. H. Noble, 2220 Central Ave., Alameda.
Architect...None.
Day's work.....COST, \$1800

DWELLING

(1741) NO. 2517 LINCOLN AVE., Alameda. One-story 5-room dwelling.
Owner....E. J. Phillips, 910 Poplar, Oakland.
Architect...None.
Contractor...C. J. Pftrang, 5187 Claremont Ave., Oakland.
COST, \$2150

DWELLING

(1742) NO. 3241 BAYO VISTA AVE., Alameda. One-story 6-room dwlg.
Owner....Mark T. Cole, Syndicate Bldg., Oakland
Architect...None
Contractor...B. F. Kopf, 1015 82nd Ave., Alameda.
COST, \$2500

DWELLING

(1743) NO. 625 LINCOLN AVE., Alameda. One-story 5-room dwelling.
Owner....P. A. Seitz, 627 Lincoln Ave Alameda.
Architect...None.
Contractor...J. Morris, 2828 Richmond Ave., Oakland.
COST, \$1500

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED AMOUNT
Aug. 28, 1915—LOT 15, BLK 4, Brookdale Terrace, being N Walnut, 41 E Lilac, Oakland. H. C. Howland to whom it may concern..Aug. 27, 1915
Aug. 28, 1915—NE FOURTEENTH and Broadway, Oakland. Central Savings Bank to Rudgear-Merle Co.....Aug. 26, 1915
Aug. 28, 1915—NE FOURTEENTH and Broadway Oakland. Central Savings Bank to C. L. Cummins.....Aug. 26, 1915
Aug. 28, 1915—LOT 8, NE 1/4 SEC 7, S 1/2 Sec 6 NW 1/4 Sec 6 Tp 2 S, Range 4 E, and NE 1/4, Sec 1, Tp 2 S, Range 3 E, and S 1/2, Sec 36, NW 1/4, Sec 36 Tp 3, Range 3 E, Alameda Co. Valley Pipe Line to Hill, Hubbell & Co.Aug. 21, 1915
Aug. 30, 1915—W GRAND AVE 200 N Bonham Way, Okd. R E Stubbe to whom it may concern...Aug. 30, 1915
Aug. 30, 1915—NO. 1720 HOPKINS, Okd. German Old Peoples' Home of San Francisco to Carl Doell being Lots 6 and 7 Cameron Tract, (2 acceptances).....Aug. 27, 1915
Aug. 30, 1915—LOT 6 BLK 2 Colusa Ave Ext, Bkly. J S Hanson to F R Penke Co.....Aug. 26, 1915
Aug. 31, 1915—E THOMAS 139 N Napa N 39xE 100, Okd. E L Hig-

gins to whom it may concern...Aug. 28, 1915
Sept. 1, 1915—W ROSEDALE AVE 50 N Carrington, Okd. Daisy L Rountree to Harry C Knight..July 31, 1915
Sept. 1, 1915—LOT 41 Map Jeanette Von Ah Tract, Okd. Wm H Sims to whom it may concern..Sept. 1, 1915
Sept. 1, 1915—NW UNIVERSITY AV and Home, Bkly. W J Acheson to H E Franks.....Aug. 31, 1915
Sept. 2, 1915—LOT 220 MAP Fremont Tract. Okd. Nicolina Christina Cartwright to F L Lindquist.....Sept. 1, 1915
Sept. 2, 1915—PTN LOT 10 AND Ptn Lot "Atalaya" Map University Terrace, Bkly. H F Jackson to Junk-Riddell Invest Co.....Aug. 31, 1915
Sept. 2, 1915—LOT 71 and Ptn Lot 70 which lies W line parallel to W boundary line Lot 70 and distant at L 25 E therefrom, Map Crocker Highlands, Okd. Alta Piedmont Land Co to G T Burtchael and D Crowley.....Aug. 23, 1915
Sept. 3, 1915—LOTS 53 AND 54 Resubdn Blks 10 and 11 Howe Tract and ptn Lots 1 and 25 Blk "A" Map No. 1, Highland Terrace, Oakland. Laniel F O'Connell to C L Strum, Aug. 27, 1915; T D Sexton.....Aug. 17, 1915

LIENS FILED

ALAMEDA COUNTY.

Aug. 24 1915—E ALICE, 430 S 19th street S 80xE 133.94, Oakland. White Bros. vs. J. Meyer and Security Investor Realty Co., \$2186.43
Aug. 23, 1915—S E-TWENTIETH ST 112.5 W 16th avenue W 40xS 80, Oakland. Inlaid Floor Co. vs. T. B. Evans\$103
Sept. 2, 1915—LOT 9 BLK 6 Map Brookdale Terrace, Okd. I L Cavasso vs O G Smith and R E Williams\$120
Sept. 2, 1915—LOT 15 BLK 6 Map Brookdale Terrace, Okd. I L Cavasso vs O G Smith and Robert Davies\$80
Sept. 3, 1915—LOT 9 BLK 6 Map Brookdale Terrace, Okd. P J Wright vs O G Smith and R E Williams\$130
Sept. 3, 1915—LOT 40 BLK "A" Map Amended Map Teachers Tract, Bkly. R M Donnelly vs A A Mayes. Sarah A and Geo Fuller.....\$26
Sept. 3, 1915—LOT 15 BLK 6 Map Brookdale Terrace, Okd. P J Wright vs O G Smith and Robert Davies\$80

RELEASE OF LIENS

ALAMEDA COUNTY.

RECORDED AMOUNT
Aug. 17, 1915—S 40 LOT 4 BLK H, Map Weston Tract, Oakland. Marshall & Stearns Co., \$52.60; J. W. Swift, \$129.85; Joseph D. Bell, \$94; John F. Maxwell, \$117.35; W. P. Fuller & Co., \$55.90; Panama Lumber Mill Co., \$263.17; Berkeley Electrical Co., \$87; California Door Co., \$92.30; George H. Tay Co., \$270; to May Grace Dwyer and Leo L. Nichols
Aug. 18, 1915—LOT 1, BLK 1, Map

Oaklawn, being resubdivision Blks R and S, Blk Q, Vernon Park, Oakland. Pacific Mfg. Co. to Rosa McCarthy\$233.20

SAN JOSE AND THE SANTA CLARA VALLEY.

RAILROAD CONSTRUCTION—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer's name given. Owners, South San Francisco Railroad and Power Co. Application has been filed with the Board of Trustees of the City of South San Francisco by the South San Francisco Railroad and Power Company for a franchise: "To construct and operate a single or double track standard gauge railroad in the city of South San Francisco, together with necessary curves, sidetracks, switches, crossovers and turnouts."

SEWER CONSTRUCTION—Cost not stated. Daly City, San Mateo Co., Cal. Engineer, City Engineer Kneese, Daly City. Owners, Daly City. City Engineer Kneese has been instructed by the City Trustees to prepare plans and specifications for the Ford street sewer, and present them at the next meeting for approval. On approval bids will be called for.

HOME FOR CHILDREN—2 story and base. Class A construction. Cost not stated. Redwood City, San Mateo Co., Cal. Architect, Houghton Sawyer, Shreve Bldg., S. F. Owners, Drexler Home for Crippled Children. Complete steel frame, brick and terra cotta walls, hollow tile interior partitions. Interior finish pine and hardwood. Steam heat, oil burning furnace and hot water system. Exterior faced with pressed brick. Plans complete and figures to be called for at once.

COUNTY HOSPITAL BUILDINGS—1 story, frame. Cost not stated. San Jose, Santa Clara Co., Cal. Architect's name not given. Owners, Santa Clara County. Bids will be opened on September 27th for constructing a milk-horn, milk room, cottage and hay barn at the Santa Clara Hospital. Plans can be secured from the office of the County Clerk.

RAILROAD CONSTRUCTION—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, Engineering Department Peninsular R. R. Co., San Jose. Owners, Peninsular Railroad Co. Railroad engineers have started a survey for a railroad to be constructed by the Peninsular Company from the terminus of their present line at the eastern city limits to Kirk avenue on Alum Rock avenue.

RESIDENCE—2 story and base, frame, \$25,000. San Mateo, San Mateo Co., Cal. Architects, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owner, E. J. Tobin. Will contain 14 rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat, open fire places, tile and brick mantels and hot water system. Bath rooms finished in tile. Exterior cement plaster and brick veneer. Plans being prepared.

SEWERS, SIDEWALKS, ETC.—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, none. Owner, George H. Irving Co., First National

is now taking bids for the construction of sidewalks, sewers and work in their new subdivision at Wood Highland. Plans can be seen either their Redwood City office or their offices in the First National Bank Bldg.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

BRIDGE—Reinforced concrete. Cost stated. Fairfield, Solano Co., Cal. Engineer, County Surveyor, Fairfield. Owners, Solano County. Bids will be opened on September 17th for construction of a reinforced concrete arch bridge. County Road No. 338 over Pleasant Valley Creek at the ranch of F. F. Sch. Vacaville Township, Road District No. 4.

PAINTMENT HOUSE AND STORES—2 story and base, frame, \$10,000. Martinez, Contra Costa Co., Cal. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, James Messer. Location, Martinez, covering area of 50 by 100 feet. Will contain 100 on first floor and two and three m suites above. Interior finish, pine throughout with some hardwood floors. Central heating system, oil burning furnace, patent store fronts and walls. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

WATER SYSTEM—Cost not stated. San Rafael, Marin Co., Cal. Engineer, County Surveyor, San Rafael. Owners, Marin County. The Municipal Water District bond election carried by a vote of 4 to 1. The bonds voted amounted to \$3,000,000. Plans for a considerable amount of work will be entered in the near future. Laying of mains, ditching, etc., are among the improvements to be made on the newly unified system.

RETAINING WALL—Reinforced concrete. Cost not stated. Mill Valley, Marin Co., Cal. Engineers, Sloan & Olson, Nevada Bank Bldg., S. F. Owner, Mill Valley. Bids will be opened on September 14th for the construction of a reinforced concrete retaining wall for the town of Mill Valley. The following are the approximate quantities of work and material: 14,120 lbs. reinforcing steel, 142 cu. yds. concrete, 140 lin. ft. of drain tile, 275 lin. ft. of 1½ inch galvanized pipe and 400 lbs. of nails.

ELECTRIC LINE CONSTRUCTION—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer's name not given. Owners, Great Western Power Co., S. F. Application has been filed with the County Supervisors by the Great Western Power Co. to erect lines, distributing electricity, along, cross, upon, over, through and under certain parts of the roads of Contra Costa County.

STREET IMPROVEMENT—Cost not stated. Sebastopol, Sonoma Co., Cal. Engineer, City Engineer, Sebastopol. Owners, City of Sebastopol. Bids will be opened on September 11th for grading and rocking of Litchfield avenue, and bids for constructing cement sidewalks and gutters on said avenue, according to specifications.

STREET PAVING—Cost not stated. Ukiah, Contra Costa Co., Cal. Engineer,

neer, Town Engineer, Crockett. Owners, town of Crockett. Main street of this city from the Southern Pacific station to the outskirts of the city is being torn up and will be macadamized. Supervisor J. F. Casey is in charge of the work.

STREET IMPROVEMENT—Cost not stated. Fairfield, Solano Co., Cal. Engineer, Town Engineer, Fairfield. Owners, Town of Fairfield. Bids will be received up to September 14th for oil and gravel street improvements as follows: Two intersections in Texas street at Clay and Washington streets, each about 80 feet square.

STORES AND OFFICES—2 story and base, concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Architect, none. Owners, L. M. Lassell Co. Location, Castro and Thompson streets. Will contain stores on the first floor and offices above. Interior finish pine. Patent store fronts. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

HOTEL AND STORES ADDITION AND ALTERATION—Frame, \$8,000 to \$10,000. Martinez, Contra Costa Co., Cal. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, L. M. La Selle. Work will consist of rearranging upper floor for rooms, interior trim, painting, plastering, electric work and plumbing. Plans being prepared.

ROAD CONSTRUCTION—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. Plans for the final link in the road to connect Martinez and Bay Point will be presented to the Board of Supervisors at their next meeting by County Surveyor Ralph C. Arnold. They will consist of specifications for the erection of the concrete overhead crossing at Leyton. This will go over the Southern Pacific tracks, and will be 62 feet wide with a length of 105 feet. On approval of the plans, bids will be called.

Contracts Awarded.

STORE ALTERATION AND ADDITION—Frame, \$1,000. Richmond, Contra Costa Co., Cal. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, A. Hinkelmann. Work will consist of new interior finish, electric work, plumbing and painting. Some exterior work is also specified. Plans are being prepared.

ELECTROLYSE SYSTEM—\$2,717. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Contractors, Pacific Fire Extinguisher Co., S. F. Contract price, \$2,717.

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

PIPE LINE CONSTRUCTION—Cost not stated. McKittrick, Kern Co., Cal. Engineer, Engineering Dept. Valley Pipe Line Co., 343 Sansome street, S. F. Owners, Valley Pipe Line Co. It is reported here that the Valley Pipe Line Co., a subsidiary of the Royal Dutch Shell interests, is planning to build a pipe line from Coalinga to the tank farm located four miles south of McKittrick, and that the present intention

is to begin the work of construction probably this fall. The distance between these two points is approximately 36 miles, and several months would be required for the distribution of the pipe, the ditching and the filling in. Further information will be given on this work when definite action has been taken by the owners.

IRRIGATION WORK—Cost not stated. Oakdale, Stanislaus Co., Cal. Engineer, Chief Engineer South San Joaquin Irrigation District, Oakdale. Owners, South San Joaquin Irrigation District. The directors of the South San Joaquin and Oakdale Irrigation Districts have recently returned from a trip into the mountains to investigate the reservoir sites. On returning it was suggested that a reservoir be constructed in the Ramsey reservoir site, owned by F. R. Pattee et al. It was also thought that the suggestion offered by the Utica Mining Co. for a dam built by the company was a good one. The proposal of the Utica Co. is that it and the district each pay half the cost of a \$1,200,000 reservoir at Spicer's Meadows, which would store 61,000 acre feet of water. The dam would be 150 feet high. This dam site is wide, while at the Ramsey site a narrow dam would have to be built, perhaps 350 feet high. About 500,000 acre feet could be stored here. The dam would cost between \$750,000 and \$1,250,000. It is probable that a meeting will be called to discuss the proposed work.

PACKING HOUSE—1 story, frame. Cost not stated. Porterville, Tulare Co., Cal. Architect, O. H. Huber, Porterville. Owners, Mid-California Citrus Association. Will cover an area of 72 by 100 feet. Capacity six cars per day. Special machinery. Exterior rustic. Plans complete and work to be done under direction of H. F. Bray.

SCHOOL ADDITION—C, frame. Cost not stated. Hanford, Kings Co., Cal. Architect's name not given. Owners, Hanford School District. Bids are now being received for the construction of an addition to the present high school building manual training quarters until September 15th. Plans, specifications and full information regarding the work may be had from L. E. Hall, Clerk of the High School Board of Trustees.

Contracts Awarded.

STORES AND OFFICES—2 story and base, brick. Cost not stated. Exeter, Tulare Co., Cal. Architect, A. M. Bowser, 1007 Broadway, Oakland. Owner, E. R. Frey, Martinez. Contractors, Graham & Buckmaster, Exeter. Contract price not stated.

STREET PAVING—Cost not stated. Tulare, Tulare Co., Cal. Engineer, Town Engineer, Tulare. Owners, Town of Tulare. Contractors, Federal Construction Co., Sharon Bldg., S. F. Contract price not stated. Note The contract covers paving of approximately 17 city blocks.

IRRIGATION PROJECT—\$1,000,000. Terra Bella, Tulare Co., Cal. Engineer, D. W. Albert, Yuba City. Owners, Terra Bella Irrigation District. In connection with the development of the Terra Bella irrigation project, 100 which bonds of \$1,000,000 were recently voted, Messrs. T. W. Methenham and A. W.

Ballardie, of the McClenahan-Ballardie Contracting Co., 180 Jessie street, S. F., and D. W. Albert, a hydraulic engineer of Yuba City, are now in Terra Bella looking over the proposed work. A detailed investigation will be made with a view of bidding on the work. It is their purpose to put in a bid for the entire project, including the diversion dam, intake, ditch, reservoir dam, canals, etc., taking pay for the same in bonds of the irrigation district. Consulting Engineer Stephen E. Kiefer is preparing a final report, which will be submitted to the directors of the district shortly. Final action will probably be taken when the report is submitted.

BATH HOUSE ADDITION—Frame and concrete. Cost not stated. Paso Robles, San Luis Obispo Co., Cal. Architect, none. Owner, E. J. Burlingham, Paso Robles. E. J. Burlingham, the new proprietor of the Sparks Bathing House, is planning to make several additions to the present building. An addition will be made on the rear of the present building for a plunge, which will be 25 by 75 feet and a depth of from 3 to 7 feet, and which will probably be of concrete and tile construction. The proposition of adding two stories, making the structure three stories for bath rooms and apartments is also being considered.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA.

STREET IMPROVEMENT—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. In response to a petition presented by residents and property owners the City Council has directed the City Engineer to prepare plans for the improvement of North Aurora street from Weber avenue to Lindsay street. Bids on the work will soon be called for.

STREET IMPROVEMENT—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The City Commission has passed a resolution calling for bids for the improvement of Front street south of N street to S street. Bids were also called for a granite block street fronting the new city wharf. Further information relative to this work may be had from the City Engineer of Sacramento.

TUNNEL CONSTRUCTION—\$5,000. Greenwood Creek, Mendocino Co., Cal. Engineer's name not given. Owners, L. C. White Lumber Co., Greenwood. The L. C. White Lumber Co., on Greenwood Creek has been ordered to build a tunnel 100 feet long through solid rock, as the State Fish and Game Commission declare the company's plant is obstructing the free travel of fish.

DISPOSAL PLANT—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has passed an ordinance authorizing the purchase of five acres of land situated on the San Joaquin River about 1,000 feet north of the Santa Fe bridge. The city will use this site for the disposal site in connection with the new sewer system.

CURBS, GUTTERS AND SIDE-

WALKS—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans and specifications for curbs, gutters and sidewalks on Weber avenue between Monroe and Edison streets were adopted.

OFFICE BUILDING—1 story, reinforced concrete, \$10,000. Eureka, Humboldt Co., Cal. Architect's name not given. Owners, City of Eureka. Eureka's water department will soon be housed in a reinforced concrete building, the matter having been taken up by the City Council at the last meeting. The structure will be located at the corner of D and 6th streets, and will contain a number of offices.

HOTEL AND INNS—1 and 2 story, frame. Cost not stated. Yosemite Valley, Cal. Architects, Daniels & Wilhelm, Monadnock Bldg., S. F. Owners, Desmond Park Service Co., Underwood Bldg., S. F. Hotel will contain 120 to 140 rooms, office, lounging rooms and dining rooms. There will be 15 small one-story inns, five of which will be erected this year and three a year following. Interior finish rustic. Exterior, stone and shakes. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story, frame. Sacramento, Cal. Architect, none. Owner, H. F. Carstens, 215 Ochsner Bldg., Sacramento. Will contain five rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. Exterior cement plaster and rustic. Plans complete and work to be done by Day Labor.

BRIDGES—14, timber, \$500 each. Oroville, Butte Co., Cal. Engineer County Surveyor, Oroville, Owners, Butte County. Permission has been granted Supervisor Evans to proceed with the construction of 14 small bridges in his district, the cost of each not to exceed \$500. The structures, which will replace those pronounced a menace to the traveling public, are as follows: Six bridges on the Biggs-Princeton road; bridge over Dry Creek west of Nelson; the Crain bridge on the Shippee road; four bridges on the Day-non road; two small bridges on the Shippee road.

Contracts Awarded.

STREET PAVING—\$26,025.25. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, Ransome-Crummey Co., Oakland. Contract price, \$26,025.25.

LOS ANGELES AND SOUTHERN CALIFORNIA.

RESIDENCE—1 and 2 story, reinforced concrete. Cost not stated. Chino, San Bernardino Co., Cal. Architect, Myron Hunt, Hibernian Bldg., L. A. Owner, E. M. Fowler, Pasadena. Location, near Chino. Will consist of several buildings besides the residence all of which will be of reinforced concrete. Interior finish, pine and hardwood with hardwood floors and white enamel. Central heating system, open fire places and brick mantels. Hot water system. Bath rooms finished in tile. Exteriors covered with cement plaster. Plans being figured,

APARTMENT HOUSE—2 story and base, frame. Cost not stated. Los Angeles, Cal. Architects, Buchanan Brockway, Chamber of Commerce Bldg., L. A. Owner, Dr. Rinehart. Location, Park street near Los Angeles avenue. Arranged for hungaloo cot and will contain three two-story and eight one-story buildings. Interior finished in pine and hardwood with hardwood floors. Central heating system, wall beds and vacuum cleaning. Bath rooms finished in tile. Exterior covered with shingles and cement plaster on metal lath. Plans being prepared.

APARTMENT HOUSE—3 story and base, brick and frame, \$20,000. Los Angeles, Cal. Architect, Edgar Dorr, 1425 Winfield street, L. A. Owner, W. J. Dorr. Location, 1425 Winfield Court, covering an area of 50 90 feet. Will contain 42 suites of two and three rooms. Interior finish pine and hardwood with some hardwood floors. Steam heat, hot water system and wall beds. Bath rooms finished tile. Exterior covered with brick veneer. Plans being prepared.

APARTMENT HOUSE—3 story and base, frame. Cost not stated. Pasadena, Los Angeles Co., Cal. Architect, Arthur S. Heineman, 831 San Fernando Bldg., L. A. Owner's name withheld. Location, South Los Robles avenue. Will contain total of 20 suites of two and three rooms. Interior finish pine and hardwood. Wall beds, steam heat and hot water system. Tile in bath rooms. Exterior covered with cement plaster on metal lath. Plans being prepared.

SCHOOL—1 story and base, frame and plaster. Cost not stated. San Jacinto, Riverside Co., Cal. Architect, Leo Kroonen, Corona. Owners, San Jacinto School District. Will cover an area of 114 by 114 and contain nine class rooms, office and auditorium. Interior finish pine with maple floor. Central heating system, progressive clocks and vacuum cleaning. Exterior cement plaster. Plans complete. Bids to be opened on September 15th.

STORES AND LOFTS—3 story and base. Class C construction. Cost not stated. Los Angeles, Cal. Architect, W. J. Saunders, Laughlin Bldg., L. A. Owner, F. W. Braun. Location, South Main street. Will contain one store and two lofts. Interior finish pine. Elevator service, metal window sash and frames. Patent store front. Exterior pressed brick. Plans complete and work to be done by Day Labor.

Contracts Awarded.

RESIDENCE—2 story and base, brick. Cost not stated. Los Angeles, Cal. Architects, Morgan, Walls & Morgan, Van Nuys Bldg., L. A. Owner's name withheld. Contractor, Thomas C. Marlowe, Story Bldg., L. A. Contract price not given.

SCHOOL—2 story and base. Class C construction, \$25,999. Los Angeles, Cal. Architect, Homer W. Glidden, Wright and Callender Bldg., L. A. Owner, Amelia School District. Contractor, G. W. Gilbreth & Co., Hollingsworth Bldg., L. A. Contract price, \$25,999.



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Fifteenth Year No. 37

Publication Office
560 Mission St.

San Francisco Cal., September 15, 1915

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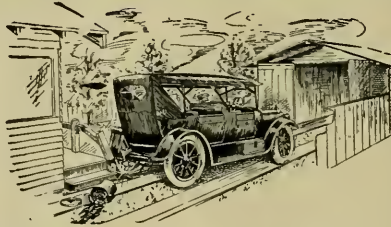
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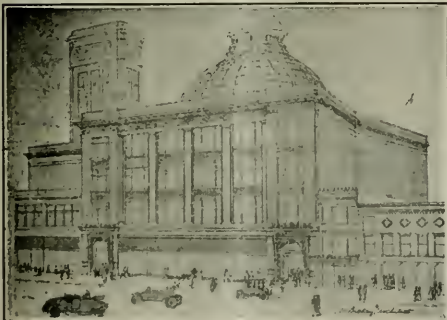
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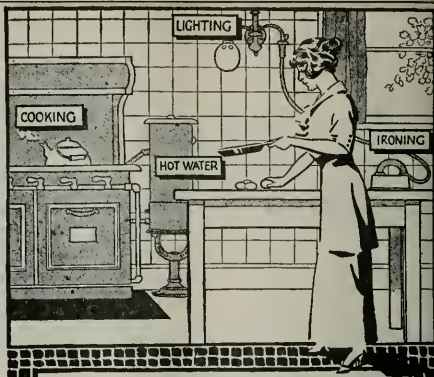
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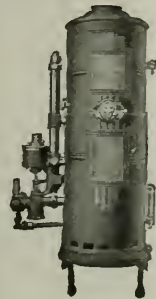
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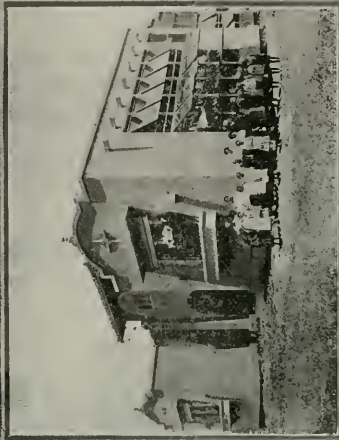
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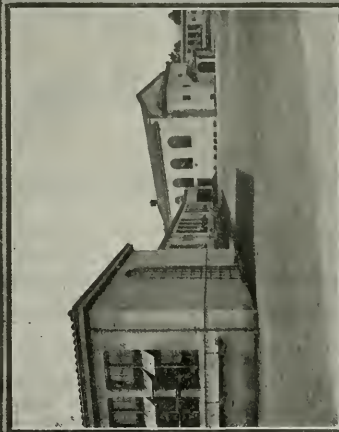
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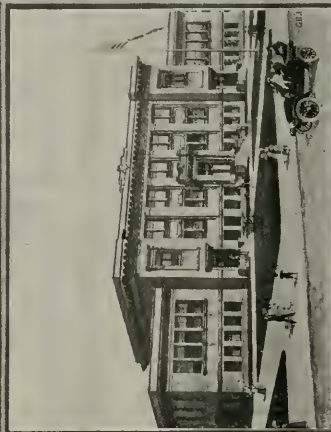
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Issued Weekly, \$3.00 per year

San Francisco, September 15, 1915

Fifteenth Year, No. 37

The mule teams are losing their jobs on the streets of the City of Los Angeles collecting non-combustible garbage. Their inefficiency has been established by the motor truck.

The result of the recent tests conducted under the personal supervision of Lute Mather, superintendent of this department of city affairs, furnish figures that will prove a surprise.

In every way the trucks have proven their superiority. They are faster, more sanitary and more economical. The tests have been complete and the trucks have been adopted. Each truck is taking the place of four mule teams and in reality eight teams, for the trucks are covering the territory every week where the teams only made the collections semi-monthly.

On the official tests 90,000 pounds were collected, covering a territory of 228 miles, with a total fuel and oil cost of \$2.30. Figured down to the finest detail, the actual cost was 34 cents per cubic yard for every yard collected.

One of the most important features of the work of the Los Angeles manufactured power wagons in this work is the record they have established for reliability. For five months seven trucks have been in regular service, covering a daily mileage averaging in the neighborhood of fifty miles. Not one of the trucks have failed to make its regular trip for a single day.

San Francisco, with over 5,000 Southern Pacific employees, including the general officers of the company, had a payroll last year of approximately \$5,000,000; 25,000 persons in Los Angeles are directly dependent on the Southern Pacific for their livelihood, while no less than \$4,000,000 yearly is spent by them over the counters of our business houses.

Oakland, with a wage disbursement last year of nearly \$4,500,000, followed closely on the heels of Los Angeles, while Sacramento and Roseville, with their great shops, had combined pay rolls comparable with that of Oakland.

Outside of the great terminals and shop centers, Bakersfield is in a class by itself, with 860 employees last year and a pay roll of \$1,000,000. Incidentally, Bakersfield, surrounded as it is by a great and growing farming community, is rapidly increasing in importance as a division point.

Other division points with large pay rolls last year are: Dunsmuir, 630 employees and a disbursement of \$750,000; Fresno and Tracy with 509 employees each, and pay rolls of \$400,000; Stockton and San Luis Obispo, 400 employees each, with pay rolls of \$275,000, and San Jose, 360 employees and a pay roll of \$333,000.

State Engineer W. F. McClure has just returned from an inspection of roads in Northern California, which took him along the east side of the Sierra Nevada Mountains, from Modoc County to Lake Tahoe. The principal purpose of the trip was to begin the building of the bridge and road across Middle Lake, Modoc County, connecting Western Nevada with Cedarville and other Modoc sections. This new road will keep traffic open the year round between the two States. Hitherto the road has always been flooded during the winter and early spring,

The new road will also open up the 70,000-acre reclamation and irrigation project in the Surprise Valley, which has been financed by Los Angeles capitalists. Surprise Valley, although little known, is one of the largest wheat producing sections in the State.

McClure reports that the State road along the west side of Lake Tahoe to Placerville is in excellent condition.

The recent election in Mojave County, Ariz., of which Kingman is the county seat, resulted in the adoption of the proposition to issue \$100,000 of good roads bonds. Most of the proceeds from the issue will be used for improving the main east and west highway across the county, which is a part of the National Old Trails route.

The decision by the Department of the Interior granting to C. J. Young a reservoir site in Pete Valley insures the construction of an irrigation system that will water approximately 400,000 acres of land in Lassen County, Cal., and Washoe County, Nev.

The project, which the decision makes possible, will be constructed by private capital and control twenty-five miles of ditches already constructed, also three dams and one reservoir in addition to the site in Pete Valley. The project will provide for the storage of 156,000 acre feet of water from Pete and Willow Creeks.

There will be a double system of canals, one on the lower levels and one known as the East High Line Canal, which will pass through Susanville township and permit the irrigation of 40,000 acres of rich loamy uplands. In addition to this the high line canal will irrigate 210,000 acres in Nevada. The project also includes the draining of Honey Lake, which the Government has had in view for some years. A great irrigation company is to be formed.

The section affected is one that promises great things in the way of development. The soil is rich and deep and the climate as near perfect for standard agriculture and fruit raising as possible.

The most important publication ever issued in the interest of the California Petroleum Industry is Bulletin No. 69 of the California State Mining Bureau.

"Bulletin 69" consists of a volume of history, current facts and statistics amply illustrated that covers 519 pages. Accompanying this book is a large map folio that is the most complete of anything of the kind that has ever been prepared for the public.

In his letter of official transmission of this bulletin, State Mineralogist Hamilton calls attention to the fact that "the economic and financial aspect of the subject has been given particular attention," and that scientific and engineering data form the necessary basis of the report.

"Bulletin No. 69" deals with the extent and location of the California oil deposits, cost of extracting the oil and the marketing and financial conditions governing the industry. The aim to make the work thoroughly comprehensive has been successfully accomplished, for it will be found to be of great value to all interested.

Lessons from the Exposition.

Collected by George Nelson, C. E.

RECORDING INSTRUMENTS IN THE BRISTOL BOOTH.

"Up to the minute" is the proper term to apply to both the Bristol Exhibit and also to the Bristol Instruments. The exhibit, with its hand-operated demonstration models, is complete in every detail, and, with a few words from the demonstrator, shows the basic principles upon which the many instruments are constructed.

RECORDING INSTRUMENTS.

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Bristol's Time Recorders, Operation Recorders and Recording Electric Counters, Recording Motion Meters, Recording Tachometers.



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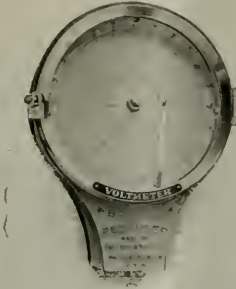
Bristol's Wet and Dry Bulb Recording Thermometers or Psychrometers.

This booth occupies space 30x40 feet in the Palace of Machinery. This booth was built in Waterbury, Conn., and shipped in sections to San Francisco.

It will be noted that Bristol Instruments themselves are used almost exclusively for decorating the booth. The color of the structure is very light pearl gray with dark green burlap-covered panels.

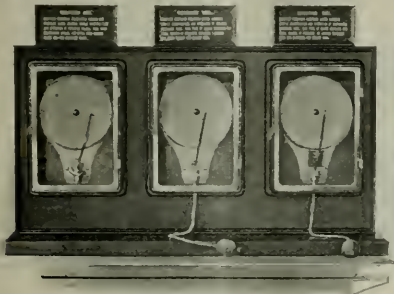
A feature of this exhibit is the set of demonstration models mounted on tables for hand operation. Several of these are shown separately on the following pages. Most of these models are so constructed that they can be operated by hand by the visitor and the operating principles studied in this way.

There are more than 200 decorative models installed in this exhibit in addition to about 100 complete calibrated working models.



Recording Pressure Gauges.

For all ranges of pressure and vacuum from full vacuum to 20,000 lbs. per square inch. The first Bristol Recording Pressure Gauges were put into service in 1889, and their extreme simplicity of construction has been responsible for their great durability. More than 35,000 Bristol Recording Gauges have been sold. They are furnished for use on air, steam and liquids and are graduated in many different units, such as pounds, ounces and metric units.



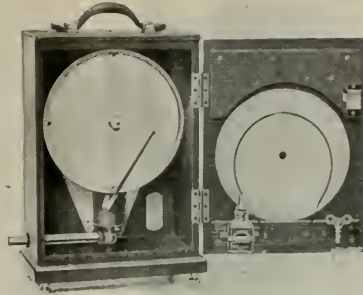
Recording Pressure and Vacuum Gauges.

These three demonstration models of the Bristol Recording Pressure Gauges are exhibited in skeleton form to show the simple construction and principle of operation of the moving elements. Both helical and diaphragm types of pressure tubes are shown with pen arm attached direct to the moving element without any multiplying devices or other complicated mechanism.



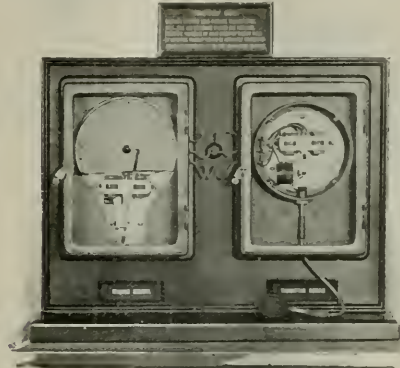
Long-Distance Electric Transmitter and Recorder.

This exhibit shows one of the new Long-Distance Electrical Bristol Recording Gauges with which the record may be transmitted over long distances. The electrical transmitting and receiving instruments employ the principle of the Induction balance, and may be adapted to recorders for pressure, temperature and motion.



Portable Recording Pressure Gauges.

This light, compact, portable recorder has been extensively used by gas companies for recording pressures. The absence of multiplying devices, bearings and other complicated mechanism insures accuracy and sensitiveness, and dependability even when roughly handled.



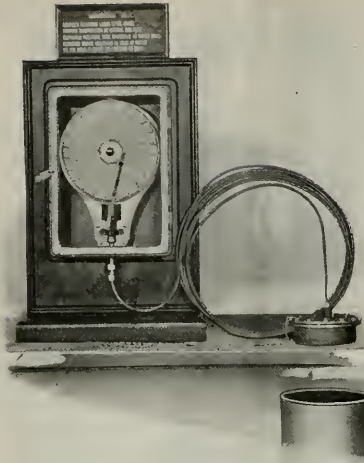
Long-Distance Electric System.

Bristol's Recorders for Pressure, Temperature and Motion can now be furnished with patented electrical transmitting devices for adapting them to record over long distances, as, for instance, twenty-five miles. The recorder and transmitter are shown above in skeleton form with pressure bulb for manual demonstration.



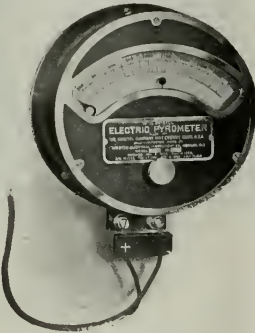
Recording Thermometer.

This type recording thermometer is especially suitable for use in cold storage rooms or for outdoor atmospheric temperatures, as, for instance, in orange groves. Similar moisture-proof cases are furnished on other Bristol Recorders when needed.



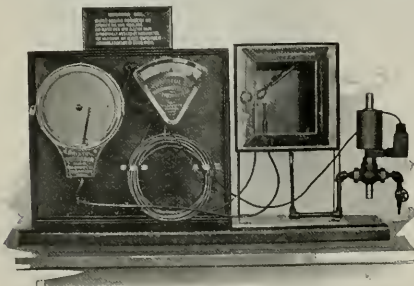
Recording Liquid Level Gauge.

To illustrate the working principle of the Bristol Liquid Level Gauge, this complete model is exhibited with an open tank into which the bulb can be lowered by hand and a record of the depth obtained.



Electric Pyrometers.

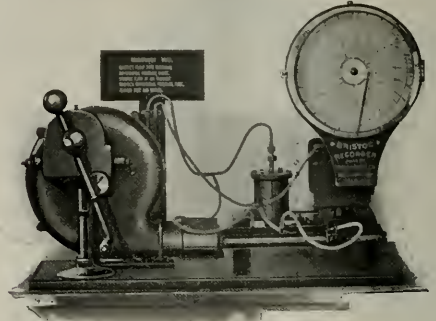
Used with the Bristol Patent Thermo-couples for measuring high temperatures.



Temperature Controller and Recording Thermometer.

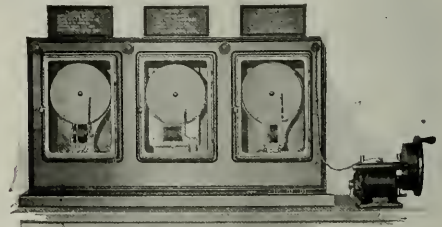
In this working exhibit the temperature inside a small gas oven is automatically controlled and maintained at a

constant point by means of a Bristol Thermometer-Thermostat and Electric Gas Valve. The Recording Thermometer, which is shown mounted with these, provides a continuous record of the oven temperature and, therefore, a check on the operation of the controlling devices.



Recording Differential Pressure Gauge or Flow Meter for Air.

Bristol's Recording Differential Pressure Gauges are designed for use in connection with Pitot Tubes, Orifices and Venturi Tubes to record velocity or volume of flow of air, gas, liquids and steam. The above recorder is exhibited with connections to three of these measuring elements and an air pump for circulating air through any one of these.



Recording Voltmeter, Ammeter and Wattmeter.

This exhibit shows in an interesting way the use of Bristol Recording Voltmeter, Ammeter and Wattmeter with a miniature hand-operated electric lighting dynamo.



Combination Indicating and Recording Electric Pyrometer.

For many practical applications of electric pyrometers it is desirable to have the furnace temperature indicated at the furnace operator's post of duty and a recorder installed in the office of the superintendent or foreman. This combination indicating and recording unit of Bristol Pyrometers, as shown above, provides for both these requirements and many such outfits are in service, as, for instance, in connection with heat treatment furnaces for steel, blast furnaces, water gas machines and galvanizing baths. Each of these instruments includes a Weston milli-voltmeter movement.



Recording Thermometers.

For all commercial ranges of temperature from 60 degrees below zero to 800 degrees F. More than 20,000 have been sold for use for hundreds of different purposes.



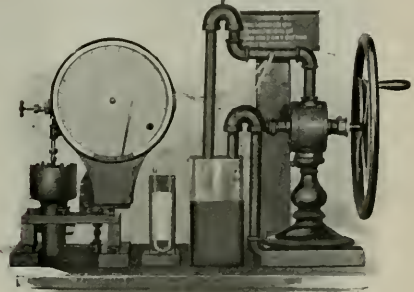
Recording Voltmeters.

For all ranges of alternating and direct current. Thousands of these voltmeters are in daily service. Bristol's Recording Voltmeters, Ammeters, and Wattmeters for both D. C. and A. C., can now be furnished either in the round chart or strip chart type.



High-Resistance Electric Pyrometer.

This portable Pyrometer for temperatures up to 3,000 degrees F., or a range of about eighteen milli-volts, is one of the high-resistance type and it is used with more than 100 ohms in circuit.



Recording Differential Pressure Gauge or Flow Meter for Water.

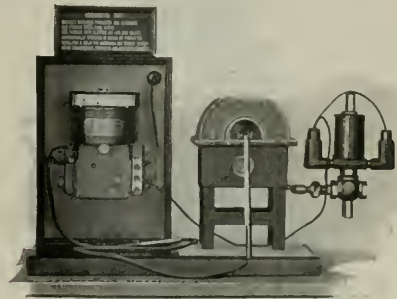
In this demonstration unit the Bristol Recording Differential Pressure Gauge has been applied for recording the flow of water with the Bristol Differential Tube.

By means of the hand pump water can be circulated through the pipe in which the Differential Tube is installed and a record of its flow obtained.



Time and Motion Recorder.

For continuously recording time and extent of mechanical movements. Valuable for recording the motion and position of sluice gates for turbines and water wheels, gas holders, alternating current feeder regulators, steam exhaust relief valves, elevators; also for recording the operation of automatic welding machines, conveyors, etc., also with floats for recording liquid level.



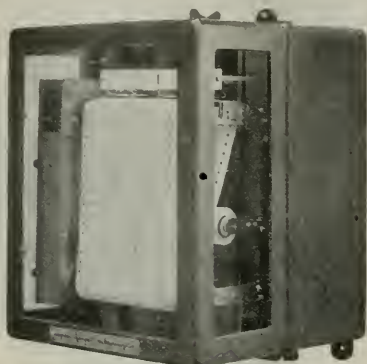
Indicating Electric Pyrometer and Automatic High Temperature Controller.

Here is shown one of the new Bristol High Temperature Regulators with electric gas valve applied to a miniature gas furnace. With this automatic electrical equipment the temperature in a furnace is continuously maintained constant at the desired point.



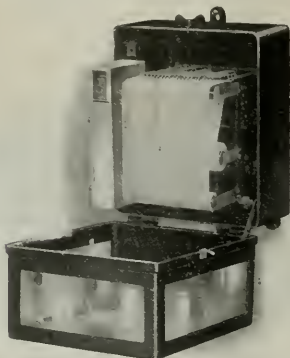
Electric Time Recorders.

For recording electrically the time of mechanical movements and the operation of machinery. Especially valuable for recording the operation of power plant equipment, valves, switches, pumps, tilt traps, automatic weighers, conveyors, circuit breakers, elevators, blast furnaces, coke ovens, reversing valves of open hearth furnaces, paper machines, cement kilns, trolley cars railway switches, etc.



Strip Type Recording Milli-Voltmeter.

This strip type recorder is here shown equipped with two Weston milli-voltmeter movements, and records are secured from these by a frictionless method. The same general type of strip recorder is also furnished for single full-strip width scale, as shown on the switchboard on the opposite page.



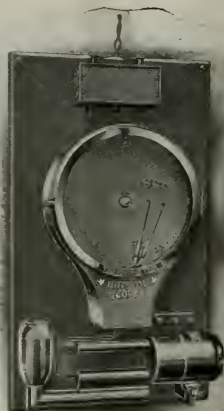
Strip Type Operating Recorder.

This strip type Bristol Electric Time Recorder is designed to record twenty different operations on one chart. The chart can be advanced at speeds varying from three-fourths of an inch per hour to twelve inches per minute.



Recording Pneumatic Tachometers.

For continuously recording the variations in the speed of shafting, machines, engines, etc. This patented pneumatic type of recording tachometer consists of recording instrument, flexible connecting tube and revolving mechanism. Special sprockets and chains are furnished for connecting to shaft, as shown above.



Recording Electric Tachometer.

This exhibit demonstrates the hand operation of a pneumatic tachometer like that shown complete at top of page. The recording instrument is a low-range vacuum gauge. The motion of the revolving tube causes a partial vacuum the degree of which determines the position of the recording pen on the chart scale reading in revolutions per minute.



Bristol-Durand Radii Averaging Instrument.

The Bristol-Durand Radii Averaging Instrument shown here is designed for securing the average of records on round charts having uniform graduations.

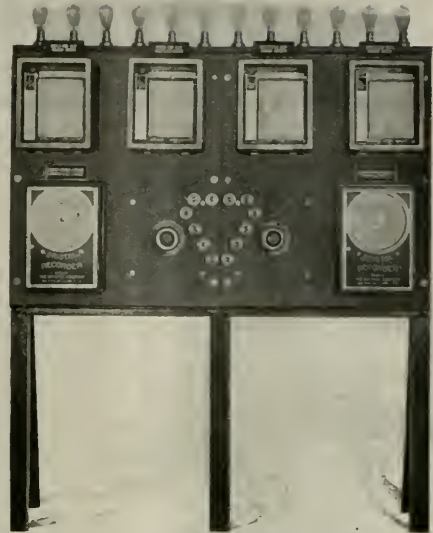
A curve is used with each uniform chart to interpret the readings obtained with this instrument.

Bristol Instruments were exhibited at the Columbian Exposition in Chicago, 1893, and at St. Louis and other expositions, and medals awarded, but this exhibit at the Panama Exposition is by far the largest and best exhibit of recording instruments ever shown.

This business was founded in 1889 by Wm. H. Bristol, the present President and General Manager, for the purpose of manufacturing two of his patented inventions, the Bristol Recording Pressure Gauges, and Bristol's patent Steel Belt Lacing. Since the first the growth has been consistent, and during the last twenty years the floor space has increased at the rate of doubling once every five years. Two factors have been largely responsible for the development of this most extensive line of recording instruments in the world.

Firstly, Bristol's Recording Instruments are unique in their extreme simplicity of construction, and for this reason have proved to be well adapted for use under ordinary shop conditions, and extremely durable in service.

Secondly, the service rendered by Bristol Recording Instruments is a much needed service, namely, Bristol Recorders help the manager or superintendent to secure and maintain uniformly efficient operating conditions in hundreds of different industries and processes. The continuous night and day records obtained with these recorders give the superintendent a check on operating conditions at all times.



Switchboard with A. C. Recorders for Volts, Amperes, Watts, Cycles and Power Factor.

This board includes recording instruments as follows: a Voltmeter, an Ammeter, two Wattmeters, Frequency Meter, and Power Factor Meter.



Recording Electric Counter.

Bristol's Recording Electric Counter connected to a miniature press arranged for hand operation. Each revolution of the press closes a contact in the battery circuit to the recorder and the pen is thus advanced a certain distance on the chart scale toward the outside of the chart and when this is reached the pen automatically drops back to the beginning of the scale at center.

Indicating and Recording Tachometer.

This combination indicating and recording unit of the Bristol Recording Electric Tachometer is exhibited with an A. C. magneto arranged for hand operation.

With the powerful magneto used a robust type of recorder is available. The recording pen is in continuous contact with surface of chart so that a complete record of every speed variation is obtained.

Recording Wet and Dry Bulb Thermometer or Recording Psychrometer.

For determining the degree of humidity or moisture in the atmosphere. The special design and the use of fan and motor insures accurate psychrometric readings. The temperature of the wet bulb and the dry bulb are recorded side by side on the chart and by referring these readings to a table or chart the actual percentage of relative humidity can be determined.

Long-Distance Electric Thermometer.

This demonstration equipment is arranged to measure the temperature of the hand applied to the coil bulb. When the sensitive bulb is grasped in the hand, the pointers of both transmitter and remote indicator rise on the scale to indicate the hand temperature.

PAN-AMERICAN ROAD CONGRESS.

A. B. Fletcher, State Highway Engineer of California M. M. O'Shaughnessy, City Engineer of San Francisco, and William R. Roy, State Highway Commissioner of Washington, have been selected by the program committee to take active parts in the work of the Pan-American Road Congress, which is to be held in Oakland during September.

Fletcher's paper will on the subject of "Organization and System in Highway Work"; O'Shaughnessy will lead the discussion on the subject of "Street Pavements."

The advance official programme of the Pan-American Congress shows that twenty-seven separate subjects will be discussed during the ten sessions, these subjects covering practically the entire field of road and street construction and maintenance, and the organization and administration of highway affairs.

The Pan-American Road Congress will convene in the Municipal Auditorium, Oakland, Monday morning, September 13, and continue until Friday night.

The opening address will be made by Governor Charles W. Gates of Vermont, chairman of the executive committee.

He will be followed by Governor Johnson of California, Mayor Davie of Oakland, and Director of Congresses Barr of the Panama-Pacific Exposition, who will deliver the address of welcome.

Addresses in response will be made by George W. Tillson, president of the American Road Builders' Association, and Fairfax Harrison, president of the American Highway Association.

The congress will be held under the joint auspices of these two associations, assisted by the Tri-State Good Roads Association of California, Oregon and Washington, and the Pacific Highway Association.

Previously, the two great associations, which are of national character, have held separate annual conventions.

On Wednesday, September 15, a diversion from the usual place of meeting has been announced. That day has been dedicated as Pan-American Road Congress Day, and the sessions of the congress will be held in Festival Hall at the Exposition.

ADVANCE NEWS

Classified according to Character of Work



Devoted to the Architectural, Engineering, Building and Industrial Activities of the Pacific Coast.

Circulates among the leading Architects, Engineers, Surveyors, Contractors and Municipal Authorities on the Pacific Coast.

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APARTMENT HOUSES.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$15,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, William Linden, 1100 Dolores street, S. F. Location, east Seventh south of Howard, covering an area of 25 by 154 feet. Will contain 41 suites of two rooms and bath. Interior finish, pine, some hardwood floors, steam heat, hot water system, wall beds and tile bath rooms. Exterior covered with rustic and brick veneer. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 4 story and base, brick and steel, \$40,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Girard Investment Co. Location, east Leavenworth south Geary, covering an area of 41 by 65 feet. Will contain 23 suites of two and three rooms. Interior finish pine and elm panels. Hardwood floors, steam heat, automatic elevator, hot water system and vacuum cleaning. Tile floors and wainscot in bath rooms. Marble and tile entrance. Wall beds. Exterior faced with pressed brick. Plans complete and work being done by Day Labor.

SAN FRANCISCO—Apartment house, 4 story and base, brick and steel, \$65,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Girard Investment Co. Location, southwest corner Bush and Jones, covering an area of 77½ feet square. Will contain 27 suites of two and three rooms and three stores. Interior finish, pine, southern gum and hardwoods. Hardwood floors, steam heat, hot water system, automatic elevator, vacuum cleaning and wall beds. Bath rooms finished in tile. Marble and tile wainscot in entrance. Patent store fronts. Exterior faced with pressed brick and terra cotta. Plans complete and work to be done by Day Labor.

FRUITVALE ALAMEDA CO., CAL.—Apartment house and stores, 2 story and base, frame, \$7,000. Architect, C. M. Norgrove, 2220 Roosevelt avenue, Berkeley. Owner's name withheld. Will contain two stores on first floor and three suites of four rooms on upper floor. Interior finish, pine. Hot water system and wall beds. Tile in bath rooms. Patent store fronts. Exterior covered with rustic and shiplap. Plans being prepared.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$12,700. Architect, John H. Powers, 460 Montgomery street, S. F. Owner, John Biller. Location, Southeast Vallejo and Polk streets, covering an area of 37½ by 90 feet. Will contain 14 suites of two and three rooms. Interior finish, pine with some elm panels and hardwood floors. Steam heat and hot water system, wall beds. Tile in bath rooms. Exterior covered with cement plaster

on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 4 story and base, reinforced concrete, \$40,000. Architect, none. Owner, J. M. Dempliak, 1658 Washington street, S. F. Location, Hyde between Sutter and Bush, covering an area of 25 by 92 feet. Owner is now taking figures for reinforced concrete work, steam heating, plumbing, grading and automatic elevator work. Can be seen at his home mornings between 8 and 10 o'clock. Phone Prospect 2063.

SAN FRANCISCO—Apartment house and stores, 2 story and base, frame. Cost not stated. Architect, none. Owner, Emilie Fabish, 192 Valley street, S. F. Location, 31st avenue, Richmond District. Will contain two stores on first floor and two suites of three rooms each on upper floor. Interior finish, pine with elm panels. Some hardwood floors. Open fire places and tile mantels. Bath rooms finished in tile. Wall beds. Exterior covered with shiplap. Plans complete and work to be done by Day Labor.

BANKS

PORTLAND, ORE.—Bank and lodge hall, 2 story and base, reinforced concrete, \$90,000. Architects, Camp & Du Puy, 426 East Alder street, Portland. Owners, East Side Business Men's Club. Location, East Alder and Grand avenue, covering an area of 90 by 100 feet. Entire ground floor to be occupied by the bank. Interior finish pine, hardwood, marble and tile. Hardwood and tile floors, metal window sash and frames, hollow tile interior partitions in first floor, steam heat, vacuum cleaning system, special bank equipment and ornamental plaster. Exterior faced with terra cotta. Plans being prepared.

BONDS.

MARYSVILLE, BUTTE CO., CAL.—In accordance with a pre-election promise the three Marysville banks have purchased the \$18,000 worth of municipal bonds voted recently to finance the construction of a sewer system and the improvement of streets. Bids on the work are now being taken.

RED BLUFF, TEHAMA CO., CAL.—The proposition to bond the county for \$140,000 for the building of sand slough bridges, east of Red Bluff, was defeated. The bonds required a two-third majority to carry. The direct tax levy system will be used to raise the money for the construction of the bridges.

HOLLYWOOD, LOS ANGELES CO., CAL.—The Hollywood Board of Trade has prepared petitions calling for an election to vote bonds for the purchase of the Hollywood Union Water Company. It is expected that the election will be held this fall. H. T. Wright

Secretary of the Hollywood Board of Trade.

RED BLUFF, TEHAMA CO., CAL.—The Trustees of the Red Bluff Union High School have adopted a resolution calling for a special bond election on October 19th for the purpose of submitting a \$30,000 bond issue for the high school district. The money is to be used in remodeling and building an addition to the present high school.

MADERA, MADERA CO., CAL.—By a vote of 116 to 73, bonds of \$12,000 for the construction of a concrete wall at the foot of D street, to replace the wood-frame structure now condemned, carried. The majority was 30 more than the necessary two-thirds.

OROVILLE, BUTTE CO., CAL.—First steps toward municipal ownership of the distributing system in Oroville of the Oro Electric Corporation were taken by the City Trustees, when they adopted a resolution instructing the City Clerk to ascertain from the State Railroad Commission the conditions under which the system can be appraised.

WINTERS, YOLO CO., CAL.—The Winters Trustees have issued a statement urging the issuing of bonds for the construction of a new City Hall.

The Supervisors will appropriate \$5,000 if the city will give an equal amount.

REDWOOD CITY, SAN MATEO CO., CAL.—A special bond election will be held October 5th for the purpose of raising funds to purchase two or more school sites and to erect school building in the district when needed.

AUBURN, PLACER CO., CAL.—On account of a misunderstanding between the members of the City Council and City Attorney Tuttle over the time which must elapse between the passing of the ordinance and the holding of the election, the bond election which was to have been held on September 21st to vote on a \$22,000 bond issue for the extension of the sewers and the purchasing of fire trucks, the election will now be delayed for at least ninety days.

SACRAMENTO, CAL.—Friend W. Richardson, State Treasurer, has been authorized by Governor Johnson to sell the \$1,500,000 4½ per cent University of California bonds to provide new buildings and improvements at the University. Richardson will proceed with the sale as soon as the legal papers are drawn up by the Attorney General.

BAKERSFIELD, KERN CO., CAL.—Within three weeks petitions will be in circulation asking the Board of Supervisors to call a special election to bond the county for the purpose of building a road from Bakersfield to the Kern County line via Weldon, the same to be the first link in the road to the top of Mt. Whitney.

The petition will call for a scenic road up the Kern River from this city, into the Hot Springs Valley, on to Weldon and from Weldon to the plateau. Roughly, it is estimated that the road will cost in the neighborhood of \$200,000, though it may run under that figure.

RED BLUFF, TEHAMA CO., CAL.—The Supervisors have adopted a motion instructing County Clerk H. G. Kuhn to notify the State Highway Commis-

sion that Tehama County now is prepared to pay the bonus on highway bonds sufficient to build the State Highway link between the Butte County line and Los Molinos, on the east side of the Sacramento River.

EL CENTRO, IMPERIAL CO., CAL.—Bonds in the sum of \$135,000 have been voted and sold by the Trustees of the Central Union High School District for the purpose of erecting new buildings and additions to the high school at El Centro. The commission to prepare plans for the work was originally awarded to Architect F. T. Harris of El Centro in a competition conducted under the Law of 1912 but the contract was never consummated. Since the repeal of the law requiring a competition for the selection of an architect for public school work, it is stated that the Board of Trustees plans to appoint an architect for the work direct without competition. The funds from the sale of the bonds will probably be available shortly and the Board will appoint an architect soon thereafter.

TURLOCK, STANISLAUS CO., CAL.—The Turlock Irrigation District has voted bonds in the sum of \$186,478 for the operation and repair of the canal system already constructed and \$14,250 for completing the outlet gate and strengthening dams C, H and J of the Davis reservoir.

VICTORVILLE, SAN BERNARDINO CO., CAL.—Bonds of \$30,000 have been voted for the erection of a new high school building.

BURBANK, LOS ANGELES CO., CAL.—An election will be held on October 12th to vote on the question of issuing bonds as follows: \$12,000 for addition to fire fighting equipment; \$30,000 for the installation of an electric lighting plant and distributing system, and \$12,500 for a new city hall.

BRIDGES, DAMS AND HARBOR WORK.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridges, 26, steel and reinforced concrete, \$350,000. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Santa Barbara County, while turning down the good roads bonds, voted favorably on the \$350,000 bond issue for building bridges along the state highway. The character and location of the proposed structures are as follows. More detailed information can be secured from the County Surveyor at Santa Barbara.

One bridge at the crossing over Southern Pacific Railroad track at station 109 plus 40, section "G."

A reinforced concrete girder bridge over Eagle Canyon Creek where state highway crosses creek, being at station 181 plus 00, section "G."

A steel truss bridge over Dos Pueblos Creek where state highway crosses creek, being at station 285 plus 50, section "G."

A reinforced concrete bridge over Gato Canyon where state highway crosses said canyon, said bridge to be at station 379 plus —, section "G."

A reinforced concrete bridge over El Capitán Creek, where state highway crosses creek at station 455 plus 50, section "G."

A reinforced concrete bridge over Corral Canyon Creek, where state high-

way crosses creek, at station 60 plus 25, section "F."

A reinforced concrete bridge over Tajiguas Canyon Creek where state highway crosses creek, being at station 243 plus 80, section "F."

A reinforced concrete bridge over Arroyo Suemada where state highway crosses arroyo, being at station 305 plus 00, section "F."

Two steel truss bridges over Gaviota Creek between Gaviota Gorge and the Pacific Ocean at points where state highway crosses creek, to wit: One bridge at station 104 and one bridge at station 109, both in section "E."

A steel truss bridge at Gaviota Gorge over Gaviota Creek where state highway crosses creek, being at station 149 plus 40, section "E."

A reinforced concrete bridge over Las Cruces Creek at place known as Sheep Camp, where state highway crosses creek, being at station 312 plus —, section "E-2."

Four bridges across Najoqui Creek at points where state highway crosses creek in Cuesta Canyon, said bridges to be located at the following points on the official survey of state highway: One reinforced concrete bridge at station 2 plus 50; one reinforced concrete bridge at station 160 plus —; one reinforced concrete bridge at station 218 plus —; one steel truss bridge at station 218 plus —, all in section "D."

A bridge across Santa Ynez River at the point where state highway crosses river near mouth of Zaca Creek, the cost to said county to construct and build said bridge not to exceed \$50,000; the cost in excess of said sum to be paid by the State of California.

Six reinforced concrete girder bridges over Zaca Creek between Santa Ynez River and Zaca Station at points on Zaca Creek where said state highway crosses Zaca Creek, indicated on official survey of state highway as follows, to wit: One bridge at station 309 plus —; one bridge at station 448 plus —; one bridge at station 472 plus —; one bridge at station 562 plus —; one bridge at station 566 plus 00, and one bridge at station 575 plus 00, all in section "D."

Three reinforced concrete girder bridges between Zaca Station and Los Alamos at points indicated on official survey of state highway as follows: One bridge at station 165 plus 75; one bridge at station 382 plus 25; and one bridge at station 399 plus 25, all in section "C."

MADERA, MADERA CO., CAL.—Bridge, reinforced concrete, \$12,000. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, Madera County. Bonds have been carried in this county for the construction of the proposed D street bridge over the Fresno River by a vote of 416 to 73, and bids for the construction will be called for shortly. Plans provide for a reinforced concrete bridge 270 feet long with a 20-foot roadway and two four-foot sidewalks.

MODESTO, STANISLAUS CO., CAL.—Bridge, reinforced concrete, \$35,000. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. The Board of Supervisors, in fixing the tax rate for Stanislaus County for the ensuing year at \$2.00, included the construction of a new \$55,000 concrete bridge over the Tuolumne River at Modesto

and the building of a permanent paved road from the city limits of Modesto to the southeast corner of the Bald Eagle ranch to connect with the Sonora lateral from Salida to Oakdale. But \$35,000 of the cost of the bridge was included in the present levy.

NICOLAUS, SUTTER CO., CAL.—Bridge, steel and reinforced concrete, \$60,000. Engineer, County Surveyor, Yuba City. Owners, Sutter County. The County Surveyor has been instructed to prepare plans and specifications for the construction of a bridge over the Feather River at Nicolaus. The proposed structure will be 600 feet long and of steel and concrete construction.

SEATTLE, WASH.—Bridge, steel and reinforced concrete, \$500,000. Engineer, City Bridge Engineer Rapp, Seattle. Owners, City of Seattle. Plans are nearing completion for the proposed city bridge over the Lake Washington Canal at 10th avenue N. E., and will probably be ready for contractors in about 60 days. It will have a span of 216 feet center to center, and will be 80 feet wide of the double leaf bascule type similar to the Fremont bridge. Temporary wooden approaches 3,000 feet long are called for. The substructure will cost about \$135,000 and the superstructure about \$365,000.

HANFORD, KINGS CO., CAL.—Bridges and culverts, reinforced concrete. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. The Board of Supervisors has directed the Clerk to advertise for bids for the construction of culverts and bridges for the improved highway. Three hundred barrels of Portland cement will be used in the work. Bids close on September 20th. Further information may be had from the County Surveyor.

RED BLUFF, TEHAMA CO., CAL.—Bridges, 3, steel and concrete. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Plans and specifications prepared by County Surveyor W. F. Lunning for three bridges to be built on the Cone Grove road were approved at the last meeting of the Supervisors and bids have been ordered received. Bids close October 5th. The structures will be built over Antelope Creek, Salt Creek, and a small slough. All will be of steel construction.

RED BLUFF, TEHAMA CO., CAL.—Fill, earth. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Bids will be received by the County Supervisors until October 5th for the construction of a fill on the Red Bluff-Harrison Gulch road at the new bridge over Salt Creek near Rosewood. Plans and specifications have been adopted by the Supervisors and bids will be received until October 5th for the fills and the Sand Slough bridges.

Contracts Awarded.

SALINAS, MONTEREY CO., CAL.—Bridge repairs, \$3,330. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, Kunz & Wolfe, Monterey. Contract price, \$3,330.

RED BLUFF, TEHAMA CO., CAL.—Bridges, reinforced concrete. Cost as follows. Engineer, County Surveyor, Red Bluff. Owners, Tehama County.

Contractors, Ross Construction Co., Sacramento. Contract prices, Dibble bridge, \$12,580; Blue Tent bridge No. 1, \$3,100; Blue Tent bridge No. 2, \$1,301. C. E. McCartney, Red Bluff, steel bridge across Mill Creek, \$1,293.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Bridge, steel and reinforced concrete, \$11,773. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractors, Gutleben Bros., New Call Bldg., S. F. Contract price, \$11,773.

COURT HOUSES.

OROVILLE, BUTTE CO., CAL.—Hall of Records, 2 story and base, reinforced concrete, \$43,843. Architect, Charles S. Kaiser, Mechanics' Institute Bldg., S. F. Owners, Butte County. Contractors, Western Building and Engineering Co., Phelan Bldg., S. F. Contract price, \$43,843.

Contracts Awarded.

OAKLAND, CAL.—Court house addition, brick, \$13,760. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, Alameda County. Contractor, Lester H. Stock, 12 Geary street, S. F. Contract price, \$13,760. A complete list of the bids received will be found under the heading of Oakland and Alameda County.

FACTORIES AND WAREHOUSES

BAKERSFIELD, KERN CO., CAL.—Oil supply station, concrete and steel. Cost not stated. Engineer, Engineering Department Chlon Oil Co., Bakersfield. Owners, Union Oil Co. The Union Oil Company will construct a storage and oil service station on the Southern Pacific reservation in East Bakersfield. The station is to be located near the Union avenue crossing, and it is planned to erect a large establishment. Big storage tanks and large office structure will be constructed to handle the refinery products.

LOS ANGELES, CAL.—Warehouse, 2 story and base. Class A construction. Cost not stated. Architect, Thomas Preston, Investment Bldg., L. A. Owners, National Transfer Co. Location, Ann street, covering an area of 50 by 110 feet. Reinforced concrete walls, floors and roof slabs. Steel rolling doors, metal window sash and frames. Exterior, cement plaster. Plans complete and figures being taken.

SEATTLE, WASH.—Warehouse, 4 story and base, reinforced concrete, \$150,000. Architect, J. R. West, Port of Seattle Commission, Seattle. Owners, City of Seattle. Location, Whatcom avenue, covering an area of 90 by 268 feet. Fireproof construction with reinforced concrete walls, floors and roof. Metal window sash and frames and steel rolling doors. Exterior cement plaster. Plans complete and figures to be called for at once.

MODESTO, STANISLAIS CO., CAL.—Oil Distributing system, \$15,000. Engineer's name not given. Owners, Associated Oil Co., S. F. A permit has been granted by the City Council to the Associated Oil Co. to construct a new distributing station on the east side of the Salida road between the Lateral No. 4 bridge and the Modesto Repressed Brick Company's yard. The entire plant will cost about \$15,000.

Contracts Awarded.

SAN FRANCISCO—Warehouse, 2 story and base, reinforced concrete. Cost not stated. Architect, Charles Paff, Merchants' Exchange Bldg., S. F. Owners, American Marine Paint Co. Contractors, Pacific Construction Co., 16 California street, S. F. Contract price not stated.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame. Cost not stated. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner, Mrs. Bunner. Location, southeast corner Bryant and 20th streets. Will contain four flats of four rooms and bath. Interior finish, pine with some hardwood floors and wall beds. Open fire places and tile mantels. Automatic water heaters. Exterior covered with shiplap. Plans complete and figures being taken.

SAN FRANCISCO—Flats, 3 story and base, frame, \$6,000. Architect, Carl Geiffuss, 16 Kearny street, S. F. Owner, Louis Laubscher. Location, Clementina west 4th street, covering an area of 23 by 60½ feet. Will contain three flats of five and six rooms. Interiors finished in pine and elm panels. Hardwood floors, open fire places and tile mantels. Imitation tile in bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster on metal lath. Plans complete and contract will be awarded in a few days.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architect, none. Owner, G. Lindner, 4029 26th street, S. F. Location, east Castro north 26th street, covering an area of 33 by 49 feet. Will contain four flats of four rooms each. Interior finish pine with some hardwood floors, wall beds and tile baths. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work will be done by Day Labor.

FIRE REPORT

MADERA, MADERA CO., CAL.—The Fairmead Inn, a pioneer hotel of this city, was destroyed by fire last week. The loss is estimated at \$15,000, partly covered by insurance.

GRASS VALLEY, NEVADA CO., CAL.—Fire, causing a loss of about \$12,000, destroyed the Union Ice Company's building, a residence and a plumbing shop owned by Cornelius Clauson.

WILLOWS, GLENN CO., CAL.—The Carson School, about a mile and a half east of Butte City, was destroyed by fire, causing a loss of \$6,000. A new building will be erected immediately.

BRAWLEY, IMPERIAL CO., CAL.—Fire of an unknown origin destroyed an entire business block in the heart of the city with a loss of \$100,000.

The fire started in the Imperial Hardware Company and spread rapidly to the surrounding buildings, eight of which, comprising the block, were leveled by the blaze.

SAN JOSE, SANTA CLARA CO., CAL.—Fire destroyed the Pacific Shingle Mill and Box Factory on Park avenue and threatened Mobley's Wood and Feed yard adjoining as well as a block of other buildings along the railway

tracks. The loss is estimated at \$50,000.

LOS ANGELES, CAL.—Fire destroyed the three-story Garden Hotel building, doing \$15,000 damage. Five stores on the ground floor were burned out.

GARAGES

SAN FRANCISCO.—Garage and shop, 1 story and base, brick, \$8,500. Architect, O. R. Thayer, 20 Montgomery street, S. F. Owners, J. B. Reite and E. V. Lacey. Location, south Bush east Van Ness avenue, covering an area of 364 by 120 feet. Concrete floor, metal window sash and frames, special tanks, machinery and patent store fronts. Exterior faced with cement plaster. Plans complete and work will be done by Day Labor.

GOVERNMENT WORK & SUPPLIES

Coast and Geodetic Survey, Vessel.

The following bids were received at the San Francisco suboffice of the U. S. coast and geodetic survey Aug. 25 in addition to those received at Washington on the same date, which appeared in our last issue:

Navy Yard, Mare Island, Cal., \$211,900; alternate proposal, \$209,300.

United Engineering Works, San Francisco, Cal., \$234,000; alternate proposal, \$226,000.

These bids are now under consideration at Washington, but no action has yet been taken in connection with awarding the contract. The lowest bid received was that of the U. S. navy yard at Portsmouth, N. H., their price being \$163,250.

Denver, Colo., Lighting Fixtures.

The contract for installing lighting fixtures in the U. S. post office at Denver, Colo., has been awarded to Horn & Brannen Manufacturing Co., Philadelphia, Pa., at \$9,867.

Pearl Harbor, H. T., Elevators.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for furnishing 3 hydropneumatic freight elevators installed, complete, at the naval station, Pearl Harbor, H. T.: Otis Elevator Co., Washington, D. C., \$8,484.

A. Kieckhefer Elevator Co., Milwaukee, Wis., \$8,600.

Elephant Butte Dam Spillway.

The chief engineer of the Reclamation Service has withdrawn the advertisement calling for bids to be opened September 2, for the cylinder gates and spillway. Elephant Butte dam, specifications No. F-5. Advertisement and specifications covering modification of design will soon be issued and new bids requested.

St. Ignace, Mont., Earth Work, Etc.

The following bids were received at the U. S. Reclamation Service, St. Ignace, Mont., for earth work and structures for Pablo laterals A, 31-A, 73-A and sublaterals:

Bid 1. Two Miracle Concrete Corporation, Kalspell, Mont.

2. Wilson Brothers, Polson, Mont.

3. Percy M. Ross, Polson, Mont.

4. J. E. Hilton, Billings, Mont.

Item 1. 25,000 cu yds class 1 excavation—Bid 1, 16.5c; 2, 16c; 3, 15.8c; 4, 15c.

2. 250 cu yds class 2 excavation—Bid 1, 36c; 2, 50c; 3, 25c; 4, 30c.

3. 50 cu yds class 3 excavation—1 bid 1, 1.2; 2, 50c; 3, 50c; 4, \$1.50.

4. 1,000 yds overhaul—Bid 1, \$20; 2, \$20; 3, \$20; 4, \$20.

5. 2,000 yds class 1 excavation—Bid 1, 50c; 2, 50c; 4, 35c.

6. 1,000 cu yds class 2 excavation—Bid 1, \$1; 2, \$1; 4, 60c.

7. 5 cu yds class 3 excavation—Bid 1, \$2; 2, \$1; 4, \$1.50.

8. 140 cu yds concrete in structures—Bid 1, \$13.50; 2, \$15; 4, \$15.90.

9. 8,400 lbs reinforcing steel—Bid 1, 3c; 2, 3.5c; 4, 2c.

10. 1,800 cu yds back filling—Bid 1, 20c; 2, 20c; 4, 25c.

11. 600 cu yds puddling—Bid 1, 60c; 2, 55c; 4, 40c.

12. 290 sq yds grouted paving—Bid 1, \$2; 2, \$2.10; 4, \$1.86.

13. 120 sq yds dry paving—Bid 1, \$1.75; 2, \$1.80; 3, \$1.10.

14. 74 lineal ft 12-in concrete pipe—Bid 1, 80c; 2, \$1; 3, 85c.

15. 30-in concrete pipe—Bid 1, \$4.50; 2, \$4; 3, \$3.61.

16. 160 sq yds rubble concrete paving—Bid 1, \$3; 2, \$4.15; 3, \$3.

17. 21,000 ft b. m. lumber in structures—Bid 1, \$22; 2, \$35; 4, \$28.

18. 5,500 cu yds class 1 excavation—Bid 1, \$50c; 3, 35c.

19. 300 cu yds class 2 excavation—Bid 1, \$1; 4, 60c.

20. 5 cu yds class 3 excavation—Bid 1, \$1; 4, \$1.50.

21. 420 cu yds concrete in structures—Bid 1, \$16; 4, \$15.90.

22. Placing 25,100 lbs reinforcing steel—Bid 1, 3c; 4, 2c.

23. Erecting 210 lbs of structural steel—Bid 1, 5c; 4, 4.5c.

24. 5,000 cu yds back filling—Bid 1, 20c; 2, 25c.

25. 1,200 cu yds puddling—Bid 1, \$60c; 4, 40c.

26. 840 sq yds grouted paving—Bid 1, \$2.75; 2, \$1.86.

27. 620 sq yds dry paving—Bid 1, \$2.50; 4, \$1.10.

28. 212 lineal ft 12-in concrete pipe—Bid 1, \$1; 4, 85c.

29. 354 lineal ft 18-in concrete pipe—Bid 1, \$1.30; 4, \$1.33.

30. 310 lineal ft 24-in concrete pipe—Bid 1, \$1.50; 4, \$1.50.

31. 1,500 sq yds rubble concrete paving—Bid 1, \$3; 4, \$3.

32. 53,000 ft b. m. lumber in structures—Bid 1, \$24; 4, \$27.

Alameda, Cal., Painting.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for painting plastering in the U. S. post office at Alameda, Cal.:

Jarvis & Co., St. Louis, Mo., \$381.

Alfred Olson & Co., Chicago, Ill., \$183.

D. J. Inman, Danville, Ill., \$123.

John Heritage & Son, Alameda, Cal., \$110.

Unlgned proposal, \$395.

Fairfax Bros., Geneva, N. Y., \$498.

J. P. Sullivan, Chicago, Ill., \$590.

Grohne Contracting Co., Joliet, Ill., \$628.

Isidore Kissel, San Francisco, Cal., \$650.

The Llewellyn Co., Oakland, Cal., \$720.

Charles Lamont, Alameda, Cal., \$999.
Gardner & Hayes, Alameda, Cal., \$1,500.

Treasury Department, Vault Shelving.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for installing metal vault shelving in the following post offices: Item 1, Greeley, Col.; New Rochelle, N. Y.:

The General Fireproofing Co., Washington, D. C., item 1, \$136.50.

Pearl Harbor, H. T., Officers' Quarters.

The chief of the bureau of yards and docks, Navy Department, Washington, D. C., has awarded the contract for constructing one four-story officers' harbor, H. T., to Bowling & Ingerson, quarters at the naval station, Pearl Honolulu, H. T., at \$19,899.

San Francisco, Wharf.

The contract for constructing an extension to the wharf at the naval training station, San Francisco, Cal., bids for which were opened at the bureau of yards and docks, Navy Department, Washington, D. C., August 21, has been awarded to Hyde, Harjes & Co., San Francisco, Cal., at \$9,341.

Berkeley, Cal., Light Fixtures.

The contract for installing lighting fixtures in the U. S. post office, Berkeley, Cal., has been awarded to Horn & Brannen Mfg. Co., Philadelphia, Pa., at \$2,140.35; time, October 31.

Yards and Docks.

Specifications for work under the bureau of yards and docks, Navy Department, have been furnished to the following firms in addition to those previously mentioned in these columns:

Storage Plants for Fuel Oil—Specification No. 2176, October 16.

Carnegie Steel Co., Pennsylvania Building, Philadelphia, Pa.

Schuttee & Koerting Co., Philadelphia, Pa.

Frank Shippe, 916 D street, Washington, D. C.

Paul B. Fenton, North American Building, Philadelphia, Pa.

L. C. Holmes, Ouray Building, Washington, D. C.

Edwin S. Denise, 17 South Hanover street, Baltimore, Md.

Day & Zimmerman, Philadelphia, Pa.

Nelson Valve Co., Philadelphia, Pa.

Norristown Magnesia and Asbestos Co., Norristown, Pa.

D'Oller Centrifugal Pump and Machine Co., Philadelphia, Pa.

Almivall & Co., Dominick and Clark streets, New York City.

Noland-Clifford Co., Newport News, Va.

John W. Danforth Co., 72 Elliott street, Buffalo, N. Y.

Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.

Elevators for Public Buildings.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for installing elevators in the U. S. post offices at Medford, Ore., and Amarillo, Texas:

Item 1, Medford, Ore. 2 Amarillo, Texas:

Otis Elevator Co., Washington, D. C., item 1, \$3,482, time May 11; 2, \$3,284, time April 12.

Llewellyn Iron Works, Los Angeles, Cal., item 1, \$5,475; 2, \$5,680; 120 days.

Kaestner & Hecht Co., Chicago, Ill., item 1, \$3,394, time May 11; 2, \$3,119, time April 12.

Transportation of Coal.

The following bids were received at the bureau of supplies and accounts, Navy Department, Washington, D. C., for transporting one cargo of coal from Hampton Roads to the naval coaling depots at Tiburon, Cal., San Diego or Puget Sound, Wash.:

Bowring & Co., all places, \$4.44.

W. R. Grace & Co., Washington, D. C., Tiburon, \$4.20.

Holder, Weir & Boyd, all places, \$4.50.

Whitney & Co., all places, \$4.25.

HALLS AND SOCIETY BUILDINGS

HEPPNER, ORE. — Lodge hall, 2 story and base, brick, \$20,000. Architect, C. C. Robbins, Ainsworth Bldg., Portland. Owners, Masonic Hall Association. Will cover an area of 50 by 100 feet and has been designed for stores on the first floor. Interior finish, pine and hardwood with hardwood floors, steam heat, metal window sash and frames and patent store fronts. Exterior faced with pressed brick. Plans being prepared.

MARSHFIELD, ORE. — Lodge hall and stores, 3 story and base, reinforced concrete, \$60,000. Architects, Hough-taling & Dougan, Henry Bldg., Portland. Owners, Elks' Hall Association. Will cover an area of 50 by 100 feet. First floor will contain two stores, upper floors lodge rooms, auditorium and social rooms. Interior finish pine and hardwood with hardwood floors. Steam heat, patent store fronts and metal window sash and frames. Exterior faced with pressed brick. Plans being prepared.

HOSPITALS.

SEATTLE, WASH. — Hospital and sanitarium group of Class A buildings, \$1,500,000. Architect, F. F. Travis, Raleigh Hotel, Seattle. Owners' names not given. What will eventually be a \$1,500,000 building venture is now projected by local and eastern capitalists associated with several prominent physicians, on 160 acres of ground between Seattle and Tacoma, on which initial payments have already been made. The first unit to cost \$800,000 will be erected at once, the plans being practically completed by Architect F. F. Travis, who will also handle the general contract on a percentage basis. The first unit will be five stories, 120 by 215 feet, of reinforced concrete construction, faced with brick and terra cotta. Additional units to be built from time to time will include a three-story, 60 by 95 foot building for nurses, wharf, natatorium, heating plant, power house and ice refrigerating building, one and two stories, 70 by 112 feet. All will be of reinforced concrete and brick. The sanitarium will be the largest in the west.

SELAM, FRESNO CO., CAL. — Hospital, 2 story and base, frame and plas-

ter. Cost not stated. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owner, Mrs. M. Christensen. Will contain two wards, operating room and dispensary. Interior finish pine and white enamel. Hardwood and tile floors. Central heating system. Exterior covered with cement plaster. Plans being prepared.

Contracts Awarded.

SUSANVILLE, LASSEN CO., CAL. — Hospital, 2 story and base, frame and plaster, \$20,000. Architect, George C. Sellon, Sacramento. Owners, Lassen County. Contractor, James L. McLaughlin, 244 Kearny street, S. F., general construction; Latourette, Fical & Co., Sacramento, plumbing. Contract prices not stated.

HOTELS.

PITTSBURG, CONTRA COSTA CO., CAL. — Hotel and garage, 3 story and base, brick. Cost not stated. Architect, A. W. Cornelius, Merchants' National Bank Bldg., S. F. Owners, S. Carusa & Bros. Location 4th and Railroad avenue, covering an area of 40 by 110 feet. Will contain garage and 40 guest rooms. Interior finish, pine and redwood. Steam heat, hot water system and special garage storage tanks. Bath rooms finished in tile. Exterior faced with pressed brick. Plans complete and figures being taken.

IRRIGATION PROJECTS

MODESTO, STANISLAUS CO., CAL. — Facing dam, \$10,000. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Plans and specifications prepared by Engineer Herrmann, of the Modesto Irrigation District, for a reinforced concrete facing for the upstream side of Dam No. 6 of the Dallas reservoir have been adopted by the directors. Bids have been ordered advertised.

RED BLUFF, TEHAMA CO., CAL. — Levee construction. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. At the last meeting of the Supervisors bids were ordered called for the construction of a levee across the head of a small slough on the Chipman ranch in Antelope Valley. The levee will be built of dirt and faced with concrete. Bids for the work will be opened on October 5th. Further information may be had from the Surveyor at Red Bluff.

MODESTO, STANISLAUS CO., CAL. — Repairing dam. Cost not stated. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. At the last meeting of the Modesto Irrigation District plans and specifications for the repairing of Dam No. 1 of the Dallas Reservoir were adopted and bids will be received until October 2nd. Further information may be had from Engineer Herrmann of the district.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL. — Reclamation work. Cost as follows. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. All bids received by the County Supervisors for protection work on the state highway leading from Nipomo to Santa Marina were rejected. The bids received were as follows. Mercereau Bridge and Construction Co., L. A., \$18,995, including royalty to River Current Control Co.;

Boardman Construction Co., L. A., \$10,903, excluding royalty; Charles W. Corbaley Co., L. A., \$11,000, excluding royalty; Mesmer & Rice, L. A., \$11,100, excluding royalty; The River Current Control Co., S. F., \$14,870. What further action will be taken by the Supervisors has not yet been made known.

Contracts Awarded

OAKDALE, STANISLAUS CO., CAL. — Irrigation pipe, \$11,114.35. Engineer, Chief Engineer, Oakdale. Owners, Oakdale Irrigation District. Contractors, Western Pipe and Steel Co., Richmond. Contract price, \$11,114.35.

LIBRARIES.

SAN FRANCISCO — Library, 4 story and base. Class A construction, \$1,200,000. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Larsen-Sampson Co. has requested the Library Board to withdraw their bid of \$397,500 for the general construction. This leaves Lindgren & Co., Menadnock Bldg., low at \$424,000. It will be two weeks before an award is made. Ralston Iron Works presented the low figure at \$35,900 for furnishing the metal book stacks. No award was made. A complete list of these bids will be found under the heading of San Francisco in this issue.

RAILROAD CONSTRUCTION AND EQUIPMENT.

YREKA, SISKIYOU CO., CAL. — Lumber bar road. Cost not stated. Engineer, none. Owners, McCloud River Lumber Co. The McCloud River Lumber Company will start immediately on the extending of its logging operations by building a new railroad spur six miles into the Pumice Mountain country, northeast of Bartle, which will be ready for use with the next season's operation.

Contracts Awarded

OAKLAND, CAL. — Railroad construction. Cost not stated. Engineer, City Engineer, Oakland. Owners, City of Oakland. Contractors, Blake Bros. Quarry Co., Richmond. Contract price not stated.

RESIDENCES.

SAN FRANCISCO — Residence, 2 story and base, frame, \$5,000. Architect, C. Coleman, Merchants' National Bank Bldg., S. F. Owner, M. Fisher, 683 Mission street, S. F. Location, Claremont Court. Will contain eight rooms, two baths and sleeping porch. Interior finished in pine and hardwood with some white enamel. Hardwood floors, furnace heat, open fire places, tile or brick mantels and automatic water heaters. Bath rooms will have tile floor and wainscot. Exterior covered with cement plaster on metal lath. Plans complete and work will be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, Emil Nelson, 244 Rivoli street, S. F. Location, east Bryant north Army. Will contain seven rooms and bath. Interior finish pine with some elm panels and hardwood

rooms. Furnace heat, open fire places and tile mantels. Automatic water heater. Tile floor and wainscot in bath room. Exterior covered with cement plaster on metal lath. Plans complete and work will be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$4,500. Architect, E. G. Bolles, 660 Market street, S. F. Owners, A. S. Born Building Co., 660 Market street. Location, Ashbury Heights. Will contain seven rooms, bath and sleeping porch. Interior finished in pine, southern gum and white enamel. Hardwood floor, furnace heat, open fire places, tile mantels and automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,500. Architect, C. M. Norgrove, 2220 Roosevelt avenue, Berkeley. Owner, A. G. Krazeeber. Location, Ashbury Heights. Will contain six rooms, two baths and large sun porch. Interior finished in southern red gum and pine. Hardwood floors, open fire place and automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

SAN FRANCISCO—Residence, 1 story and base, frame. Cost not stated. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner, Mr. Herring. Location, Angleside. Will contain six rooms. Interior finish pine with some hardwood floors. Besides the house, plans provide for extensive out buildings, kennels and stables. Open fire place, tile mantel. Exterior shingles. Plans complete and figures being taken.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,000. Architect, Joseph A. Leonard, 85 Cerritos avenue, S. F. Owners, Urban Realty Co. Location, east Borica north Urbano avenue. Will contain eight rooms, two baths, basement garage and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat, open fire places, tile and brick mantels and automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work will be done by Day Labor.

SAN FRANCISCO—Residence, 3 story and base, frame, \$6,500. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Mrs. John W. Proctor, 123 26th avenue. Location, south Scenic Way west 25th avenue. Will contain eight rooms, bath, garage and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat, open fire places, brick and tile mantels and hot water system. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans in hands of owner who will do the work by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residences, 2 story and base, frame, \$1,500. Architect, C. M. Norgrove, 2220 Roosevelt avenue, Berkeley. Owner, Dr. Hussey. Will contain five rooms, bath and three rooms for office and laboratory. Interior finish, pine and oak. Hardwood floors, open fire place and furnace heat. Automatic water heater and tile mantels. Bath room finished in tile. Exterior covered with

cement plaster on metal lath. Plans being prepared.

BURLINGAME, SAN MATEO CO., CAL.—Residence, 1 story and base, frame, \$3,500. Architect, Carl Gellfuss, 46 Kearny street, S. F. Owner's name withheld. Location, Burlingame. Will contain six rooms, bath and sleeping porch. Interior finished in pine and white enamel. Hardwood floors, open fire place, tile or brick mantel and automatic water heater. Bath room finished in tile. Exterior covered with shingles. Plans complete and figures being taken.

MARTINEZ, CONTRA COSTA CO., CAL.—Residence, 1½ story and base, frame, \$4,000. Architect, Carl Gellfuss, 46 Kearny street, S. F. Owner's name withheld. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, furnace heat, open fire places, brick and tile mantels and automatic water heater. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans prepared and figures to be called for shortly.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,000. Architect, Joseph A. Leonard, 85 Cerritos avenue, S. F. Owners, Urban Realty Co. Location, east Borica north of Urbano Drive. Will contain seven rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, tile bath rooms, automatic water heater, furnace heat and open fire places. Mantels tile or brick. Exterior shingles. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 3 story and base, frame, \$6,500. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Mrs. John W. Proctor, 123 26th avenue, S. F. Location, south Scenic Way west 25th avenue. Will contain ten rooms and bath. Interior finish pine and hardwood with hardwood floors. Furnace heat, open fire places and tile mantels. Bath room finished in tile. Exterior covered with cedar shingles. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, C. J. Pfirang, 5634 Claremont avenue, Oakland. Location, southeast corner 58th and Dover streets. Will contain five rooms and bath. Interior finish pine and redwood. Hardwood floors, open fire place and tile or brick mantel. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residences, 4, 1 story and base, frame, \$2,250 each. Architect, none. Owner, Charles Waltz, 926 East 17th avenue, Oakland. Locations, two houses on 10th avenue, two on 17th avenue. Will contain five rooms and bath. Interiors finished in pine with some elm panels and hardwood floors. Open fire places and tile and brick mantels. Automatic water heaters. Tile in bath rooms. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, Paul E. Woodburn, 3965 Greenwood avenue, Oakland. Location, east Vista south Everett. Will contain five

rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Automatic water heater and tile bath. Exterior cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$10,000. Architect, C. W. McCall, Central Bank Bldg., Oakland. Owner, Nat. M. Crossley, 1330 Washington street, Oakland. Location, corner Cleveland and Capell streets. Will contain eight rooms, three baths, sleeping porch and garage in rear. Interior finish pine, hardwood and white enamel. Hardwood floors throughout. Furnace heat, open fire places and hot water circulating system. Bath rooms finished in tile. Mantels tile and brick. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN JOSE, SANTA CLARA CO., CAL.—Residence, 1 story and base, frame, \$1,100. Architect, none. Owner, A. T. Foley, 8th near Virginia, San Jose. Location, 8th near Virginia. Will contain four rooms and bath. Interior finish pine. Open fire place and tile mantel. Exterior, rustic. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL.—Residence, 2 story and base, frame. Cost not stated. Architects, De Remer & Hewitt, Title Insurance Bldg., L. A. Owner, W. H. Baback Co. Location, Fremont Place. Will contain twelve rooms, three baths, sleeping porch and separate garage. Interior finish pine, hardwood and white enamel with hardwood floors throughout. Steam heat, open fire places and tile mantels. Tile wainscot and floors in baths. Hot water circulating system. Exterior cement plaster on metal lath. Plans being prepared.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$1,500. Architect, none. Owner, C. W. Olanie, 2227 62nd street, Oakland. Location, north Hearst east Lincoln. Will contain five rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Exterior covered with rustic. Plans complete and work will be done by Day Labor.

Contracts Awarded.

CHINO, SAN BERNARDINO CO., CAL.—Residence, 1 story and base, reinforced concrete, \$14,120. Architect, Myron Hunt, Hibernian Bldg., L. A. Owner, Mrs. E. M. Fowles, Pasadena. Contractors, Cresmer Mfg. Co., Riverside. Contract price, \$14,120.

COVINA, LOS ANGELES CO., CAL.—Residence, 2 story and base, frame, \$15,885. Architect, Robert M. Taylor, Marsh-Strong Bldg., L. A. Owner, Mrs. J. D. Seitz. Contractors, F. O. Engstrom Co., 5th and Seaton streets, L. A. Contract price, \$15,885.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Residence, 2 story and base, brick and frame, \$65,000. Architect, A. H. Stibolt, 1242 Valley Road, Casa Verdugo. Owner, E. B. Brison. Contractors, Hudson & Shaw, Central Bldg., L. A. Contract price, \$65,000.

SCHOOLS.

HUBBARD, ORE.—School, 2 story and base, hollow tile and brick, \$15,000. Architects, Brown & Forbes, Portland. Owners, City of Hubbard. Will contain six class rooms and assembly hall. Interior finish, pine with maple floors in class rooms. Steam heat and modern school plumbing. Exterior faced with cement plaster. Plans complete and figures being taken.

VANCOUVER, WASH.—School, 3 story and base, reinforced concrete and brick, \$275,000. Architects, Julius Zittel and D. Nichols, Spokane. Owners, State of Washington. Will cover an area of 76 by 130 feet. Construction fireproof with concrete walls, floors and hollow tile interior partitions. Interior finish pine and hardwood. Steam heat, hot water system, vacuum cleaning, elevator service and modern plumbing. Metal window sash and frames. Exterior faced with pressed brick. Plans complete and figures being taken by the State Board of Control at Olympia. Separate figures for general construction, heating, plumbing and electric work. Plans from State Board of Control.

FRESNO, FRESNO CO., CAL.—School, 1 story and base, brick, \$10,000. Architect, Ernest J. Kump, Lowell Bldg., Fresno. Owners, West Park School District. Will contain four class rooms and assembly hall. Interior finish pine with maple floors in class rooms. Central heating system. Exterior faced with pressed brick. Plans complete and figures being taken. Bids will be opened on September 20th.

LOS ANGELES, CAL.—School, 1 story and base, brick, \$20,000. Architects, Dennis & Hewitt, Fay Bldg., L. A. Owners, City of Los Angeles. Location, 2055 west 24th street, covering an area of 60 by 80 feet. Will contain eight rooms. Interior finish pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior faced with pressed brick. Plans complete and revised figures being taken. Bids open on September 23rd.

LOS ANGELES, CAL.—School, 1 story and base, brick, \$20,000. Architect, W. C. Pennell, Baker-Detwiler Bldg., L. A. Owners, City of Los Angeles. Location, Olive street at Vernon, covering an area of 68 by 80 feet. Will contain eight class rooms. Interior finish pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

STOCKTON, SAN JOAQUIN CO., CAL.—School, 1 story and base, frame, \$21,347. Architects, Stone & Wright, San Joaquin Bldg., Stockton. Owners, City of Stockton. Contractors, Daniels & Green, Stockton. Contract price, \$21,347.

SAN DIEGO, SAN DIEGO CO., CAL.—School, 1, 2 and 3 story and base, brick, \$79,740. Architect, Joseph B. De Remer, Title Insurance Bldg., L. A. Owners, City of San Diego. Contractors, Cramer Co., Riverside. Contract price, \$79,740.

LOS ANGELES, CAL.—School, 2 story and base, brick, \$26,097. Architects, Jeffery & Schaefer, Wesley Roberts Bldg., L. A. Owners, City of Los An-

geles. Contractors, G. W. Gilbreth & Co., Hollingsworth Bldg., L. A. Contract price, \$26,097.

YREKA, SISKIYOU CO., CAL.—School gymnasium, 2 story, frame, \$8,105. Architect, none. Owners, Siskiyou Union High School District. Contractor, D. M. Reid, Yreka. Contract price, \$8,105.

SEWERS, STREET WORK & WATER SYSTEMS.

OAKLAND, CAL.—Street work. Cost not stated. Engineer, City Engineer. Oakland. Owners, City of Oakland. Bids are now being taken for the improvement of 25th avenue from the southwest line of E-14th street to the southwest line of block 4 of the Kennedy Tract. The work includes sewers, conduit, curbs, gutters, etc. Bids close September 16th between 11 a. m. and 12 noon. Further information may be had from the City Engineer.

BERKELEY, ALAMEDA CO., CAL.—Street improvements. Costs as follow. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. The following appropriations have been asked for improvements to be made in the City of Berkeley: \$1,000 for the improvement of the south half of Allston Way fronting the corporation yard, a distance of 312 feet east from West street; \$1,000 for the improvement of the east half of Curtis street fronting the West Berkeley School; \$1,000 for the improvement of the north half of Dwight Way fronting the McKinley School, a distance of 150 feet; \$3,000 for the cost of construction of a concrete bridge over Cordones Creek on Walnut street north Berryman street; \$2,500 for the cost of labor and materials to construct a fire cistern in South Berkeley; \$5,000 for the necessary material to grade the new Corporation Yard, construct sheds, buildings and shops and for the equipment and machinery; \$6,000 for encasing in concrete the piles under the inner landing of the Municipal Wharf, \$3,800 for the purchase of an auto truck for the Street Department.

SAUSALITO, MARIN CO., CAL.—Street pavement. Cost not stated. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Plans and specifications for the improvement of Central avenue, North street and one block of West street from Richardson to Main were adopted at the last meeting of the Trustees. All to be asphaltic macadam 18 feet between curbs, except on North street from Fourth to West streets, and on West street from Main to Richardson street. Bids will soon be called.

SAUSALITO, MARIN CO., CAL.—Street work. Cost not stated. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. The Trustees will receive bids until September 20th at 8 p. m. for improvement work to be done in West and Valley streets. Plans and further information may be had from the Town Engineer at Sausalito. Bids for the above work were opened at the last meeting, but were rejected as they were too high. Leech & De Camp bid \$1,865 on the work, while the engineer's estimate was placed at \$1,350.

SAUSALITO, MARIN CO., CAL.—Sewer construction. Cost not stated.

Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. The Town Trustees at their last meeting adopted revised plans and specifications with estimated cost of the construction of sewer work in District F. Bids will soon be called for.

LINDSAY, TULARE CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Lindsay. Owners, City of Lindsay. At a special meeting the City Trustees adopted specifications providing for the improvement of Hermosa street with the following exceptions: A crushed rock base to be 4 inches instead of 3½ inches after being rolled, and a change in width from 16 to 18 feet, with the same 2-foot shoulder on each side, making practically a 22-foot pavement. The proposition of improving Honolulu street will be taken up by the Board at their next meeting. Bids on both projects will probably be called for immediately.

VISALIA, TULARE CO., CAL.—Sewer construction, \$65,000. Engineer, City Engineer, Visalia. Owners, City of Visalia. Bonds have been sold and bids are now being advertised for the construction of the new Visalia sewer system. The work will consist of a main sewer, outfall system and sewage disposal plant. Plans and specifications may be had from the City Engineer at Visalia.

WOODLAND, YOLO CO., CAL.—Street pavement, etc. Cost not stated. Engineer, City Engineer, Woodland. Owners, City of Woodland. Plans and specifications have been adopted for the improvement of Main, North College and East streets. Plans and specifications prepared by City Engineer Arnold provide for the construction of concrete curbs and gutters, and for the grading of roadways and constructing thereon a strip of asphaltic pavement 18 feet wide in the center, consisting of hydraulic concrete base 5 inches in thickness and an asphaltic wearing surface ½ inch thick, the rest of the road to be paved with 5½ inches of waterbound macadam. Bids will soon be called for.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving. Cost as follows. Engineer, City Engineer, Stockton. Owners, City of Stockton. Bids opened at the last meeting of the City Council for street paving show the following low bidders: North Commerce and North Center streets, W. H. Paul, Oakland, \$26,148.76; engineer's estimate, \$21,560.57. North El Dorado street, Clarke & Henery Co., Sacramento, \$20,267.82; engineer's estimate, \$23,384.20; and North Commerce and North Center streets north of Wyandotte, W. H. Paul, Oakland, \$21,969; engineer's estimate, \$25,942.06. Contracts will be awarded at the next meeting of the Council.

HOLLISTER, SAN BENITO CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Hollister. Owners, City of Hollister. A resolution of intention for the paving improvement of South street from San Benito to Powell street was passed at the last meeting of the Trustees. Bids on the work will soon be called.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. At the

last meeting of the Santa Cruz City Council the following action was taken on street work. The resolution for work on Bay street was adopted. It is for paving the street the full width and detached curbs where the work was not done. Plans and specifications were ordered for pavements, sewer, waterway and walks on King, Kirby, Peyton, Laurel and Miles streets, and the resolution was adopted. The Clerk was ordered to advertise for plans and specifications for resurfacing Walnut avenue.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, South San Francisco. Owners, City of South San Francisco. A resolution of intention providing for the improvement of Lux avenue, between Maple avenue and San Bruno road, was adopted; also for the improvement of Cypress avenue, between Linden and Lux avenues, by grading, laying asphaltic concrete pavement and the construction of concrete gutters, was adopted at the last meeting of the City Board of Trustees. Bids on the work will soon be called.

REDWOOD CITY, SAN MATEO CO., CAL.—Highway work, \$5,404.29. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Bids received by the County Supervisors for the macadamizing of the road from Moss Beach to Montara were rejected, as there were not sufficient funds available in the Fourth District. The following bids were received on the work: James Wilson, \$5,404.29; Barrett & Hilt, \$6,557.61.

SAN RAFAEL, MARIN CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, San Rafael. Owners, City of San Rafael. The City Council has instructed the City Manager to prepare plans and specifications for macadamizing portions of C street, D street, Clark street, Sixth street, Center street, Cljos street, San Rafael avenue and San Rafael and San Quentin Turnpike. Bids will be called on the approval of the plans.

MARTINEZ, CONTRA COSTA CO., CAL.—Water system, \$43,000. Engineer, City Engineer Elam C. Brown, Martinez. Owners, City of Martinez. According to the figures submitted to the City Trustees by City Engineer Elam C. Brown, it will cost \$43,000 to install a water system such as the Board of Trustees has under contemplation. This includes the reservoir and laying of suitable mains throughout the city. It is probable that a bond election will be called in the near future to vote funds to finance the cost of the system.

MARTINEZ, CONTRA COSTA CO., CAL.—Street paving. Cost not stated. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. The County Supervisors have issued a call for bids for the concrete paving of the main street in Danville in conformance with the plans now on file with the Clerk of the Board. Bids close on September 27th.

STOCKTON, SAN JOAQUIN CO., CAL.—Highway construction. Cost not stated. Engineer, County Surveyor, Stockton. Owners, San Joaquin County. The Board of Supervisors are considering plans and specifications in con-

nection with the Borden Highway. Estimates of the work are now being prepared and provide for the construction of a number of bridges and other minor details. Bids on the work will soon be called.

VISALIA, TULARE CO., CAL.—Sewer system, \$65,000. Engineer, City Engineer, Visalia. Owners, City of Visalia. Bids will be received by the Board of Trustees up to October 6, 1915, for the construction of an outfall sewer, disposal works and extensions to the present municipal sewer system in accordance with plans and specifications on file in the office of the City Engineer. Bonds in the sum of \$65,000 have been voted and sold for the work.

REDWOOD CITY, SAN MATEO CO., CAL.—Grading and paving. Cost not stated. Engineer, City Engineer, Redwood City. Owners, Redwood City. The City Engineer has been instructed to prepare plans and specifications for the grading and macadamizing of Brewster street from the county road to Arguello street, excepting the S. P. right of way. Plans were also ordered for the construction of sidewalks and curbs on the county road at the end of Main street and also at Whipple avenue.

VENTURA, VENTURA CO., CAL.—Paving. Cost not stated. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be received by the Board of Supervisors up to 11 a. m. or September 21, 1915, for paving the extensions to the Bardsdale bridge in accordance with plans and specifications on file in the office of the Board. The work will require about 23,340 square feet bituminous macadam pavement of an average thickness of three inches. Certified check for 10 per cent is required. J. B. McCloskey is the County Clerk.

SANTA ANA, ORANGE CO., CAL.—Boulevard construction. Cost not stated. Engineer, County Surveyor, Santa Ana. Owners, Orange County. Bids will be opened on September 21 for constructing and rebuilding Section No. 2 of the Irvine Boulevard. Plans can be secured from the County Clerk.

Contracts Awarded

CROCKETT, CONTRA COSTA CO., CAL.—Street improvement. Cost as follows. Engineer, Town Engineer, Crockett. Owners, Town of Crockett. Contractor, S. C. Rogers, Richmond. Contract price, curbs, \$30 per lineal foot, and gutters, \$12½ per square foot.

STOCKTON, SAN JOAQUIN CO., CAL.—Road improvements. Costs as follows. Engineer, County Surveyor, Stockton. Owners, San Joaquin County. The Board of Supervisors at their last meeting awarded the following contracts: Improvement of the Jack Tone road to C. W. McIntyre at \$11,000; improvement of the Murphy Ferry road to Cy Moreing & Sons at \$13,512; improvement of the West Lane and Weber roads to Cy Moreing & Sons at \$10,000.

SALINAS, MONTEREY CO., CAL.—Road construction, \$16,155.10. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractor, D. C. Howard, Redwood City. Contract price, \$16,155.10.

REDWOOD CITY, SAN MATEO CO., CAL.—Road improvement, \$1,964.02. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Contractor, James Wilson, Redwood City. Contract price, \$1,964.02.

SANTA ANA, ORANGE CO., CAL.—Road construction, \$14,659.80. Engineer, County Surveyor, Santa Ana. Owners, Orange County. Contractor, Oscar Ford, Riverside. Contract price, \$14,659.80.

RIVERSIDE, RIVERSIDE CO., CAL.—Street improvement. Cost as follows. Engineer, County Surveyor, Riverside. Owners, Riverside County. Contractors, Ishell Construction Co., San Diego, \$22,074.78, and Brashear-Burns, Los Angeles, \$10,998.

STORES AND OFFICES.

WATTS, LOS ANGELES CO., CAL.—Restaurant, 1 story, frame. Cost not stated. Architect, Fred Noonan, Brockman Bldg., L. A. Owner, A. Levy. Will contain an area of 134 by 153 feet and will contain besides a main dining room seating 700 people, kitchen, office, dance pavilion, rest rooms and lobby. Interior finish plaster board. Steam heat, modern plumbing and electric work. Exterior covered with rustle. Plans being prepared.

SEATTLE, WASH.—Stores, 1 story and base, brick, \$40,000. Architects, Charles Behb and Carl Gould, Denny Bldg., Seattle. Owners, Puget Sound Mill Co. Location, 3rd street between Madison and Spring, covering an area of 60 by 240 feet. Will contain eight modern stores. Patent store fronts, marble bases, hardwood and pine trim. Cement floor. Exterior faced with pressed brick and terra cotta. Plans complete add figures being taken.

SAN FRANCISCO—Store and office alterations, \$22,500. Architect, Charles Paff, Merchants' Exchange Bldg., S. F. Owners, Postal Realty Co. Location, south Pine east Sansome. Work will consist of extensive exterior and interior alterations to a 4-story building. Hardwood interior finish, plastering, electric work and plumbing. Exterior faced with matt glazed terra cotta. Segregated figures being taken.

SAN FRANCISCO—Saloon and stores, 2 story and base, brick, \$18,500. Architect, J. de la Montanya, Nevada Bank Bldg., Owner, Sara Jane de la Montanya. Location east Drumm near Washington, covering an area of 115 by 137½ feet. Interior finish pine. Cement first floor. Exterior faced with pressed brick. Plans complete and work to be done by Day Lahor.

SEALED PROPOSALS

PROPOSALS FOR EARTHWORK.

EARTHWORK, ETC.—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Malta, Mont., until 2 o'clock p. m. September 20, 1915, for earthwork and structures, Bowdoin Canal, Milk River project, involving about 215,000 cubic yards of excavation, 450 cubic yards of reinforced concrete, 420 square yards of dry paving, the placing of 30,000 pounds of steel reinforcement and the placing in wooden structures of about 12,000 feet, b. m., of lumber. The work is located about seven miles east of Malta, Mont., near Strater and Bowdoin

stations on the Great Northern Railway. For particulars address the United States Reclamation Service, Washington, D. C., Denver, Colo., or Malta, Mont. A. P. DAVIS, chief engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 966—Proposals for Wrought Iron or Steel Pipe, Cast Iron Pipe, Steel Boiler Tubes, Steel Tubing, Chain, Locomotive Driving Wheel Tires, Dust Guards for Journals, Grip Nuts, Twist Drills, Journal Jacks, Steel Hand Trucks, Platinum Wire, Air-brake Hose, Flax Packing, Putty Knives, Window Glass, Crash Toweling and Fish Oil.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. September 24, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 966) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. E. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Stable at Puget Sound" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m. September 25, 1915**, and then opened, for furnishing oil engines and compressors for Slip Point Light Station, Wash. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard, Bremerton, Wash. WM. M. SMITH, acting chief of bureau.

PROPOSALS FOR ENGINES.

ENGINES—Sealed proposals will be received at the office of the light house inspector, Portland, Ore., until **2 o'clock p. m. September 20, 1915**, and then opened, for furnishing oil engines and compressors for Slip Point Light Station, Wash. Blank proposals and particulars may be obtained by addressing the above office.

PROPOSALS FOR STRUCTURES.

STRUCTURES, ETC.—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Malta, Mont., until **2 o'clock p. m. September 20, 1915**, for structures, Nelson Reservoir, South Canal, Milk River project, involving about 25,000 cubic yards of excavation, 1,700 cubic yards of concrete, the placing of 15,900 pounds of steel reinforcement, the erection of 450 linear feet of metal flume and the placing in wooden structures of about 85,000 feet b. m. of lumber. The work is situated in the vicinity of Saco and Beaverton, Mont., on the Great Northern Railway. For particulars address the United States Reclamation Service, Washington, D. C., Denver, Colo., or Malta, Mont. A. P. DAVIS, chief engineer.

Proposal for Building.

BUILDING—Sealed proposals indorsed "Proposals for Marine Barracks, Mare Island," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m. September 25, 1915**, and then and there publicly opened, for a three-story and basement marine barracks building of reinforced concrete construction with steel rod trusses. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard, subject to a deposit of \$25 to insure their return, or may be seen at the navy yard, New York, N. Y. WM. M. SMITH, acting chief of bureau.

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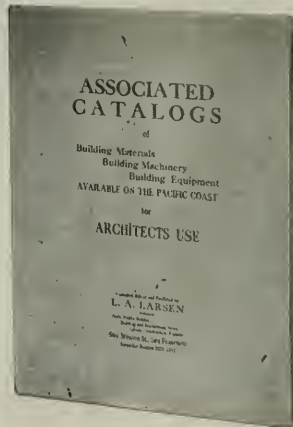


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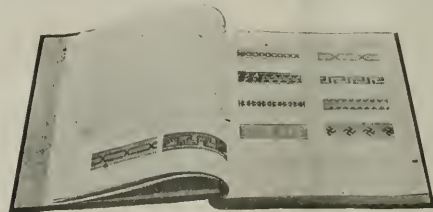


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three rooms. Interior finish pine with some elm panels and hardwood floors. Steam heat and hot water system, wall beds. Tile in bath rooms. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—4 story and base, reinforced concrete, \$40,000. San Francisco. Architect, none. Owner, J. M. Dempniak, 1658 Washington street, S. F. Location Hyde, between Sutter and Bush, covering an area of 25 by 92 feet. Owner is now taking figures for reinforced concrete work, steam heating, plumbing, grading and automatic elevator work. Can be seen at his home mornings between 8 and 19 o'clock. Phone Prospect 2063.

APARTMENT HOUSE AND STORES—2 story and base, frame. Cost not stated. San Francisco. Architect, none. Owner, Emile Fabish, 192 Valley street, S. F. Location, 31st avenue, Richmond district. Will contain two stores on first floor and two suites of three rooms each on upper floor. Interior finish pine with elm panels. Some hardwood floors. Open fire place and tile mantels. Bath rooms finished in tile. Wall beds. Exterior covered with shiplap. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, Joseph A. Leonard, 85 Cerritos avenue, S. F. Owners, Urban Realty Co. Location, east Borica north of Urbano Drive. Will contain seven rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, tile bath rooms, automatic water heater, furnace heat and open fire places. Mantels tile or brick. Exterior shingles. Plans complete and work to be done by Day Labor.

RESIDENCE—3 story and base, frame, \$6,500. San Francisco. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Mrs. John W. Proctor, 123 26th avenue, S. F. Location, south Scenic Way west 25th avenue. Will contain ten rooms and bath. Interior finish pine and hardwood with hardwood floors. Furnace heat, open fire places and tile mantels. Bath room finished in tile. Exterior covered with shingles. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$4,400. San Francisco. Architect, none. Owner, G. Lindner, 4029 26th street, S. F. Location, east Castro north 26th street, covering an area of 33 by 49 feet. Will contain four flats of four rooms each. Interior finish, pine with some hardwood floors, wall beds and tile baths. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work will be done by Day Labor.

STORE AND OFFICE ALTERATIONS—\$22,500. San Francisco. Architect, Charles Paff, Merchants' Exchange Bldg., S. F. Owners, Postal Realty Co. Location, south Pine east Sansome. Work will consist of extensive exterior and interior alterations to a four story building. Hardwood interior finish, plastering, electric work and plumbing. Exterior faced with matt glazed terra cotta. Segregated figures being taken.

SALOON AND STORES—2 story and base, brick, \$18,500. San Francisco. Architect, J. de la Montanya, Nevada Bank Bldg. Owner, Sara Jane de la Montanya. Location, east Drumm near Washington, covering an area of 115 by 137½ feet. Interior finish, pine. Cement first floor. Exterior faced with pressed brick. Plans complete and work to be done by Day Labor.

Contracts Awarded.

WAREHOUSE—2 story and base, reinforced concrete. Cost not stated. San Francisco. Architect, Charles Paff, Merchants' Exchange Bldg., S. F. Owners, American Marine Paint Co. Contractors, Pacific Construction Co., 16 California street, S. F. Contract price not stated.

More Library Bids Received By Board.

Bids on Metal Book Stacks Opened.
Larsen-Sampson Co. Request Withdrawal of Bid on General Construction.

At Tuesday's meeting of the Public Library Trustees Larsen-Sampson Co., low bidders on the general construction of the main library in the Civic Center, asked that their bid be withdrawn. The request was granted by the Library Board. Larsen-Sampson Company's bid was \$397,500 or \$26,500 below the second bid, that of Lindgren & Co., at \$424,000. Secretary Mullin of the Board states that it will be at least two weeks before an award is made.

Bids were opened at the same meeting for furnishing and installing metal book stacks and book lifts for the main library. Ralston Iron Works submitted the lowest figures at \$35,900. No award was made. Following is a complete list of the bids:

Metal Book Stacks, Etc.

Artistic Metal Constr. Co.	\$54,425
Library Bureau	39,497
Ralston Iron Works	35,900
Patridge Co.	39,990
General Fireproofing Co.	44,550
Smead & Co.	39,123

Bids Opened For Pier No. 35.

State Board of Harbor Commissioners Receive Bids for New Pier. Award to be Made Later.

Nineteen sets of figures were opened at Friday's session of the State Board of Harbor Commissioners for the construction of Pier No. 35; two bids for furnishing wood block pavement for Pier No. 22, and three bids for furnishing steel rolling doors for the same pier. Following is a complete list of the bids received:

Construction Pier No. 35.

M. P. Mortenson (a)	\$104,566; (b) \$118,000; (c) \$100,884; (d) \$113,437.
Isaac Penny (a)	\$92,882; (b) \$104,379; (c) \$88,818; (d) \$94,666.
Val Franz (a)	\$81,780; (b) \$93,173; (c) \$76,120; (d) \$81,968.

Lester H. Stock (a) \$81,997; (b) \$90,247; (c) \$75,210; (d) \$81,010.

P. L. Hansen (a) \$94,591; (b) \$—; (c) \$91,962; (d) \$—.

Lang & Bergstrom (a) \$85,500; (b) \$—; (c) \$78,500; (d) \$—.

W. A. Newsom (a) \$83,519; (b) \$—; (c) \$75,633; (d) \$82,265.

David Graham (a) \$82,240; (b) \$—; (c) \$77,270; (d) \$—.

W. D. Henderson (a) \$75,400; (b) \$—; (c) \$68,959; (d) \$—.

Masow & Morrison (a) \$82,786; (b) \$95,185; (c) \$79,614; (d) \$85,112.

Hearty Tibbitts Constr. Co. (a) \$74,722; (b) \$—; (c) \$69,272; (d) \$—.

C. E. Lambert (a) \$56,00; (b) \$95,000; (c) \$77,000; (d) \$88,000.

John Monk (a) \$73,392; (b) \$—; (c) \$70,573; (d) \$—.

Bert T. Owsley (a) \$88,143; (b) \$99,536; (c) \$82,870; (d) \$92,870.

J. D. Hannah (a) \$83,000; (b) \$97,000; (c) \$78,000; (d) \$85,000.

Pacific Constr. Co. (a) \$84,800; (b) \$—; (c) \$77,000; (d) \$—.

Ward & Goodwin (a) \$77,500; (b) \$85,763; (c) \$74,360; (d) \$79,842.

Strehlow, Freese & Petersen (a) \$86,500; (b) \$99,000; (c) \$79,990; (d) \$86,700.

Pringle, Dunne Co. (a) \$78,850; (b) \$89,625; (c) \$98,760; (d) \$105,000.

Wood Block Paving, Pier No. 22.

Rolph-Mills & Co. \$2,653.00

J. H. Baxter & Co. 2,194.50

Contract awarded to J. H. Baxter & Company.

Steel Rolling Doors. Same.

Kinner Mfg. Co. \$6,330

C. Jorgensen \$6,850

United States Steel Products Co. 6,993

Contract awarded Kinner Mfg. Co.

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Amt.
2562	Trobruck	Nelson	22600
2563	Farrell	Hamilton	14000
2564	Samuels	Samuels	5000
2565	McNear	Trammal	5000
2566	Risso	Cavaglieri	10000
2567	Zellerbach	MacDonald	2000
2568	Hornlein	Hornlein	4000
2569	City & Co.	Pac Contg Co	97771
2570	Same	Dyer	31350
2571	Same	Spargo	4400
2572	Same	Otis	5885
2573	Same	Lawson	14350
2574	Same	Rex	335
2575	Same	Atlas	3990
2576	S. P. Co.	Brumfield	400
2577	Odd Fellows	Brumfield	430
2578	Urban	Urban	3000
2579	Heyman	Heyman	1250
2580	Ryan	Ryan	500
2581	Urban	Urban	3000
2582	Urban	Urban	3000
2583	Kruse	Kruse	600
2584	Hoots	Owner	5000
2585	Edwards	Edwards	20000
2586	Mohr	Mallock	4950
2587	Hafstad	Meyer	1800
2588	Viola	Viola	400
2589	Vogel	Brueck	400
2590	Hind	Keneally	790
2591	Hubard	Oslund	750
2592	Trowbridge	Blethch	400
2593	Rednall	Rednall	400
2594	Nelson	Nelson	2700
2595	Hampton	Hampton	2000
2596	Thompson	Thompson	500
2597	Nelson	Nelson	2500
2598	Nelson	Nelson	2500
2599	Lind	Lind	2800
2600	Kitchner	Novely	400
2601	Fisher	Fisher	4750
2602	Schroder	Floodberg	13250
2603	Williams	Cox	3000
2604	Risso	Cavaglieri	11540
2605	Renard	McKenzie	1200
2606	Smith	Jones	7420
2607	Allred	Allred	1950
2608	Di Bona	Voljtrath	750
2609	Nolan	Nolan	500
2610	Douglas	Warnock	450

1	Glnty	Glnty	450
2	Cavey	Reedy	400
3	Borman	Borman	700
4	Borman	Borman	700
5	Vardrobe	Owner	500
6	McAlbee	Krolann	450
7	Blglio	Biggio	1200
8	Born	Born	400
9	Nordstrom	Woolfrey	1200
10	Basile	Miller	1700
11	Goodyear	Klyce	1500
12	Samuels	Muller	450
13	Gump	Brockhage	1000
14	Lutge	Munster	1900
15	Marowski	Grahn	1865
16	Schwaderer	Davis	1300
17	Erickson	Gilmour	2500
18	Conlan	Born	5000
19	Camponodica	Garibaldi	400
20	Wigwam	Wigwam	400
21	Nippon Dry Goods	Owner	500
22	Rhode	Simpson	500
23	Drinkhouse	Co-operative	950
24	Penhlow	Healing	450
25	Urban	Urban	5000
26	Harney	Moore	4000
27	Poppiano	Fraschina	1700

CONCRETE HOTEL

262)	E ST. ANNE PLACE 72 N Pine.		
Four-story and basement reinforced concrete hotel.			
Owner.....	Mary Trobuck 484 Eddy, San Francisco.		
Architect....	Chas. Paff, 905 Merchants' Exchange Bldg., S. F.		
Contractor....	Nelson & Bauer, Fulton & Gough, San Francisco.		
	COST, \$22,600		

FRAME APARTMENTS

563)	N FILBERT 87-6 W Polk.		
Three-story and basement frame (11) apartments.			
Owner.....	Chas. Farrell, 1616 Clay, San Francisco.		
Architect....	C. E. Gottschalk Phelan Bldg., San Francisco.		
Contractor....	Peter Hamilton, Russ Bldg., San Francisco.		
	COST, \$14,000		

ALTERATIONS

564)	NOS. 105-107 STOCKTON. Alter front, remove and replace stairs, etc., on store.		
Owner.....	D. Samuels Co., O'Farrell and Stockton, S. F.		
Architect....	Henry H. Meyer, Kohl Bldg., San Francisco.		
Day's work.	COST, \$5000		

ADDITION

565)	NE JACKSON AND LOCUST. Build two-story addition containing one dining room and lavatory on 1st floor and two rooms on 2nd floor with 2 baths (dwelling)		
Owner.....	Geo. W. McNear, Insurance Exchange Bldg., S. F.		
Architect....	Julia Morgan, Merchants' Exchange Bldg., S. F.		
Contractor....	E. Trammal, 5473 Kales Ave., San Francisco.		
	COST, \$5000		

FRAME TENEMENTS

566)	SE NOE AND NINETEENTH. Two-story and basement frame (8) tenements.		
Owner.....	M. J. Rizzo & G. Obertelli, 27 Hoff Ave., San Francisco		
Architect....	C. O. Clausen, Hearst Bldg., San Francisco.		
Contractor....	G. Cavaglieri, 593 Potrero Ave., San Francisco.		
	COST, \$10,000		

BRICK LOFTS AND STORES

567)	E SANSOME 89 S California.		
Owner.....	J. C. Zellerbach, Pine and Battery an Francisco.		

Architect....	MacDonald & MacDonald, 635 Holbrook Bldg., S. F.		
Contractor....	MacDonald & Kahn, Rialto Bldg., S. F.		
	COST, \$20,000		

NOTE.—Job started.

ALTERATIONS

52568)	NO. 775 SACRAMENTO. Build rooms in 2nd 3rd and 4th stories of four-story brick building (converting loft building into lodging house)		
Owner.....	H. A. Hornlein, 15 Stockton, San Francisco.		
Architect....	Havens & Toepke, 46 Kearny, San Francisco.		
Day's work.	COST, \$4000		

CLASS "A" DETENTION HOME,

52569)	N OTIS bet. Duboce and McCoppin. Nine-story and basement Class "A" Juvenile Detention Home.		
Owner.....	City and County of S. F.		
Architect....	L. C. Mullgardt, Chronicle Bldg., San Francisco.		
Contractor....	Pacific Contracting Co., 45 Kearny, San Francisco.		
	COST, \$97,771		

(2570) STRUCTURAL STEEL ON ABOVE.

Contractor....	Dyer Bros., 17th and Kansas, San Francisco.		
	COST, \$31,350		

(2571) EXCAVATION AND FOUNDATION ON ABOVE.

Contractor....	John Spargo, 240 Montgomery, San Francisco.		
	COST, \$4400		

(2572) ELEVATORS ON ABOVE.

Contractor....	Otis Elevator Co., Beach and Stockton, S. F.		
	COST, \$5855		

(2573) PLUMBING ON ABOVE.

Contractor....	H. Lawson, 344 4th Ave., San Francisco.		
	COST, \$14,350		

(2574) ELECTRIC WORK ON ABOVE

Contractor....	Rex Elec. Constr. Co., 1174 Sutter, San Francisco.		
	COST, \$3635		

(2575) HEATING AND VENTILATING ON ABOVE.

Contractor....	Atlas Heating & Ventilating Co., 4th & Freelon, San Francisco.		
	COST, \$3950		

Day's work. COST, \$2000

(2576) S MARKET 200 W New Montgomery. Electric sign.

Owner.....	Southern Pacific Co., Prem		
Architect....	None.		
Contractor....	Brumfield Elec. Sign Co., 18 7th, San Francisco.		
	COST, \$400		

ELECTRIC SIGN

(2577) SW SEVENTH AND MARKET. Electric sign.

Owner.....	Odd Fellows Hall Ass'n., Premises.		
Architect....	None.		
Contractor....	Brumfield Elec. Sign Co., 18 7th, San Francisco.		
	COST, \$430		

FRAME DWELLING

(2578) W ASHTON 200 S Pico. One-story and basement frame dwelling.

Owner.....	Urban Realty Imp. Co., 85 Cerritos Ave., S. F.		
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Architect....	None.		
Day's work.	COST, \$1000		

FRAME DWELLING

(2579) W FORTY-FIFTH AVE bet. N Lawton. One-story and basement frame dwelling.

Owner.....	Oscar Heyman & Bro., 711 Market, San Francisco		
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Architect....	None.		
Day's work.	COST, \$1075		

ALTERATIONS

(2580) NOS. 1211-1213 DIVISADERO. Alter front.

Owner.....	William Ryan, Promis		
Architect....	None.		
Day's work.	COST, \$500		

FRAME DWELLING

(2581) W ASHTON 250 S Pico. One-story and basement frame dwlg.

Owner.....	Urban Realty Imp. Co., 85 Cerritos Ave., S. F.		
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Architect....	Jos. A. Leonard, 85 Cerritos Ave., S. F.		
Day's work.	COST, \$5000		

FRAME DWELLING

(2582) W ASHTON 150 S Pico. One and one-half-story and basement frame dwelling.

Owner.....	Urban Realty Imp. Co., 85 Cerritos Ave., S. F.		
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Architect....	Jos. A. Leonard, 85 Cerritos Ave., S. F.		
Day's work.	COST, \$2000		

FRAME DWELLING

(2583) E NAPLES 50 S Brazil. One-story and basement frame dwlg.

Owner.....	John Kruse, 403 Naples, San Francisco.		
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Architect....	None.		
Day's work.	COST, \$600		

FRAME FLATS

(2584) W BELVEDESE 25 S Rivoli. Two-story and basement frame (4) flats.

Owner.....	John A. Hoots & Son, 251 Kearny, San Francisco.		
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Architect....	None.		
Day's work.	COST, \$5000		

"C" STORES AND COLLEGE

(2585) NE TURK AND VAN NESS. Two-story Class "C" stores and business college.

Owner.....	William Ede Co., 333 Kearny, San Francisco.		
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Architect....	Wm. Knowles, Hearst Bldg., San Francisco.		
Day's work.	COST, \$20,000		

FRAME DWELLING

(2586) NW TWENTIETH AVE AND Lake. All work for two-story and basement frame dwelling.

Owner.....	Henrietta P. Mohr.		
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Architect....	Milton Lichtenstein, 111 Ellis, San Francisco.		
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Contractor....	J. S. Malloch, 510 Pano, San Francisco.		
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Filed Sept. 4, '15. Dated Sept. 4, '15.			
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Frame up and sheathed.....	\$1200		
Brown coated.....	1250		
Completed and accepted.....	1250		
Usual 35 days.....	1250		
TOTAL COST.....	\$4950		

Bond, \$2175. Surety, Massachusetts			
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Bonding & Insurance Co. Limit, Dec. 7. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

(2587) S SEVILLE 170 W Cordova. One and one-half-story and basement frame dwelling.

Owner.....John J. Hafstad, 32 DeLong San Francisco.

Architect...None.

Contractor...Henry Meyer, 53 Walter, San Francisco.

COST, \$1800

FRAME DWELLING

(2588) E SAN JOSE opp. Sunnyside Ave. One-story frame dwelling.

Owner.....G. Viola, 431 Cortland, San Francisco.

Architect...None.

Day's work. COST, \$400

ALTERATIONS

(2589) NO. 2125 SAN BRUNO. Alter meat market.

Owner.....Mrs. Vogel, Premises.

Architect...None.

Contractor...M. M. Brueck, 600 Charter Oak, San Francisco.

COST, \$400

ALTERATIONS

(2590) NO. 2740 MISSION. Alter market.

Owner.....Hind Estate, 245 Montgomery, San Francisco.

Architect...None.

Contractor...H. J. Keneally, 457 Utah, San Francisco.

COST, \$790

ALTERATIONS

(2591) NO. 1031 MARKET. Alter meat market.

Owner.....C. E. Hubard, 79 Post, S. F. Architect...None.

Contractor...Ostlund & Johnson, 1901-5 Bryant, San Francisco.

COST, \$750

ALTERATIONS

(2592) NO. 2118 LYON. Raise roof and add porch.

Owner.....C. C. Trowbridge, Premises Architect...None.

Contractor...E. C. Bletch, 120 Burnett Ave., San Francisco.

COST, \$400

CONCRETE WALLS

(2593) E LYON 115 N Green. Construct concrete walls.

Owner.....W. W. Rednall, 2500 Filbert, San Francisco.

Architect...None.

Contractor...W. W. Rednall, 2500 Filbert, San Francisco.

COST, \$400

FRAME DWELLING

(2594) E BRYANT 112 N Army. Two-story and basement frame dwelling.

Owner.....Emil Nelson, 244 Rivoli, San Francisco.

Architect...None.

Day's work. COST, \$2700

CONCRETE GARAGE

(2595) S FREDERICK 25 W Downey. One-story concrete garage.

Owner.....A. P. Hampton, Cor. Frederick and Downey, S. F.

Architect...A. C. Hampton, Olympic Club, San Francisco.

ALTERATIONS

(2596) NO. 354 THIRTY-SECOND AVE.

Alter dwelling.

Owner.....J. M. Thompson, Premises. Architect...Geo. Streshly, 111 Naples, San Francisco.

Day's work.

COST, \$450

FRAME DWELLING

(2597) W TWENTY-SEVENTH AVE. 50 N Irving. Two-story and basement frame dwelling.

Owner.....P. Nelson, 30 Presidio Terrace, San Francisco.

Architect...None.

Day's work. COST, \$2500

FRAME DWELLING

(2598) W TWENTY-SEVENTH AVE. 75 N Irving. Two-story and basement frame dwelling.

Owner.....P. Nelson, 30 Presidio Terrace, San Francisco.

Architect...None.

Day's work. COST, \$2500

FRAME DWELLING

(2599) E NINETEENTH AVE 150 N Balboa. Two-story and basement frame dwelling.

Owner.....Oscar Lind, 4385 25th, S. F. Architect...None.

Day's work

COST, \$2800

ELECTRIC SIGN

(2600) NO. 160 POWELL. Electric sign.

Owner.....Kitchener-Schulian Co., 160 Powell, San Francisco.

Architect...None.

Contractor...Novelty Elec Co., 165 Eddy San Francisco.

COST, \$400

FRAME DWELLING

(2601) LOT 28 BLK 2983, Claremont Court. All work for two-story and basement frame dwelling.

Owner.....M. Fisher, 683 Mission, San Francisco.

Architect...D. C. Coleman, Merchants Bank Bldg., S. F.

Day's work.

COST, \$4750

BRICK STORES AND ROOMS

(2602) W STOCKTON 35 N Sacramento N 33-9xW 80. All work for three-story brick stores and rooms.

Owner.....H. Bruce Schroder, 1960 Pierce, San Francisco.

Architect...Earl B. Scott, Humboldt Bank Bldg., S. F.

Contractor...Chas. Floodberg, 2251 Van Ness Ave., San Francisco.

Filed Sept. 7, '15. Dated Sept. —, '15.

Walls up to 1st floor joists...\$1939.50

Roof on 2666.00

Brown coated 2666.00

Completed 2666.00

Usual 35 days 3312.50

TOTAL COST, \$13,250.00

Bond, \$6625. Surety, Hulda E. Floodberg. Limit, 120 days. Forfeit, \$5.

Plans and specifications filed.

RESIDENCE AND GARAGE

(2603) E FOURTH AVE 295-9½ S Parnassus Ave S 25xW 105. All work for two-story frame residence and one-story garage.

Owner.....Pauline Williams. Architect...None.

Contractor...Cox Bros., 1375 9th Ave., San Francisco.

Filed Sept. 7, '15. Dated Sept. 4, '15.

Upon execution of contract...\$350.00

Rough frame up 662.50

Brown coated 662.50

Completed 662.50

Usual 35 days 662.50

TOTAL COST, \$3000.00

Bond, none. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

FRAME APARTMENTS

(2604) SE NOE AND NINETEENTH S 3½x E 79. All work for two-story frame (8) apartments.

Owner.....M. J. Itisso and G. Obertelli 27 Hoff Ave., San Francisco.

Architect...C. O. Clausen, Hearst Bldg., San Francisco.

Contractor...G. Cavaglieri, 593 Potrero Ave., San Francisco.

Filed Sept. 7, '15. Dated —.

Frame up \$2875

Brown coated 2875

Completed and accepted 2875

Usual 35 days 2875

TOTAL COST, \$11,500

Bond, \$6000. Surety, D. Counihan and E. F. Suedlohn. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(2605) SW BRODERICK AND EDDY; No. 1059 Broderick. Alterations to frame residence.

Owner.....L. Renard, 1241 Ellis, S. F. Architect...Foulkes & Hildebrand (Associated), Crocker Bldg San Francisco.

Contractor...K. H. McKenzie & Co., 2783 McAllister, San Francisco.

Filed Sept. 7, '15. Dated Sept. 2, '15.

1st coat on interior and roof on garage \$450

Completed and accepted 450

Usual 35 days 300

TOTAL COST, \$1200

Bond, \$600. Surety, James H. Pinkerton. Limit, fast as practical. Forfeit, none. Plans and specifications filed.

FRAME FLATS

(2606) E SEVENTH AVE 392-5½ N Lake N 30x E 120. All work for two-story and basement frame flats.

Owner.....W. I. Smith, Burlingame. Architect...E. E. Young, 251 Kearny, San Francisco.

Contractor...Paul K. Jones, 180 Jessie, San Francisco.

Filed Sept. 7, '15. Dated Sept. 7, '15.

Frame up \$1855

Brown coated 1855

Completed and accepted 1855

Usual 35 days 1855

TOTAL COST, \$7420

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

(2607) N OCEAN 100 E Otsego. One-story and basement frame dwelling.

Owner.....C. S. Alired, 150 Onondago Ave., San Francisco.

Architect...None.

Day's work. COST, \$1950

FRAME DWELLING

(2608) N DE LONG 400 W San Jose. One-story and basement frame dwlg.

Owner.....F. Di Bona, 160 Sagamore, San Francisco.

Architect...None.

Contractor...G. D. Voljrath, 301 Nevada, San Francisco.

COST, \$750

ALTERATIONS

(2609) S DE WOLF 40 E Sickles. Alter and underpin dwelling.
Owner.....John Nolan, 25 De Wolf, San Francisco.
Architect...None.
Day's work. COST, \$500

ALTERATIONS

(2610) NO. 819 GERARD. Alter dwlg. Owner.....John Douglas, Premises. Architect...None.
Contractor..M. C. Warwick, 3930 Mission, San Francisco. COST, \$450

ADDITION

(2611) NO. 44 ALPINE TERRACE. Add and alter dwelling.
Owner.....L. V. Ginty, 1628 Fell, S. F. Architect...None.
Days work. COST, \$450

ALTERATIONS

(2612) NO. 26 ST. MARY'S AVE. Add and alter dwelling.
Owner.....Mrs. M. Caveney, Premises. Architect...None.
Contractor..Wm. M. Reedy, 157 Bronte, San Francisco. COST, \$400

FRAME DWELLING

(2613) E SAN BRUNO 275 N Thornton. One-story frame dwelling.
Owner.....A. Borman, 2495 San Bruno, San Francisco.
Architect...None.
Day's work. COST, \$700

FRAME DWELLING

(2614) W CHARTER OAK 200 N Thornton. One-story and basement frame dwelling.
Owner.....A. Borman, 2495 San Bruno, San Francisco.
Architect...None.
Day's work. COST, \$700

BRICK FOUNDATION, ETC

(2615) S CLEMENTINA 300 W Fourth. Boiler and brick foundation.
Owner.....The Wardrobe Laundry Co., Premises.
Architect...None.
Day's work. COST, \$500

FRAME DWELLING

(2616) S MATEO 75 W Laidley. One-story frame dwelling.
Owner.....Mary and Norman McAlbee
Architect...None.
Contractor..G. Korlann, 630 Natoma, San Francisco. COST, \$450

ADDITION

(2617) NO. 4739 MISSION. Add frame flat.
Owner.....E. Biggio.
Architect...None.
Day's work. COST, \$1200

FRAME RESIDENCE

(2618) ON 1/2 LOT 24, Ashbury Terrace Three-story and basement frame residence.
Owner.....S. A. Born Bldg. Co., 660 Market, San Francisco.
Architect...E. G. Bolles, 660 Market, San Francisco.
Day's work. COST, \$4000

FRAME DWELLING

(2619) N NEY 225 W Congdon. One-

story and basement frame dwlg.

Owner.....Axel G. Nordstrom.
Architect...None.
Contractor..John E. Woolfrey, 3163 21st San Francisco. COST, \$1200

FRAME DWELLING

(2620) W CAPITAL 150 N Grafton. One-story and basement frame dwlg. Owner.....G. D. Basile, 160 Colgate, San Francisco.
Architect...None.
Contractor..Wm. Miller, 49 Park, S. F. COST, \$1700

REPAIRS

(2621) NE COLERIDGE & VIRGINIA. Repair fire damage.
Owner.....Goodyear Rubber Co., 2nd and Market, S. F.
Architect...None.
Contractor..H. A. Klyce, Sheldon Bldg., San Francisco. COST, \$1500

ALTERATIONS

(2622) NO. 129 GRANT AVE. Alter front.
Owner.....Samuels, Premises.
Architect...None.
Contractor..Muller Mfg. Co., 3246 20th, San Francisco. COST, \$450

ALTERATIONS

(2623) NO. 2559 GREEN. Alter and add to dwelling.
Owner.....Mabel B. Gump, Premises.
Architect...Milton Lichtenstein, 111 Ellis, San Francisco.
Contractor..Brockhage, Foley & Green, 1326 Natoma, S. F. COST, \$1000

REPAIRS

(2624) SW EIGHTEENTH & TREAT AVE. Repair fire damage.
Owner.....R. Lutge, 1081 Capp, S. F.
Architect...None.
Contractor..Munster & Bornholdt, 1530 Broderick, San Francisco. COST, \$1900

FRAME DWELLING

(2625) E JUPITER 100 S Thornton. One-story and basement frame dwlg. Owner.....John Marowski, 27 Jupiter, San Francisco.
Architect...None.
Contractor..Wm. H. Grahm, 2840 Bryant, San Francisco. COST, \$1865

ALTERATIONS

(2626) NE KIRKHAM AND 12TH AVE. Alter and add to dwelling.
Owner.....Carl Schwaderer, 754 Kirkham, San Francisco.
Architect...None.
Contractor..Robt. E. Davis, 1475 12th Ave., San Francisco. COST, \$1300

FRAME FLATS

(2627) W RAUSCH 275 S Howard. All work for two-story and basement frame flats.
Owner.....Andrew and Elizabeth Erickson, 52 Rausch, S. F.
Architect...None.
Contractor..George D. Gilmour, 2376 Howard, San Francisco.
Filed Sept. 8, '15. Dated Sept. 7, '15.

Frame up \$625
Brown coated 625
Completed and accepted 625
Usual 35 days 625
TOTAL COST, \$2500

Bond, \$1250. Sureties, Wm. Gilmour and Margaret Gilmour. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

(2625) LOT "D" S. A. BORN BLDG. CO. Resbvn of subdivision No. 1 of Sea-cliff. All work for two-story and basement frame residence.
Owner.....F. J. S. Conlan, 533 10th Ave., San Francisco.
Architect...Edw. G. Bolles, 660 Market San Francisco.
Contractor..S. A. Born Bldg. Co., 660 Market, San Francisco.
Filed Sept. 8, '15. Dated Sept. 7, '15.
Upon signing contract \$1500
Frame up 1500
Plastered 1500
Completed and accepted 1500
Usual 35 days 2000
TOTAL COST, \$8000
Bond, limit, forfeit, none. Plans and specifications filed.

FRAME DWELLING

(2629) N BERLIN 125 W Ordway. One-story frame dwelling.
Owner.....Enrico Campodonico.
Architect...None.
Contractor..V. Garibaldi, 14 Crane, San Francisco. COST, \$400

FRAME SHED

(2630) NO. 2555 MISSION (rear). Erect frame shed.
Owner.....Wigwam Amusement Co., Premises.
Architect...None.
Day's work. COST, \$400

ALTERATIONS

(2631) NO. 132 SANSOME. Alter offices.
Owner.....Nippon Dry Goods Co., 132 Sansome, San Francisco.
Architect...None.
Day's work. COST, \$300

ALTERATIONS

2632 NO. 917 PLYMOUTH. Alter and add to dwelling.
Owner.....F. Rhode, Premises.
Architect...None.
Contractor..A. B. Simpson, 1702 Broderick, San Francisco. COST, \$500

FRAME DWELLING


(2633) N ALMA 70 W Shrader One-story frame dwelling.
Owner.....F. R. Drinkhouse, Ross, Marin Co., Cal.
Architect...None.
Contractor..Co-operative Bldg. Co. COST, \$950

ALTERATIONS

(2634) NO. 3409 SACRAMENTO. Alter store.
Owner.....A. Penhluou, Premises.
Architect...None.
Contractor..Geo. Healing, 110 Jessie, San Francisco. COST, \$450

FRAME DWELLING

(2635) E BORICA 250 N Urbano Drive Two-story and basement frame dwlg.



Structural Steel Contractors

Works at
**HARRISON ST.,
bet. 8th & 9th
San Francisco**

Telephone Market 337

Owner.....Urban Really Improvement Co., 85 Cerritos Ave., San Francisco.
Architect.....Joseph A. Leonard, 85 Cerritos Ave., S. F.
Day's work.....COST, \$5000

FRAME DWELLING
(2636) E THIRD AVE 229 N Fulton E 120xN 25. All work except lighting fixtures and wall paper for two-story and basement frame residence.
Owner.....Fannie M. Harney, 32 Montgomery, S. F.
Architect.....G. E. McCrea, 1st National Bank Bldg., Oakland.
Contractor.....Moore & Watson, 213 Sharon Bldg., S. F.
Filed Sept. 10, '15. Dated Sept. 7, '15.
Foundation in.....\$620
Rough frame up.....\$45
Ready for plaster.....\$45
Completed and accepted.....\$45
Usual 35 days.....\$45
TOTAL COST, \$4000
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME APARTMENTS
(2637) N UNION 65 W Leavenworth W 48xN 137-6. Painting, tinting, enameling, paper hanging, varnishing and polishing for three-story frame (12) apartments.
Owner.....S. Poppiano, 622 Broadway San Francisco.
Architect.....L. Traverso, 854 Union, San Francisco.
Contractor.....A. Franchina (Manager Demarta Painting Co.), 6 Imperial Ave., S. F.
Filed Sept. 10, '15. Dated Sept. 2, '15.
1st coat on outside and inside wood work stained.....\$425
2nd coat on outside and 1st coat varnish on inside.....425
Completed and accepted.....425
Usual 35 days.....425
TOTAL COST, \$1700
Bond, none. Limit, without delay. Forfeit, none. Plans and specifications none.

LEASE.

Sept. 8, 1915—E VALENCIA 55 N 25th N 75 E 117-6 S 65 SW 15 W 103-0 1/2 except ptn occupied by Marble Works and Yard. Mrs S E Meacham, Jewett W Adam & Johathan J Hillman to C A Anderson. 5 years. \$80 per month.
Sept. 8, 1915—NOS. 637-639 CLEMENT. Mrs J R Billington. 5 years. \$3000.
Sept. 8, 1915—NO. 647 CLEMENT. J R and Annie M Billington to Overton M Saul. 4 years. \$1290.
Sept. 8, 1915 NO. 633 CLEMENT. J R and Annie Billington to Frank Dittmann. 4 years. \$3270.

Sept. 7, 1915—S CHESTNUT 179-3 E Pierce E 27xS 137-6. Paolo Grasso to T W McClenahan and J W Clarke. 5 years. \$2400.

NOTICE OF NON-RESPONSIBILITY.

Sept. 8, 1915—LOTS 41 TO 45 BLK 12 Flint Tract Hd Ass'n; Lots 35 to 41 Blk 14 Flint Trct Hd. Ass'n. Jos Friedlander and R R Hillman as to improvements on leased property..

COMPLETION NOTICES

San Francisco

RECORDED **ACCEPTED**
Sept. 1, 1915—GOLDEN GATE PARK. California Academy of Sciences to C J Hillard Co. Aug. 30; Wm F Wilson, Aug. 30; Lydon & Bickel.....Aug. 30, 1915
Sept. 1, 1915—NO. 2970 BROADWAY. Sidney M Ehrman to Fred L Preston.....Aug. 31, 1915
Sept. 1, 1915—SW FIFTEENTH AVE and Irving S 100xW 27-6. William Koenig to whom it may concern.....Aug. 31, 1915
Sept. 1, 1915—E SEVENTEENTH AVE 200 N California H C Keenan to whom it may concern.....Sept. 1, 1915
Sept. 1, 1915—E SEVENTEENTH AVE 175 N California. H C Keenan to whom it may concern.....Sept. 1, 1915
Sept. 1, 1915—NE NINETEENTH & Lexington Ave E 30xN 55. Henry Sipple to J Witzelsburger.....Aug. 31, 1915
Sept. 1, 1915—N DORLAND 85 E Dolores E 25xN 65. Amendes T and Dora A Gantner to John J Binet Co.....Aug. 27, 1915
Sept. 1, 1915—E EUREKA 258-6 S 18th E 125xS 27-6. Clement H Shepard to Petterson & Persson.....Aug. 31, 1915
Sept. 1, 1915—W NINTH AVE 150 N Anza bet. Geary and Anza. Daniel J Mahoney to Nelson Bros.....Aug. 31, 1915
Sept. 1, 1915—E DEVISADERO 75 N Fell N 25xE 112-6. Edward E Young to whom it may concern.....Aug. 30, 1915
Sept. 2, 1915—SW CALIFORNIA AND Powell 206 on California by 275 on Powell; L H Sly to whom it may concern.....Aug. 26, 1915
Sept. 2, 1915—S GEARY 107-6 E 19th Ave 25x100. E Coleman to whom it may concern.....Aug. 30, 1915
Sept. 2, 1915—N POST 164-3 E Hyde N 137-6xE 75-9. W H Bowen to whom it may concern.....Aug. 30, 1915
Sept. 2, 1915—N GEARY 57-6 E 9th Ave E 25xN 100. Thomas Kilkenny to whom it may concern.....Sept. 2, 1915
Sept. 2, 1915—S CARL 182-6 W Stanyan W 25xS 137-6. Josepha

Prosek to Frank Prosek.....Sept 1, 1915
Sept. 2, 1915—LOT 42 Lyon & Hoag's Sub Lincoln Manor. E A Janssen to whom it may concern.....Sept. 2, 1915
Sept. 2, 1915—LOT 27-6x120 on S Magnolia Ave 27-6 E Webster Adolfo Puccinelli to Liebert & Martinelli.....Sept. 1, 1915
Sept. 3, 1915—GOLDEN GATE PARK. California Academy of Sciences to M G West Co.....Aug. 26, 1915
Sept. 3, 1915—S GEARY 57-6 E 25th Ave E 25xS 100. Kate Magee to J Maloney & W J Harbin.....Sept 2, '15
Sept. 3, 1915—LOT 13 BLK 22 Crocker Amazon Tract. Thos J and Mary J Harley to O E Evans & Co.....Aug. 28, 1915
Sept. 4, 1915—S TURK 57-6 E Polk E 30x 85. Jesse D Hannah to whom it may concern.....Aug. 31 1915
Sept. 7, 1915—S PACIFIC 25 E Leavenworth E 25xS 68-6. Daniele Giannini to V Filippis.....Sept. 7, 1915
Sept. 7, 1915—E MOSCOW 200 S Russia Ave S 25x100. Henry and Rosa Woods to G H Browning.....Sept. 3, 1915
Sept. 7, 1915—W MISSION 105 N 20th N 25xW 90. Mrs Sadie R McNally to L A Rose.....Sept. 7, 1915
Sept. 7, 1915—WEST END OF W A Blk 749 bounded by Fillmore, Eddy, Webster and Turk. Realty & Rebuilding Co to G P W Jensen and Stranahan & Son.....Sept. 2, 1915
Sept. 7, 1915—NO. 351 THIRD AVE. George A Stolte to R L Tarrant.....Sept. 4, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

Sept. 1, 1915—W NINETEENTH AVE 100 S Lake S 27-6xW 120. James Cantley vs S F Bldg Co.....\$36
Sept. 2, 1915—N OAK 157-6 W Van Ness Ave W 89-9 N 120 E 68-9 S 40 E 21 S 80. Taylor & Co vs Ward & Goodwin and Young Men's Institute Hall Ass'n.....\$525.55
Sept. 2, 1915—E SEVENTEENTH AV 57-4 1/2 S Rivera S 25xE 134. George N Zaro vs E R & Bessie G Hayden.....\$308
Sept. 3, 1915—S McALLISTER 106-3 W Lyon W 25xS 137-6. The Mission Marble Works vs California Co-operative Real Estate Co and L Helbing.....\$43
Sept. 7, 1915—S FELL 100 E Steiner E 27-6xS 137-6. Vulcan Iron Wks vs Isabella J Murray.....\$118
Sept. 4, 1915—SW CALIFORNIA AND Powell S 275xW 206-3. Uhl Bros vs L H Sly.....\$6488.41
Sept. 4, 1915—S EIGHTEENTH 25 W Clover W 25xS 121. E Cox vs George W Hall.....\$195
Sept. 8, 1915—SW CALIFORNIA AND Powell S 275xW 206-3. Holbrook, Merrill & Stetson, \$777.08; Pacific Hardware & Steel Co, \$7073.02; W P Fuller & Co, \$13,851.32; Wilson Bros & Co, \$6865.17; John A Roebbling Sons Co, \$5253.24; Standard Portland Cement Cpn, \$9985.66 vs L H Sly.....\$76.72
Sept. 8, 1915—S McALLISTER 106-3 W Lyon W 25xS 137-6. W P Fuller & Co vs L Helbing and California Co-operative Real Est Co.....\$76.72
Sept. 10, 1915—E THIRTY-FIRST

Ave 127 N Clement E 170xN 23; E 31st Ave 100 N Clement. The New Era Marble & Concrete Co vs Mrs J Wilcox and Mrs E M Adair and T Roy Murray.....\$114.34
Sept. 10, 1915—SW CALIFORNIA & Powell S 137xW 206-3. R W Kinney Co vs L H Sly.....\$19,395.91

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

RECORDED **AMOUNT**
to John M Boscus.....
Sept. 3, 1915—SW EMBARCADERO (East) 137-6 SE Howard SE 45-10x SW 137-6. Pope & Talbot, Theo S Hoin, Habenight & Howlett, Chas J Morrison, H L Petersen, Pacific Mfg Co, Globe Elec Works, Mallott & Peterson, Horace J Perazzi, Magnier Bros and J E Connell to Joseph Magnier and Theo S Hoin.....
Sept. 3, 1915—W THIRTY-THIRD AV 75 S Lincoln Way W 90xS 25. Arden Plaster Co to E L Rolls and Pacific Plastering Co.....
Sept. 1, 1915—E SCOTT 60 N Green N 50xE 137-6. Arden Plaster Co to Maude James Graves, W C Graves and Jesse Steere.....
Sept. 1, 1915—W RIVERA 40 E 15th Ave E 35 N 96-6 W 35 S 98-3. Redwood Manufacturers Co to Wilhelmmina Taylor, A J and J E Luncey..

OAKLAND AND ALAMEDA COUNTY.

RESIDENCE — 2 story and base, frame, \$4,500. Berkeley, Alameda Co. Cal. Architect, C. M. Norgrove, 2220 Roosevelt avenue, Berkeley. Owner, Dr. Hussey. Will contain five rooms, bath and three rooms for office and laboratory. Interior finish, pine and elm. Hardwood floors, open fire place and furnace heat. Automatic water heater and tile mantel. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans being prepared.

APARTMENT HOUSE AND STORES — 2 story and base, frame, \$7,000. Fruitvale, Alameda Co. Cal. Architect, C. M. Norgrove, 2220 Roosevelt avenue, Berkeley. Owner's name withheld. Will contain two stores on first floor and three suites of four rooms on upper floor. Interior finish pine. Hot water system and wall beds. Tile in bath rooms. Patent store fronts. Exterior covered with rustic and shiplap. Plans being prepared.

STREET WORK—Cost not stated. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. Bids are now being taken for the improvement of 25th avenue from the southwest line of E-14th street to the southwest line of block 4 of the Kennedy Tract. The work includes sewers, conduit, curbs, gutters, etc. Bids close September 16th between 11 a. m. and 12 noon. Further information may be had from the City Engineer.

STREET IMPROVEMENTS—Costs as follow. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. The following appropriations have been asked for improvements to be made in the City of Berkeley: \$1,000 for the improvement of the south half of Allison Way fronting the Corporation Yard, a distance of 312 feet east from

West street; \$1,000 for the improvement of the east half of Curtis street, fronting the West Berkeley School; \$1,000 for the improvement of the north half of Dwight Way, fronting the McKinley School, a distance of 150 feet; \$3,000 for the cost of construction of a concrete bridge over Cordones Creek on Walnut street north Berryman street; \$2,500 for the cost of labor and material to construct a fire cistern in South Berkeley; \$5,000 for the necessary material to grade the new Corporation Yard, construct sheds, buildings and shops and for the equipment and machinery; \$6,000 for encasing in concrete the piles under the inner landing of the Municipal Wharf; \$8,800 for the purchase of an auto truck for the Street Department.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, C. J. Pfrang, 5684 Claremont avenue, Oakland. Location, southeast corner 55th and Dover streets. Will contain five rooms and bath. Interior finish pine and redwood. Hardwood floors, open fire place and tile or brick mantel. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCES — 4, 1 story and base, frame, \$2,500 each. Oakland, Cal. Architect, none. Owner, Charles Waltz, 926 East 17th avenue, Oakland. Locations, two houses on 10th avenue, two on 17th avenue. Will contain five rooms and bath. Interiors finished in pine with some elm panels and hardwood floors. Open fire places and tile and brick mantels. Automatic water heaters. Tile in bath rooms. Interiors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, Paul E. Woodburn, 2965 Greenwood avenue, Oakland. Location, east Vista south Everett. Will contain five rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Automatic water heater and tile bath. Exterior cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$10,000. Oakland, Cal. Architect, C. W. McCall, Central Bank Bldg., Oakland. Owner, Nat M. Crossley, 1330 Washington street, Oakland. Location, corner of Cleveland and Capell streets. Will contain eight rooms, three baths, sleeping porch and garage in rear. Interior finish pine, hardwood and white enamel. Hardwood floors throughout. Furnace heat, open fire places and hot water circulating system. Bath rooms finished in tile. Mantels tile and brick. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE — 1½ story and base, frame, \$1,500. Oakland, Cal. Architect, none. Owner, C. W. Olanic, 2227 62nd street, Oakland. Location, north Hearst east Lincoln. Will contain five rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and the mantel. Exterior covered with rustic. Plans complete and work will be done by Day Labor.

Contracts Awarded.

COURT HOUSE ADDITION Brick, \$13,760. Oakland, Cal. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, Alameda County. Contractor, Lester H. Stock, 12 Geary street, S. F. Contract price, \$13,760. A complete list of the bids will be found under the heading of Oakland and Alameda County.

RAILROAD CONSTRUCTION — Cost not stated. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. Contractors, Blake Bros. Quarry Co, Richmond. Contract price not stated.

Building Contracts Awarded

Oakland

No.	Owner.	Contractor	Amt.
1783	Alameda Co	Henderson	1495
1784	Same	Westerlund	12984
1785	Same	Fraunder	2549
1786	Same	Schnehy	6592
1787	Same	Yager	2828
1788	Same	Parafine	443
1789	Same	Maxwell	1247
1790	Same	Zelinsky	2856
1791	Same	Snook	3964
1792	Same	Rex	1698
1793	Same	Dinen	2549
1794	Same	Doell	3281
1795	Same	Otis	1990
1796	McWilliams	Owner	4850
1798	Mulford	Mulford	1000
1799	Fabing	Fabing	3000
1800	Pleitner	Pleitner	2000
1801	Rahm	Rogers	500
1802	Silverstein	Cook	500
1803	Thomas	Thomas	2500
1805	Edwards	Burton	4500
1807	Heavey	Scott	4529
1808	Shredded Wheat	Keefe	5390
1809	McGrade	Bell	1200
1810	Gurdch	Gurdch	2000
1811	Pattillo	Nichols	1905
1812	Willford	Owner	500
1813	Coit	Coit	1200
1817	Michels	Jouke	2600
1818	Newsom	Anderson	5750
1819	Stivers	Griffin	2200
1814	Goldstein	Goldstein	400
1815	Ricardo	Constock	400
1816	Rhoda	Chase	8000
1825	Woodburn	Woodburn	2500
1826	Waltz	Waltz	2250
1827	Same	Same	2250
1828	Same	Same	2250
1829	Same	Same	2250
1830	Pfrang	Pfrang	2500
1831	Pacific	Steiger	12060

CONCRETE DETENTION HOME

(1783) N EIGHTEENTH, bet. Union & Poplar, Oakland. Carpentry work for two-story reinforced concrete Detention Home.

Owner.....Alameda County.

Architect.....Henry H. Meyers, Kohl Bldg., San Francisco.

Contractor.....W. D. Henderson, Monadnock Bldg., S. F.

COST, \$11,963

NOTE.—Work is started.

(1784) EXCAVATING & CONCRETE work on above.

Contractor.....J. V. Westerlund, 320 Market, San Francisco.

COST, \$12,981

(1785) ORNAMENTAL IRON WORK on above.

Contractor.....C. Fraunder, 335 8th, Oakland.

COST, \$2540

(1786) PLASTERING WORK ON above.

Contractor.....Schnehy, Hostawser & Pedgill, 6th and Jackson, Oakland.

COST, \$6492

(1786) SHEET METAL WORK ON ABOVE.
Contractor...Yager Sheet Metal Works,
3309 Chestnut, Oakland.
COST, \$2838

(1788) ROOFING ON ABOVE.
Contractor...Paraffine Paint Co., 34 1st,
San Francisco.
COST, \$443

(1789) HARDWARE ON ABOVE.
Contractor...Maxwell Hardware Co.,
1320 Washington, Oakland.
COST, \$1247

(1790) PAINTING ON ABOVE.
Contractor...J. Zelinsky & Son, 364
Eddy, San Francisco.
COST, \$2856

(1791) PLUMBING ON ABOVE.
Contractor...Frederick W. Snook Co.,
596 Clay, San Francisco.
COST, \$3964

(1792) ELECTRIC WORK ON ABOVE.
Contractor...Rex Elec. Constr. Co., 1174
Sutter, San Francisco.
COST, \$1698

(1793) MARBLE WORK ON ABOVE.
Contractor...Dineen Marble Wks, 40th
and Grove, Oakland.
COST, \$2549

(1794) HEATING AND VENTILATING
on above.
Contractor...Carl T. Doell, 427 21st,
Oakland.
COST, \$3284

(1795) ELEVATOR WORK ON ABOVE.
Contractor...Otis Elevator Co., Bay &
Stockton, S. F.
COST, \$1990

ALTERATIONS

(1796) NO. 238 E-TWELFTH, Oakland
Alter 2-story dwelling into apart-
ments.
Owner.....Ada B. McWilliams, 5845
Ayala, Oakland.
Architect...None.
Contractor...R. A. McWilliams, 5845
Ayala, Oakland.
COST, \$4850

DWELLING

(1798) N HOLLOWAY 110 W 57th
Ave., Oakland. One and one half-
story 4-room dwelling.
Owner.....C. E. Mulfred, 1923 57th
Ave., Oakland.
Architect...None.
Day's work. COST, \$1000

DWELLING

(1799) W ELLIOT 60 N E-32nd, Oak-
land. One-story 5-room dwelling.
Owner.....E. N. Pabing, 3515 13th
Ave., Oakland.
Architect...None.
Day's work. COST, \$3000

DWELLING

(1800) S FAIRVIEW AVE 50 E
Baker, Oakland. One-story 5-room
dwelling.
Owner.....H. A. Pleitner, 954 Fruit-
vale Ave., Oakland.
Architect...None.
Day's work. COST, \$2000

Addition To Alameda County Court House.

Lester H. Stock Awarded Contract For Two-story Addition to County Court House at Oakland.

Bids were opened by the Alameda County Board of Supervisors Tuesday afternoon for the construction of the proposed addition of two stories to the present court house. Lester H. Stock of San Francisco presented the lowest bid and was officially awarded the contract. Plans for the work were prepared by Architect Henry Meyers, Kohl Bldg. Following is complete list of the bids.

Court House Addition

	Formal Bid	No. 1	No. 2	No. 3	No. 4	No. 5	Alternates
Baccus & Kennedy	\$16,320.00	\$496.00	\$ 735.00	.....	.....	.....	\$1,926.00
Bergren, L. G. & Son.....	15,840.00	489.00	633.00	\$ 2.00	\$20.00	.....	1,642.00
Christensen Bros.	14,987.00	450.00	600.00	.....	.....	.....	1,770.00
Field, Fred H.	19,940.00	350.00	1080.00	.....	.....	.....	1,600.00
Church, D. O., Co.....	15,500.00	440.00	360.00	.....	.....	.....	1,848.00
Hayes, Wm. W.....	16,885.00	346.00	620.00	.....	.....	.....	1,748.00
Hannah, J. S.	15,997.00	358.50	672.00	.....	.....	.....	1,213.00
Henderson, W. D.....	16,887.00	540.00	495.00	.....	.....	.....	2,000.00
Pringle Dunn & Co.....	14,945.00	525.00	700.00	.....	.....	.....	1,559.00
Robinson, Frank	15,390.00	354.00	759.00	.....	.....	.....	1,416.00
Sheridan, Phil	14,878.00	510.00	500.00	10.00	.....	.....	1,085.00
Stock, L. H.	13,760.00	483.00	532.00	12.00	.....	.....	1,056.00
Stockholm & Allyn.....	16,477.00	375.00	650.00	.....	.....	.....	1,587.00
Schnebley, Hostrowser & Pedgrift	16,485.00	550.00	529.00	10.00	.....	.....	1,792.00
Wendering, J.	14,890.00	375.00	600.00	10.00	.....	.....	1,750.00
Leiter, E. T. & Sons.....	15,987.00	358.00	600.00	16.00	.....	.....	1,750.00
Munson Bros.	16,078.00	220.00	838.00	.....	.....	.....	1,700.00
Morton Mathew	15,987.00	435.00	625.00	.....	.....	.....	1,567.00

ALTERATIONS

(1801) NO. 380 SIXTY-SECOND, Oak-
land. Alterations.
Owner.....Mr. Rahm, Premises.
Architect...None.
Contractor...Chas. Rogers, 5426 Boyd
Ave., Oakland.
COST, \$500

ALTERATIONS

(1802) NO. 722½ LINDEN, Oakland.
Alterations.
Owner.....H. Silverstein, 680 Broad-
way, Oakland.
Architect...None.
Contractor...L. P. Cook, 543 30th, Okd.
COST, \$500

DWELLING

(1803) N LAVERNE 210 W 55th Ave.,
Oakland. One-story 5-room dwelling
Owner.....J. S. Thomas, 2495 62nd
Ave., Oakland.
Architect...None.
Day's work. C ST, \$2500

DWELLING

(1805) S ARIMO 200 E Wall Vista,
Oakland. Two-story 7-room dwlg.

Owner.....Ella B. Edwards, Oakland
Architect...C. B. Barton, 1st Saving
Bank Bldg., Oakland.
Contractor...C. B. Barton, 1st Saving
Bank Bldg., Oakland.
COST, \$480

DWELLING

(1807) N WALLA VISTA AVE bein
Lot 8 Blk "E" Sbdyn East Piedmon
Heights Extension, Oakland. A
work for two-story dwelling.
Owner.....E. H. Heavey, Wayne Apt
and J. H. Fitzmaurice, 71
15th, Oakland.
Architect...None.

Contractor...G. A. Scott, 685 23rd, Ok
Filed Sept. 4, '15. Dated Sept. 4, '15.
Frame up\$113
1st coat plaster inside and out. 113
Completed113
Usual 35 days.....113

TOTAL COST, \$452

Bond, \$2300. Sureties, G. A. Scott, Carl
Doell and C. M. MacGregor. Limit, 9
days. Forfeit, \$150. Plans and speci-
fications filed.

PAINTING FACTORY

(1808) LOTS 8, 9, 10, 11, 12, 13 to an

inclusive 24 and ptm Lots 4, 5, 6, 7, 25, 26, 27, 28, 29, 30, 31 and 32 Map R. J. McMullins Sbdvn Blk 576, Oakland. Painting for shredded wheat factory. Owner.....Pacific Coast Shredded Wheat Co.
 Architect...Lewis Hobart, Crocker Bldg., San Francisco.
 Engineer...J. S. Bogart, Mills Bldg., San Francisco.
 Contractor...J. H. Keefe Co., 1442 Bush, San Francisco.

Filed Sept. 4, '15. Dated Aug. 13, '15.
 Monthly installments of..... 75%
 TOTAL COST, \$5390
 Bond, \$2695. Surety, Fidelity & Deposit Co. of Maryland, Limit, 60 working days after Feb. 1, 1916. Forfeited, \$10. Specifications only filed.

ALTERATIONS
 (1899) NO. 805 FIFTY-NINTH, Oakland. Alterations.
 Owner.....Mrs. S. C. McGrade, Prem.
 Architect...None
 Contractor...Geo. C. Bell.
 COST, \$1200

DWELLING
 (1810) S E-THIRTY-FOURTH 50 W 13th Ave., Oakland. One-story six-room dwelling.
 Owner.....Rose Dora Gurach, 2933 25th Ave., Oakland.
 Architect...None.
 Day's work. COST, \$2000

STORE AND FLATS
 (1811) NW THIRTY-EIGHTH AVE & Santa Rita, Oakland. Two-story store and flats.
 Owner.....J. F. Pattillo, 2022 Franklin, Oakland.
 Architect...None.
 Contractor...C. S. Nichols, 1719 Castro, Oakland.
 COST, \$1905

ALTERATIONS
 (1812) NO. 5266 MANILA AVE., Oakland. Alterations.
 Owner.....Minnie Williford, Prem.
 Architect...None.
 Contractor...Howard Williford, 5266 Manila Ave., Oakland.
 COST, \$300

(1813) E WEBSTER 100 N 41st, Oakland. One-story 4-room dwelling.
 Owner.....C. B. Colt, 306 14th, Okd.
 Architect...None.
 Contractor...Roger Colt, 306 14th, Okd.
 COST, \$1200

FRAME COTTAGE
 (1817) E WEST 30 S Thirly-fifth, Oakland. All work for one-story and basement frame cottage.
 Owner.....John Michels, 3434 West, Oakland.
 Architect...None.
 Contractor...Victor Jonke, 708 Nevada, Oakland.

Filed Sept. 8, '15. Dated Sept. 8, '15.
 Frame up\$650
 1st coat plaster completed..... 650
 Accepted 650
 Usual 35 days..... 650
 TOTAL COST, \$2600
 Bond, none. Limit, 60 days. Forfeited, none. Plans and specifications filed.

FRAME RESIDENCE
 (1815) N 209.21 S ASHMOUNT AVE E Clarendon Crescent, Oakland. All

work for one-story and basement frame residence.
 Owner.....Sidney B. Nesom, Nevada Bank Bldg., San Francisco.
 Architect...Sidney B. Nesom, Nevada Bank Bldg., San Francisco.
 Contractor...Anderson & Larson, Okd.
 Filed Sept. 8, '15. Dated Aug. 30, '15.
 Frame up\$1437
 2nd coat plaster on..... 1437
 Completed and accepted..... 1437
 Usual 35 days..... 1439
 TOTAL COST, \$3750
 Bond, none. Limit, 80 days. Forfeited, \$5. Plans and specifications filed.

FRAME BUILDING
 (1819) LOT OF LAND W SIDE OF Mountain Road leading from Mission San Jose to Niles known as the Stivers Ranch. Excavating, carpenter work, painting, plumbing, rough and finish hardware, plastering, electric wiring, brick work, tiling and reinforced roof for one-story frame building.
 Owner.....Samuel Stivers, Irvington.
 Architect...None.
 Contractor...F. C. Griffin & Sons, Irvington.
 Filed Sept. 8, '15. Dated Sept. 8, '15.
 Frame up\$550
 Brown coated 550
 Completed and accepted..... 550
 Usual 35 days..... 550
 TOTAL COST, \$2200
 Bond, none. Limit, 75 days. Forfeited, \$5. Plans and specifications filed.

REPAIRS
 (1814) NO. 703 CASTRO, Oakland. Fire repairs.
 Owner.....M. Goldstein, Premises.
 Architect...None.
 Day's work. COST, \$400

ALTERATIONS
 (1815) NO. 333 CHESTER, Oakland. Alterations.
 Owner.....Frank Ricardo, Premises.
 Architect...None.
 Contractor...G. M. Comstock, 1104 Peralta, Oakland.
 COST, \$400

STORES AND OFFICES
 (1816) NE FRUITVALE & HOPKINS, Oakland. Two-story 20-room stores and offices.
 Owner.....Albert Rhoda, Diamond and Fruitvale, Oakland.
 Architect...None.
 Contractor...A. B. Chase, 1521 79th Ave., Oakland.
 COST, \$5000

DWELLING
 (1825) E VISTA 100 S Everett, Oakland. One-story 5-room dwelling.
 Owner.....Paul E. Woodburn, 3965 Greenwood Ave., Oakland.
 Architect...None.
 Day's work. COST, \$2500

DWELLING
 (1826) W TENTH AVE 45 N E-17th, Oakland. One-story 5-room dwlg.
 Owner.....Chas. Waltz, 926 E-17th, Oakland.
 Architect...None.
 Day's work. COST, \$2250

DWELLING
 (1827) W TENTH AVE 75 N E-17th, Oakland. One-story 6-room dwlg.
 Owner.....Chas. Waltz, 926 E-17th, Oakland.

Architect...None.
 Day's work. COST, \$2250

DWELLING
 (1828) N E-SEVENTEENTH 72 W 10th Ave., Oakland. One-story five-room dwelling.
 Owner.....Chas. Waltz, 926 E-17th, Oakland.
 Architect...None.
 Day's work. COST, \$2250

DWELLING
 (1829) NW E-SEVENTEENTH AND Tenth Ave., Oakland. One-story 5-room dwelling.
 Owner.....Chas. Waltz, 926 E-17th, Oakland.
 Architect...None.
 Day's work. COST, \$2250

DWELLING
 (1830) SE FIFTY-EIGHTH & DOVER, Oakland. One-story 5-room dwlg.
 Owner.....C. J. Pfang, 5654 Claremont, Oakland.
 Architect...None.
 Day's work. COST, \$2500

TERRA COTTA WORK
 (1831) LOTS 8, 9, 10, 11 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 and Ptn Lots 4, 5, 6, 7, 25, 26, 27, 28, 29, 30, 31 and 32 Map I. J. McMullen's Sbdvn Blk 576, Oakland. Terra cotta work for four-story reinforced concrete factory.
 Owner.....Pacific Coast Shredded Wheat Co.
 Architect...Lewis P. Hobart, Crocker Bldg., San Francisco.
 Contractor...Steiger Terra Cotta & Pottery Works, Mills Bldg., S. F.
 Filed Sept. 10, '15. Dated Aug. 25, '15.
 Monthly installments of..... 75%
 TOTAL COST, \$12,060
 Bond, none. Limit, 120 days after Sept. —, 1915. Forfeited, \$10 per day. Specifications only filed.

**Building Contracts Awarded
 Berkeley.**

No.	Owner	Contractor	Amt.
1797	Bell	Osborn	500
1801	Bonner	Bonner	2400
1806	Haiman	Johanson	1900
1820	Grant	Franklin	1500
1821	Jalo	Jalo	1200
1822	Rossi	Bregante	900
1823	Peake	Engelson	3750
1824	Hodson	Taylor	1200

ALTERATIONS
 (1795) SE VINCENTE & TUNNELL Road, Berkeley. Alterations.
 Owner.....E. J. Bell, Premises.
 Architect...None.
 Contractor...A. Osborn, 1224 Spruce, Berkeley.
 COST, \$500

DWELLING
 (1804) S RUSSELL 160 W Regent, Berkeley. Two-story 7-room dwelling.
 Owner.....N. F. Bonner, 2848 Telegraph Ave., Berkeley.
 Architect...None.
 Contractor...A. W. Bonner, 2848 Telegraph Ave., Berkeley.
 COST, \$2400

DWELLING
 (1806) S BURNETTE 152 W Maple, Berkeley. One-story 5-room dwlg.
 Owner.....M. Haiman, 1517 7th, Bkly.
 Architect...None.

Contractor...Gustaf Johanson, 1811
Rose, Berkeley.
COST, \$1900

DWELLING

(1820) W ROOSEVELT 200 S Bancroft, Berkeley. One-story 4-room dwelling.
Owner.....Mrs. Augusta Grant, 2326 Roosevelt, Berkeley.
Architect.....None.
Contractor...John Franklin, 2324 Roosevelt, Berkeley.
COST, \$1500

DWELLING

(1821) W TENTH 366 N Snyder Ave., Berkeley. One-story 4-room dwlg.
Owner.....Victor Jaló, 2333 10th, Berkeley.
Architect...J. Makkonen, 405 Van Ness Ave., San Francisco.
Day's work. COST, \$1200

DWELLING

(1822) S DERBY 40 W Grant, Berkeley. One-story 4-room dwelling.
Owner.....G. Rossi, 463 10th, Okd.
Architect.....None.
Contractor...D. Bregante, 5346 Vallejo, San Francisco.
COST, \$900

DWELLING

(1823) W CLAREMONT 200 S Alcatraz, Berkeley. Two-story 3-room dwelling.
Owner.....F. R. Peake Co., 2227 University Ave., Berkeley.
Architect...W. Brodina.
Contractor...Chris Engleson, 562 39th, Oakland.
COST, \$3750

DWELLING

(1824) N RUSSELL 97 W McGee, Berkeley. One-story 4-room dwelling.
Owner.....Mrs. G. L. Hodson, 2810 Kelsey, Berkeley.
Architect.....None.
Contractor...W. Carl Taylor, 1616 Russell, Berkeley.
COST, \$1200

NOTICE OF NON-RESPONSIBILITY.

Sept. 8, 1915—LOT 24 Map Cunha & Walker Ppty, Brooklyn Tp., Ala Co. A L Stone as to improvements on leased property.....

ASSIGNMENT OF LIENS**ALAMEDA COUNTY.**

Sept. 2, 1915—S 10 FEET LOT 137 and 30 feet Lot 136, Map Fruitvale Addition. Thomas Arada to J M Arada\$107.70
Sept. 2, 1915—S 10 FEET LOT 137 and 30 feet Lot 136 Map Fruitvale Addition Tract, Okd. E M Johnson to J M Arada\$45

COMPLETION NOTICES**ALAMEDA COUNTY.**

RECORDED AMOUNT
Sept. 3, 1915—LOTS 53 AND 54 Resbryn Blks 10 and 11 Ilwaco Tract and ptn Lots 1 and 25 Blk "A" Map

No. 1, Highland Terrace, Oakland.
Laniel F O'Connell to C L Strum, Aug. 27, 1915; T D Sexton.....
.....Aug. 17, 1915

Sept. 4, 1915—NW THIRTEENTH AV and Bay View Ave 25x100, Okd. John Kringlen to whom it may concern.....Sept. 3, 1915
Sept. 4, 1915—N 12½ FEET LOT 18 and all Lot 19 Blk 2 Map Solano Ave Terrace, Alameda Co. Mark T Cole to whom it may concern.....
.....Sept. 4, 1915

Sept. 7, 1915—E EVERETT 125 S Vista, Oakland. M Glass to whom it may concern.....Sept. 7, 1915
Sept. 7, 1915—LOT 121 and Ptn Lot 120 lying E of line parallel to E line Lot 120 and distant 23 W therefrom, Map Crocker Highlands, Okd. Alta Piedmont Land Co to H P Nelson.....Sept. 4, 1915

Sept. 7, 1915—N HEARST AVE 175 E Le Roy Ave E 100x144.65, Bkly. California Gamma Phi Kappa Psi House Ass'n to Kidder & McCullough.....Aug. 31, 1915
Sept. 8, 1915—LOT fronting 55 feet W side Chestnut by uniform depth W 100xS 30, Okd. Thos Brain to Thos Rutherford.....Aug. 30, 1915

Sept. 8, 1915—E RICHMOND AVE about 205 S 29th, Okd. Lou Norris to Justus Norris.....Sept. 8, 1915
Sept. 8, 1915—SE DIVISION AND Hempel Lot 45 Blk "H" 4th Ave Terrace, Okd. C M MacGregor to whom it may concern...Sept. 4, 1915

Sept. 8, 1915—N E-THIRTY-7TH 230 E Linwood; Lot 5 Blk 2, 4th Ave Terrace, Okd. C M MacGregor to whom it may concern...Sept. 4, 1915
Sept. 8, 1915—N FOOTHILL BLVD 500 W 90th Ave, Okd. California Properties Ltd to John M Bartlett.....Sept. 8, 1915

Sept. 8, 1915—E STANTON 100 S Santa Clara Ave, Ala. Jos Lewis to A G Vollman.....Sept. 8, 1915
Sept. 10, 1915—NO. 1720 HOPKINS, Oakland. German Old People Home of San Francisco to Eugene A Mantell.....Sept. 10, 1915

Sept. 10, 1915—S FORTY-FIFTH 81 W from E line Salome W 28xS 100, Emeryville. Erich Werling to whom it may concern...Aug. 28, 1915
Sept. 10, 1915—LOT 84 BLK 6 Map Key Route Terrace No. 3, Bkly. L A Wetzel to whom it may concern.....Sept. 8, 1915

Sept. 10, 1915—LOT 12 BLK 1 Map Thousand Oaks Court, Okd. Walter A Shaw to Riddell Bldg Service Corp.....Sept. 4, 1915

LIENS FILED**ALAMEDA COUNTY.**

Sept. 4, 1915—LOT 18 BLK 16 Regents Park No. 4, Albany. F W Foss Co vs Carl Ericsson.....\$179.29
Sept. 4, 1915—LOT 47 except S 29 and 19-100 feet Map of Piedmont Manor, Piedmont. A P Bartley vs W H Creighton.....\$30.45
Sept. 8 1915—LOT 47 except S 29.19 feet Map Piedmont Manor, Okd. Oakland Lime & Cement Co vs J H Kirk and Walter H Creighton...\$107.85

RELEASE OF LIENS**ALAMEDA COUNTY.**

RECORDED AMOUNT
Aug. 27, 1915—E INTO ST, 151.17 N Marin avenue, being lot 16, block 19, Map Northbrae, Berkeley. Sunset Lumber Co., \$206.84; J. L. Cavasso, \$41.93; Pacific Mfg. Co., \$202.40; Sunset Hardware Co., \$33.80; Western Roofing Co., \$69.50; Art Fixture Co., \$50; R. H. McBeth, \$60; E. Lightfoot, \$33; T. Neal and L. E. Dobon, \$10; L. E. Dobon Co., \$95.50; James Cahill & Co., \$14; Union Floor Co. \$65; to J. G. and W. N. Taylor
Sept. 3, 1915—S 10 FEET LOT 137 and N 30 feet Lot 136 Map Fruitvale Addition Tract, Okd. John P Maxwell to Oakland Homes Corporation\$56.91
Sept. 3, 1915—N 40 FEET LOT 137, Map Fruitvale Addition Tract, Okd. John P Maxwell to Oakland Homes Corporation\$44.30
Sept. 3, 1915—E 20 FEET LOT 136 and W 20 feet Lot 137, Fruitvale Addition Tract, Okd. Pacific Mfg Co to Oakland Homes Corporation...\$121.90
Sept. 3, 1915—E 30 FEET LOT 137 and W 10 feet Lot 138, Map Fruitvale Addition Tract, Okd. John P Maxwell to Oakland Homes Corporation\$103.40
Sept. 3, 1915—N BARTLETT 320 E Deering E 40xN 125, Okd. Panama Lumber & Mill Co to Oakland Homes Corporation\$454.57
Sept. 3, 1915—N BARTLETT 360 E Deering E 40xN 125, Okd. Panama Lumber & Mill Co to Oakland Homes Corporation\$449.36
Sept. 3, 1915—NW BARTLETT 320 NE Deering NE 80xNW 125, Okd. A Lazzareschi to Oakland Homes Corporation\$200
Sept. 2, 1915—LOT 162 Map Wickham Havens Inc Map Piedmont—by the Lake, Okd. R F Long to John A Brunje\$202.50
Sept. 7, 1915—W EL CERRITTO AVE 175.15 S Magnolia Ave S 35xW 90, Piedmont. I L Cavasso, \$30.81; J W Swift and R C Wilcox, \$73.95 to O M Bullock and A F Bullock. Same. California Door Co to O M Bullock\$123.60
Sept. 7, 1915—LOT 31 BLK "F" Map 2, Linda Vista Terrace, Oakland. Hutchinson Co to Mary C Smith.....\$362.17

SAN JOSE AND THE SANTA CLARA VALLEY

RESIDENCE — 1 story and base, frame, \$2,500. Burlingame, San Mateo Co., Cal. Architect, Carl Geilfuss, 46 Kearny street, S. F. Owner's name withheld. Location, Burlingame. Will contain six rooms, bath and sleeping porch. Interior finished in pine and white enamel. Hardwood floors, open fire place, tile or brick mantel and automatic water heater. Bath room finished in tile. Exterior covered with shingles. Plans complete and figures being taken.

STREET PAVING—Cost not stated. Hollister, San Benito Co., Cal. Engi-

r, City Engineer, Hollister. Own-
City of Hollister. A resolution of
entation for the paving Improvement
South street from San Benito to
well street was passed at the last
meeting of the Trustees. Bids on the
rk will soon be called.

TREET PAVING—Cost not stated.
Santa Cruz, Santa Cruz Co., Cal. En-
gineer, City Engineer, Santa Cruz.
ners, City of Santa Cruz. At the
meeting of the Santa Cruz City
Council the following action was taken
on street work. The resolution for
rk on Bay street was adopted. It is
paving the street the full width,
l detached curbs where the work
is not done. Plans and specifications
are ordered for pavements, sewer,
terway and walks on King, Kirby,
yton, Laurel and Milles streets, and
resolution was adopted. The Clerk
is ordered to advertise for plans and
cifications for resurfacing Walnut
et.

IGHWAY WORK—\$5,404.29. Red-
wood City, San Mateo Co., Cal. Engi-
ner, County Surveyor, Redwood City.
ners, San Mateo County. Bids re-
ved by the County Supervisors for
the macadamizing of the road from
as Beach to Montara were rejected,
there were not sufficient funds avail-
able in the Fourth District. The fol-
lowing bids were received on the work:
mes Wilson, \$5,404.29; Barrett &
p, \$6,557.61.

RESIDENCE — 1 story and base,
time, \$1,400. San Jose, Santa Clara
Co., Cal. Architect, none. Owner, A.
Foley, 8th and Virginia, San Jose.
catlon, 8th and Virginia streets. Will
tain four rooms and bath. Interior
ish pine. Open fire place and tile
mantel. Exterior rustic. Plans com-
plete and work to be done by Day
bor.

GRADING AND PAVING—Cost not
ated. Redwood City, San Mateo Co.,
l. Engineer, City Engineer, Redwood
y. Owners, Redwood City. The City
gineer has been instructed to pre-
pare plans and specifications for the
ading and macadamizing of Brews-
r street from the county road to Ar-
ello street, excepting the S. P. right
way. Plans were also ordered for
e construction of sidewalks and
rbs on the county road at the end
Main street and also at Whipple
venue.

Contracts Awarded

BRIDGE REPAIRS—\$3,330. Salinas,
onterey Co., Cal. Engineer, County
urveyor, Salinas. Owners, Monterey
ounty. Contractors, Kunz & Wolfe,
onterey. Contract price, \$3,330.

ROAD CONSTRUCTION—\$16,155.10.
Salinas, Monterey Co., Cal. Engineer,
ounty Surveyor, Salinas. Owners,
onterey County. Contractor, D. C.
oward, Redwood City. Contract
rice, \$16,155.10.

ROAD IMPROVEMENT — \$1,964.02.
Redwood City, San Mateo Co., Cal. En-
gineer, County Surveyor, Redwood
City. Owners, San Mateo County. Con-
tractor, James Wilson, Redwood City.
Contract price, \$1,964.02.

BUILDING CONTRACTS

SANTA CLARA COUNTY.

COTTAGE
TWELFTH AND WASHINGTON STS.,
San Jose. Six-room cottage.

Owner.....Ella C. Ferguson, 799 S-9th
St., San Jose.
Architect....None.
Contractor...S. G. Pelton, 217 S-1st St.,
San Jose.

COST, \$2000

COTTAGE
LOT 7, SEVENTH AND KEYS STS., San
Jose. Four-room cottage.

Owner.....W. W. Albright, 211 S-8th
St., San Jose.
Architect....None.
Contractor...C. S. Rhea, 75 E-San An-
tonio St., San Jose.

COST, \$1500

COTTAGE
S-EIGHTH near Virginia, San Jose.
Five-room cottage.

Owner.....A. T. Foley, Premises.
Architect....None.
Day's work. COST, \$1400

COTTAGE
TWENTY-FOURTH AND SANA CLARA
STS., San Jose. Four-room cottage.

Owner.....Mark D. Hill, Berryessa
Road near 17th, San Jose.
Architect....None.
Contractor...Van Dolsum.

COST, \$900

DWELLING
LOT 8 BLK 2 Col. Sbdvn Harless Ave.,
San Jose. Five-room dwelling.

Owner.....E. A. Bishop.
Architect....None.
Day's work. COST, \$350

SHED
SE THIRD AND SAN FERNANDO STS.,
San Jose. Public market shed.

Owner.....Lou Campbell
Architect....None.
Day's work. COST, \$500

ALTERATIONS
NO. 62 DELMAS, San Jose. Alterations,
Owner.....Mrs. M. Rogers, Premises.

Architect....None.
Day's work. COST, \$450

BUILDING CONTRACTS.

SAN MATEO COUNTY.

COTTAGE
LOT 42 BLK 10, Crocker Estate Tract
Sub. No. 1, Daly City. All work for
six-room cottage.

Owner.....Arthur G. Duncan and L.
Abraham, 526 Crocker Bldg.,
San Francisco.
Architect....None.

Contractor...Allen & Knight, 4525 Mis-
sion, San Francisco.

Filed Sept. 1, '15. Dated Aug. 31, '15.
Frame up\$400
Mortar on400
When completed400
Usual 35 days400

TOTAL COST, \$1600

Bond, none. Limit, 60 days. Forfeit,
none. Specifications only filed.

FRAME COTTAGE
LOT 4 BLK 7 RANGE "C," Redwood

City. All work for five-room frame
cottage with haseiment, bath and
sleeping porches.

Owner.....Ino Capella, Redwood City
Architect....None.

Contractor...Floyd L. and Earl D. Baird
Redwood City.

Filed Sept. 1, '15. Dated Aug. 31, '15.

Frame up\$436
Brown coated436
When completed436
Usual 35 days437

TOTAL COST, \$1745

Bond, \$900. Sureties, H. Norman and
L. Goldberg. Limit, 60 days. Forfeit,
\$10 per day. Plans and specifications
filed.

FRAME BUILDINGS

GEO. A. POPE RANCH near La Honda,
Cal. All work for one-story frame
ranch house, two-story frame hay
barn and stable, one-story frame
milking shed, one-story dairy build-
ing and one-story hog house.

Owner.....Geo. A. Pope, Burlingame.
Architect...Henry H. Meyers, Kohl
Bldg., San Francisco.

Contractor...F. H. Boring, San Mateo.
Filed Sept. 7, '15. Dated Sept. 3, '15.

On 1st and 15th of each month
work done and materials furnish-

ed, 75%\$9795
Usual 35 days, 25%3265

TOTAL COST, \$13,060

Bond, \$6530. Sureties, J. H. Taylor and
Wm. F. Turnbull. Limit, 75 days. For-
feit, \$10 per day. Plans and specifica-
tions filed.

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED ACCEPTED

Aug. 27, 1915—COLMA. The Roman
Catholic Archbishop of S. F. to
James F. McCarthy....Aug. 25, 1915

Aug. 31, 1915—LOT 11 BLK 28 Red-
wood Highlands, Redwood City.

Redwood Highlands Co. to whom it
may concern.....Aug. 30, 1915

Aug. 31, 1915—LOTS 10 AND 20 BLK
"P" San Mateo Heights, San Mateo.

E W Oest to whom it may concern
.....Aug. 21, 1915

Aug. 31, 1915—LOT 17 BLK 12 Rad-
wood Highlands, Redwood City.

Redwood Highlands Co. to whom it
may concern.....Aug. 30, 1915

Aug. 31, 1915—LOT 4 BLK 19, Red-
wood Highlands, Redwood City.

Redwood Highlands Co. to whom it
may concern.....Aug. 30, 1915

Aug. 31, 1915—NW 55 FEET LOT 8
Blk 20, Redwood Highlands, Red-
wood City. Redwood Highlands Co.
to whom it may concern.....Aug. 30, 1915

Sept. 8, 1915—LOT 7 BLK 27 Easton
Add'n to Burlingame No. 2. Edwin
A Rogers to W A and C C Terrill

.....Sept. 4, 1915

Sept. 7, 1915—LOTS 3 AND 4 BLK 57,
Easton Odd'n to Burlingame Nos.
6 and 7, Burlingame. L B Sibley to
Ruegg Bros.....Aug. 31, 1915

Sept. 8, 1915—LOT 26, Taylor Add'n
to San Mateo. A Baradat to Croop
& Keegan.....Aug. 25, 1915

Sept. 8, 1915—LOT 21 BLK 28 Second
Add'n to Easton, Easton. Mary
Fitzpatrick to W G McDiarmid....

.....Sept. 7, 1915

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RELEASE OF LIENS

SAN MATEO COUNTY.

RECORDED AMOUNT
Sept. 8, 1915—LOTS 18, 19 20 BLK 4
Sdbvn Blks 2, 3, 4 and 5, Concordia
Land Co Tract, San Mateo. Spring
Valley Lumber Yard to John
Kownacki\$30

MARIN, CONTRA COSTA AND SONOMA COUNTIES

RESIDENCE—1½ story and base, frame, \$4,000. Martinez, Contra Costa Co., Cal. Architect, Carl Geilfuss, 46 Kearny street, S. F. Owner's name withheld. Will contain seven rooms, bath and sleeping porch. Interior finish, pine and white enamel. Hardwood floors, furnace heat, open fire places, brick and tile mantels and automatic water heater. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans prepared and figures to be called for shortly.

HOTEL AND GARAGE—3 story and base, brick. Cost not stated. Pittsburg, Contra Costa Co., Cal. Architect, A. W. Cornelius, Merchants' National Bank Bldg., S. F. Owners, S. Carusa & Bros. Location, 4th and Railroad avenue, covering an area of 40 by 110 feet. Will contain garage and 40 guest rooms. Interior finish, pine and redwood. Steam heat, hot water system and special garage storage tanks. Bath rooms finished in tile. Exterior faced

with pressed brick. Plans complete and figures being taken.

STREET PAVEMENT—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Plans and specifications for the improvement of Central avenue, North street and one block of West street from Richardson to Main were adopted at the last meeting of the Trustees, all to be asphaltic macadam 18 feet between curbs except on North street from Fourth to West street, and on West from Main to Richardson street. Bids will soon be called for.

STREET WORK—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. The Trustees will receive bids until September 20th, 8 p. m. for improvement work to be done in West and Valley streets. Plans and further information may be had from the Town Engineer at Sausalito. Bids for the above work were opened at the last meeting, but were rejected as they were too high. Leech & De Camp bid \$1,865 on the work, while the engineer's estimate was placed at \$1,350.

SEWER CONSTRUCTION—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. The Town Trustees at their last meeting adopted revised plans and specifications with estimated cost of the construction of sewer work in District F. Bids will soon be called for.

STREET PAVING—Cost not stated. San Rafael, Marin Co., Cal. Engineer,

City Engineer, San Rafael. Own City of San Rafael. The City Council has instructed the City Manager to prepare plans and specifications for repaving portions of C street, Clark street, Sixth street, Center street, Cijos street, San Rafael avenue and San Quentin Turnpike. Bids will be called on approval of the plans.

WATER SYSTEM—\$43,000. Martinez, Contra Costa Co., Cal. Engineer, Engineer Elam C. Brown, Martinez. Owners, City of Martinez. According to figures submitted to the City Trustees by City Engineer Elam C. Brown it will cost \$43,000 to install a water system, such as the Board of Trustees has under contemplation. This includes the reservoir and laying of main lines throughout the city. It is probable that a bond election will be called in the near future to vote for bonds to finance the cost of the system.

STREET PAVING—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. County Supervisors have issued a call for bids for the concrete paving of the main street in Danville in accordance with the plans now on file with the Clerk of the Board. Bids will be called on September 27th.

Contracts Awarded.

STREET IMPROVEMENT. Cost not stated. Crockett, Contra Costa Co., Cal. Engineer, Town Engineer, Crockett. Owners, Town of Crockett. S. C. Rogers, Richmond.

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\$3.12 1/2 per square foot.

BUILDING CONTRACTS.

MARIN COUNTY.

ME HOTEL AND STORE
SALITO. All work for two-story
me hotel and store building.
er.....Henry Kruse.
itect.....O'Brien Bros., 240 Mont-
gomery, San Francisco.
ractor.....Peter Hamilton, Russ Bldg
San Francisco.

Sept. 2, '15. Dated Sept. 2, '15.
undation up\$2468.50
d story joists on..... 2500.00
of enclosed 2500.00
hen floored 2500.00
terior plastered 2500.00
mpleted 2500.00
ual 35 days..... 2500.00
TOTAL COST, \$19,982.00

Bond, none. Limit, 90 working days.
Forfeit, none. Plans and specifications
filed.

FRAME RESIDENCE

LOT 11, A BARBER TRACT, San An-
selmo. All work for frame residence.
Owner.....Frederick W. and Nellie E.
Van Meter.

Architect...A. Garden Mitchell and
Charles Ed. Hodges, Bank-
ers Invest Bldg., S. F.
Contractor.....Ellis L. Wilson.

Filed Sept. 8, '15. Dated Sept. 7, '15.
Excavation and foundation done.\$ 50
Frame up and roof on..... 555
Brown mortar on..... 605
Completed and accepted..... 605
Usual 35 days..... 605

TOTAL COST, \$2120

Bond, none. Limit, 80 days. Forfeit,
none. Plans and specifications filed.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

TANK

REFINERY PROPERTY AT AVON. All
work for 25,000 barrel Residum
tank for oil refinery.

Owner.....Associated Oil Co., Avon,
California.

Architect...None.

Contractor.....Western Pipe & Steel Co.,
444 Market, San Francisco.

Filed Aug. 30, '15. Dated Aug. 16, '15.
10 days after arrival of steel and
other material at site..... 50%
Completion of tank..... 25%
Usual 35 days..... 25%

TOTAL COST, \$5850

Bond, \$3000. Sureties, W. F. Howard
and Albert H. Hayes. Limit, within 35
days. Forfeit, none. Plans and speci-
fications filed

COMPLETION NOTICES

MARIN COUNTY.

RECORDED ACCEPTED

Aug. 20, 1915—FAIRFAX MANOR,
Marin Co. G Malpiede and wife to
L L Jessup.....Aug. 27, 1915

Sept. 3, 1915—MILL VALLEY. Miss
K Ball to E C Bletch....Aug. 2, 1915

Sept. 3, 1915—CASCADE DRIVE,
sFairfax. L D Sloss to Lindberg
Bros.....Sept. 2, 1915

Aug. 31, 1915—SAN ANSELMO, Marin
Co. Geo A Itaymond to A F Han-
son.....Aug. 23, 1915

Sept. 7, 1915—MILL VALLEY Lots 9,
10 Blk 1, Tamalpais Land & Water

Co Map No. 5. Charles L Mehrlens
to Christian Ambuster..Sept. 1, 1915

LIENS FILED

MARIN COUNTY.

RECORDED AMOUNT

Sept. 7, 1915—MILL VALLEY being
ptn Lot "R" Corte Madera del Pres-
sidio. C E Christley (Marin Lum-
ber Co) vs G Galiotti, Jessie O and
C J Sollom\$185.57

COMPLETION NOTICES

CONTRA COSTA COUNTY.

RECORDED ACCEPTED

Aug. 31, 1915—NORTHERLY 50 FEET
Lots 7 and 8 Blk 62, Additional Sur-
vey of Town of Martinez. Anne

Beder to Karl M Neilson..Aug. 30, '15

Sept. 1, 1915—NEAR TOWN OF MAR-
tinez formerly known as Cutler or
Frazer Tract. Shell Co of Califor-
nia, Inc to Petroleum Iron Works..

.....Aug. 25, 1915

Sept. 3, 1915—ASSOCIATED REFIN-
ery's Plant at Avon, Cal. Associ-
ated Oil Co to Western Pipe &
Steel Co.....Aug. 24, 1915

Sept. 3, 1915—ASSOCIATED OIL CO'S
refinery at Avon. Associated Oil Co
to Llewellyn Iron Wks..Aug. 24, 1915

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

BRIDGE—Reinforced concrete, \$12,-
000. Madera, Madera Co., Cal. Engi-
neers, Leonard & Day, Rialto Bldg., S.
F. Owners, Madera County. Bonds
have been carried in this county for the
construction of the proposed D street
bridge over the Fresno River by a vote
of 416 to 73, and bids for the construc-
tion will be called for shortly. Plans
provide for a reinforced concrete bridge
270 feet long with a 26-foot roadway
and 2 four-foot sidewalks.

BRIDGE—Reinforced concrete, \$85,-
000. Modesto, Stanislaus Co., Cal. En-
gineer, County Surveyor, Modesto.
Owners, Stanislaus County. The Board
of Supervisors in fixing the tax rate
for Stanislaus County for the ensuing
year at \$2.00 included the construction
of a new \$85,000 concrete bridge over
the Tuolumne River at Modesto and
the building of a permanent paved road
from the city limits of Modesto to the
southeast corner of the Bald Eagle
ranch to connect with the Sonora lat-
eral from Salida to Oakdale. But \$35,-

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000 of the cost of the bridge was included in the present levy.

OIL SUPPLY STATION—Concrete and steel. Cost not stated. Bakersfield, Kern Co., Cal. Engineer, Engineering Department Union Oil Co., Bakersfield. Owners, Union Oil Co. The Union Oil Company will construct a storage and oil service station on the Southern Pacific reservation in East Bakersfield. The station is to be located near the Union avenue crossing, and it is planned to erect a large establishment. Big storage tanks and large office structure will be constructed to handle the refinery products.

FACING DAM—\$10,000. Modesto, Stanislaus Co., Cal. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Plans and specifications prepared by Engineer Herrmann, of the Modesto Irrigation District, for a reinforced concrete facing for the upstream side of Dam No. 6 of the Dallas reservoir, have been adopted by the directors. Bids have been ordered advertised.

STREET IMPROVEMENT—Cost not stated. Lindsay, Tulare Co., Cal. Engineer, City Engineer, Lindsay, Owners, City of Lindsay. At a special meeting the City Trustees adopted specifications providing for the improvement of Hermosa street with the following exceptions: A crushed rock base to be 4 inches instead of 3½ inches after being rolled, and a change in width from 16 to 18 feet, with the same 2-foot shoulder on each side, making practically a 22-foot pavement. The proposition of improving Honolulu street will be taken up by the Board at their next meeting. Bids on both projects will probably be called for immediately.

SEWER CONSTRUCTION—\$65,000. Visalia, Tulare Co., Cal. Engineer, City Engineer, Visalia. Owners, City of Visalia. Bonds have been sold and bids are now being advertised for the construction of the new Visalia sewer system. The work will consist of a main sewer, outfall system and sewage disposal plant. Plans and specifications may be had from the City Engineer at Visalia.

BRIDGES AND CULVERTS—Reinforced concrete. Cost not stated. Hanford, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. The Board of Supervisors has directed the Clerk to advertise for bids for the construction of culverts and bridges for the improved highway. Three hundred barrels of Portland cement will be used in the work. Bids close on September 20th. Further information may be had from the County Surveyor.

OIL DISTRIBUTING SYSTEM—\$15,000. Modesto, Stanislaus Co., Cal. Engineer's name not given. Owners, Associated Oil Co., S. F. A permit has been granted by the City Council to the Associated Oil Co. to construct a new distributing station on the east side of the Salida road between the Lateral No. 4 bridge and the Modesto Re-pressed Brick Company's yard. The entire plant will cost about \$15,000.

LEEVE CONSTRUCTION—Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff.

Owners, Tehama County. At the last meeting of the Supervisors bids were ordered called for the construction of a levee across the head of a small slough on the Chipman ranch in Antelope Valley. The levee will be built of dirt and faced with concrete. Bids for the work will be opened on October 5th. Further information may be had from the Surveyor at Red Bluff.

RECLAMATION WORK—Cost as follows: San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. All bids received by the County Supervisors for protection work on the state highway leading from Nimopo to Santa Marina were rejected. The bids received were as follows: Mercereau Bridge and Construction Co., L. A., \$18,995, including royalty to River Current Control Co.; Boardman Construction Co., L. A., \$10,903, excluding royalty; Charles W. Corbaley Co., L. A., \$11,000, excluding royalty; Mesmer & Rice, L. A., \$11,100, excluding royalty; The River Current Control Co., S. F., \$14,870. What further action will be taken by the Supervisors has not yet been made known.

SCHOOL—1 story and base, brick, \$20,000. Los Angeles, Cal. Architects, Dennis & Hewitt, Pay Bldg., L. A. Owners, City of Los Angeles. Location, 2055 west 24th street, covering an area of 60 by 80 feet. Will contain eight rooms. Interior finish pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior faced with pressed brick. Plans complete and revised figures being taken. Bids open on September 23rd.

SCHOOL—1 story and base, brick, \$20,000. Los Angeles, Cal. Architect, W. C. Pennell, Baker-Detwiler Bldg., L. A. Owners, City of Los Angeles. Location, Olive street at Vernon, covering an area of 68 by 80 feet. Will contain eight class rooms. Interior finish pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior faced with pressed brick. Plans being prepared.

REPAIRING DAM—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. At the last meeting of the Modesto Irrigation District plans and specifications for the repairing of Dam No. 1 of the Dallas Reservoir were accepted and bids will be received until October 2nd. Further information may be had from Engineer Herrmann of the District.

SCHOOL—1 story and base, brick, \$10,000. Fresno, Fresno Co., Cal. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owners, West Park School District. Will contain four class rooms and assembly hall. Interior finish pine with maple floors in class rooms. Central heating system. Exterior faced with pressed brick. Plans complete and figures being taken. Bids will be opened on September 20th.

SEWER SYSTEM—\$65,000. Visalia, Tulare Co., Cal. Engineer, City Engineer, Visalia. Owners, City of Visalia. Bids will be received by the Board of Trustees up to October 6, 1915, for the construction of an outfall sewer, disposal works and extensions to the present municipal sewer system, in ac-

cordance with plans and specifications on file in the office of the city engineer. Bonds in the sum of \$65,000 have been voted and sold for the work.

HOSPITAL—2 story and base, frame ad plaster. Cost not stated. Selma, Fresno Co., Cal. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owner, Mrs. M. Christensen. Will contain two wards, operating room and dispensary. Interior finish pine and white enamel. Hardwood and tile floors. Central heating system. Exterior covered with cement plaster. Plans being prepared.

Contracts Awarded.

BRIDGE—Steel and reinforced concrete, \$11,773. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractors, Gutleben Bros., New Call Bldg., S. F. Contract price, \$11,773.

IRRIGATION PIPE—\$11,114.35. Oakdale, Stanislaus Co., Cal. Engineer, Chief Engineer, Oakdale. Owners, Oakdale Irrigation District. Contractors, Western Pipe and Steel Co., Richmond. Contract price, \$11,114.35.

BUILDING CONTRACTS

FRESNO COUNTY.

EARN

No. 1315 Q ST., Fresno. Barn. Owner.....Otis Allen, 1338 A St., Fresno.

Architect...None.

Contractor...W. J. Downing.

COST, \$1000

DWELLING

LOTS 6 AND 7 BLK 120, Fresno.—All work for dwelling.

Owner.....Leon Kuyudjian.

Architect...None.

Contractor...S. Bololan, 208 Wagner St., Fresno.

COST, \$1175

DWELLING

No. 429 D ST., Fresno. Dwelling.

Owner.....Jacob Helmuth.

Architect...None.

Day's work.

COST, \$1000

BRICK BUILDING

LOTS 14, 15 AND 16 BLK 82, Fresno.

All work for one-story and basement brick building.

Owner.....J. T., R. B. W. C. and Mary H. Tupper.

Architect...None.

Contractor...R. F. Felchlin, 616 Rowell Bldg., Fresno.

Filed Aug. 28 '15. Dated Aug. 23, '15.

1st payment of.....75%

Usual 35 days.....Balance

TOTAL COST not to exceed \$20,300

Bond, \$15,000. Surety, E. L. Lacour.

Forfeit, \$12.50 to Dec. 15 and \$20 per day thereafter. Limit, Nov. 14. Plans and specifications filed.

NOTE—Contractor to receive 10% for services.

DWELLING

LOTS 5, 6 AND 7 Bloomington Addn.

No. 3, Fresno. All work for one-story dwelling.

ner.....H. W. Tucker, Fresno National Bank Bldg., Fresno.
 Architect...None.
 Contractor...J. E. Cregor.
 Bid Aug. 25, '15. Dated —.
 Roof on\$345
 Plastered 345
 Completed 692
 Total Cost, \$1332
 and, \$700. Surety, O. A. Augell.
 Limit, 30 days. Forfeit, none. Plans
 and specifications filed.

TELLING
 TS 10 AND 11, Fresno Heights,
 Fresno. Dwelling.
 ner.....A. D. Olmstead.
 Architect...None.
 Contractor...Morris Bros.

COST, \$1200

TELLING
 TS 14 AND 15 BLK A. TERRY TCT.,
 Fresno. All work for one-story
 dwelling.

ner.....W. S. Scott, 391 Poplar St.,
 Fresno.
 Architect...None.
 Contractor...E. A. Turner, 1359 K St.,
 Fresno

Bid Aug. 26, '15. Dated Aug. 24, '15.
 Roof on\$400
 Then plastered 200
 Then completed 590

TOTAL COST, \$1190

and, \$600. Sureties, R. J. and Lillie
 Christie. Limit, 45 days. Forfeit,
 e. Plans and specifications filed.

EVATOR
 TS 1, 2 AND 3 BLK 55, Fresno. All
 work for elevator for building.
 ner.....Masonic Hall Association,
 2030 Merced St., Fresno.
 Architect...None.
 Contractor...A. Allen.

COST, \$900

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED	ACCEPTED
Aug. 26, 1915—LOTS 8 AND 9 BLK 4 Jackstone Park, Fresno, E M Main to J A Warrick.....Aug. 18, 1915	
Aug. 28, 1915—PIPE LINE PUMP- ing Stations Nos. 1, 2, 3, Fresno. Valley Pipe Line Co. to whom it may concern.....Aug. 21, 1915	
Aug. 30, 1915—LOTS 45 AND 46 BLK 1, College Add'n, Fresno. J M uswell to whom it may concern..... Aug. 26, 1915	
Aug. 7, 1915—LOT 23, East Elmhurst A Van Buren to J R Church..... August 12, 1915	

LIENS FILED.

FRESNO COUNTY.

Aug. 10, 1915—LOT 23 BLK 21, Alta
 Vista Tract, Fresno. Valley Hard-
 ware Co. \$56; A W Gordon, \$104 vs
 I Enright and C V Smith.....
 RECORDED
 Aug. 4, 1915—W 1/2 OF SW 1/4 OF SE
 Sec 30, 15-20, Fresno. J H Jar-
 vis, 1915—LOT 18 SEC 14, 15-21,
 Fresno. Orange Cove Lumber Co.
 vs H E Wright and Orosi orange
 and Co\$213

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

BRIDGE—Steel and reinforced con-
 crete, \$60,000. Nicolaus, Sutter Co., Cal.
 Engineer, County Surveyor, Yuba City.
 Owners, Sutter County. The County
 Surveyor has been instructed to pre-
 pare plans and specifications for the
 construction of a bridge over the
 Feather River at Nicolaus. The pro-
 posed structure will be 600 feet long
 and of steel and concrete construction.

STREET PAVEMENT, ETC. — Cost
 not stated. Woodland, Yolo Co., Cal.
 Engineer, City Engineer, Woodland.
 Owners, City of Woodland. Plans and
 specifications have been adopted for
 the improvement of Main, North Col-
 lege and East streets. Plans and
 specifications prepared by City Engi-
 neer Arnold provide for the construc-
 tion of concrete curbs and gutters, and
 for the grading of roadways and con-
 structing thereon a strip of asphaltic
 pavement 18 feet wide in the center,
 consisting of hydraulic concrete base
 5 inches in thickness and an asphaltic
 wearing surface 1/2 inch thick, the
 rest of the road to be paved with 5 1/2
 inches of waterbound macadam. Bids
 will soon be called.

STREET PAVING—Cost as follows.
 Stockton, San Joaquin Co., Cal. Engi-
 neer, City Engineer, Stockton. Owners
 City of Stockton. Bids opened at the
 last meeting of the City Council for
 street paving show the following low
 bidders: North Commerce and North
 Center streets, W. H. Paul, Oakland,
 \$26,148.76; engineer's estimate, \$31,-
 560.37. North El Dorado street, Clarke
 & Henry Co., Sacramento, \$20,267.32;
 engineer's estimate, \$29,384.20; and
 North Commerce and North Center
 streets north of Wyandotte, W. H. Paul,
 Oakland, \$21,969; engineer's estimate,
 \$25,942.06. Contracts will be awarded
 at the next meeting of the Council.

BRIDGES—Reinforced concrete. Cost
 as follows. Red Bluff, Tehama Co., Cal.
 Engineer, County Surveyor, Red Bluff.
 Owners, Tehama County. Contractors,
 Ross Construction Co., Sacramento. Con-
 tract prices, Dibble bridge, \$12,580;
 Blue Tent bridge No. 1, \$3,100; Blue
 Tent bridge No. 2, \$1,501. C. E. Mc-
 Cartney, Red Bluff, steel bridge across
 Mill Creek, \$1,293.

LUMBER ROAD—Cost not stated.
 Yreka, Siskiyou Co., Cal. Engineer,
 none. Owners, McCloud River Lumber
 Co. The McCloud River Lumber Com-
 pany will start immediately on the
 extending of its logging operations by
 building a new railroad spur six miles
 into the Pumice Mountain country,
 northeast of Bartle, which will be
 ready for use with the next season's
 operation.

BRIDGES—2, steel and concrete.
 Cost not stated. Red Bluff, Tehama
 Co., Cal. Engineer, County Surveyor,
 Red Bluff. Owners, Tehama County.
 Plans and specifications prepared by
 County Surveyor W. F. Lunning for
 three bridges to be built on the Cone
 Grove road were approved at the last
 meeting of the Supervisors and bids
 have been ordered received. Bids close
 October 5th. The structures will be
 built over Antelope Creek, Salt Creek
 and a small slough. All will be of
 steel construction.

FILL—Earth. Cost not stated. Red
 Bluff, Tehama Co., Cal. Engineer,
 County Surveyor, Red Bluff. Owners,
 Tehama County. Bids will be received
 by the County Supervisors until Octo-
 ber 5th for the construction of a fill
 on the Red Bluff-Harrison Gulch road
 at the new bridge over Salt Creek, near
 Rosewood. Plans and specifications
 have been adopted by the Supervisors
 and bids will be received until October
 5th for the fills and the Sand Slough
 bridges.

HIGHWAY CONSTRUCTION — Cost
 not stated. Stockton, San Joaquin Co.,
 Cal. Engineer, County Surveyor, Stock-
 ton. Owners, San Joaquin County.
 The Board of Supervisors are consid-
 ering plans and specifications in con-
 nection with the Borden Highway.
 Estimates of the work are now being
 prepared and provide for the construc-
 tion of a number of bridges and other
 minor details. Bids on the work will
 soon be called.

ROAD IMPROVEMENTS — Costs as
 follow. Stockton, San Joaquin Co., Cal.
 Engineer, County Surveyor, Stockton.
 Owners, San Joaquin County. The
 Board of Supervisors at their last meet-
 ing awarded the following contracts:
 Improvement of the Jack Tone road to
 C. W. McIntyre at \$11,000; improve-
 ment of the Murphy Ferry road to Cy
 Moreing & Sons at \$13,512; improve-
 ment of the West Lane and Weber
 roads to Cy Moreing & Sons at \$10,000.

Contracts Awarded.

SCHOOL—1 story and base, frame.
 \$21,347. Stockton, San Joaquin Co., Cal.
 Architects, Stone & Wright, San Joa-
 quin Bldg., Stockton. Owners, City of
 Stockton. Contractors, Daniels &
 Green, Stockton. Contract price, \$21,-
 347.

HALL OF RECORDS—2 story and
 base, reinforced concrete, \$13,843. Oro-
 ville, Butte Co., Cal. Architect, Charles
 S. Kaiser, Mechanics' Institute Bldg.,
 S. P. Owners, Butte County. Contrac-
 tors, Western Building and Engineer-
 ing Co., Phelan Bldg., S. F. Contract
 price, \$43,843.

HOSPITAL—2 story and base, frame
 and plaster, \$20,000. Susanville, Las-
 sen Co., Cal. Architect, George C.
 Sellen, Sacramento. Owners, Lassen
 County. Contractor, James L. McLaugh-
 lin, 244 Kearny street, S. F., general
 construction; Latourette, Fical & Co.,
 Sacramento, plumbing. Contract prices
 not stated.

SCHOOL GYMNASIUM — 2 story,
 frame, \$8,105. Yreka, Siskiyou Co.,
 Cal. Architect, none. Owners, Siski-
 you Union High School District. Con-
 tractor, D. M. Reid, Yreka. Contract
 price, \$8,105.

Open Figures For Hall Of Records.

Butte County Supervisors Receive
 Figures For New Hall of Records
 Building at Oroville.

(By Special Wire.)

OROVILLE, Butte Co., Cal.—Fifteen
 sets of figures were opened this after-
 noon by the Board of Supervisors for
 the construction of the two-story and

basement reinforced concrete and brick Hall of Records, designed by Architect Charles S. Kaiser, San Francisco. Western Building & Engineering Co. submitted the lowest bid at \$13,813 and will probably be awarded the contract as their bid is well within the architect's estimate. Following is a complete list of the figures presented:

Butte County Hall of Records.

Howard S. Williams.....	\$48,422
McLeran & Peterson.....	46,992
Collman & Collman Co.....	47,140
Master Vogt Co.....	53,337
Harvey A. Klyce.....	50,876
Pacific Contg. Co. (no check or bond).....	44,923
Pringle-Dunn & Co.....	45,644
Wester H. Stock.....	49,421
Macdonald & Kahn (no check or bond).....	46,750
Van Sant-Houghton Co.....	51,900
Lange & Bergstrom.....	52,000
Houda & Spivock (no check or bond).....	47,500
Robert Trost.....	46,854
Western Bldg. & Eng. Co.....	43,843
Teichert & Ambrose.....	47,985

BUILDING CONTRACTS

SACRAMENTO COUNTY.

FLAME BUILDING

± 65 FEET OF E ¼ AND S 80 feet of W ¼ of E ¼ of Lot 2, K, L, 8th and 9th Sts., Sacramento. One-story and basement tile and frame building.

Owner.....Lusien Caen.

Architect...None.

Contractor...Charles Vanina, 2022 M St., Sacramento.

COST, \$4650

ALTERATIONS

NO. 2132 BONITA AVE, on Lot 10 Bonita Terrace, Sacramento. Build sleeping porch and finish off basement.

Owner.....R G. Johnson, Nicolas, Cal. Architect...None.

Contractor...F. A. Holdener, 522½ M St. Sacramento. COST, \$600

ALTERATIONS

NOS. 1027, 1029 K ST., Sacramento. Alterations to store.

Owner.....The Cherry's Co., 1009 Market, San Francisco.

Architect...None.

Contractor...Barton & Hite, 1009½ 9th St., Sacramento.

Filed Aug. 26, '15. Dated Aug. 23, '15. COST, \$2300

NOTE.—If completed on or before Sept. 17, contract price shall be \$2459.

LOS ANGELES AND SOUTHERN CALIFORNIA

BRIDGES—26, steel and reinforced concrete, \$350,000. Santa Barbara, Santa Barbara Co., Cal. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Santa Barbara County, while turning down the good roads bonds, voted favorably on the \$550,000 bond issue for building bridges along the state highway. The character and location of the proposed structures are as follows. More detailed information can be secured from the County Surveyor at Santa Barbara.

One bridge at the crossing over Southern Pacific Railroad track at station 109 plus 10, section "G."

A reinforced concrete girder bridge over Eagle Canyon Creek where state

highway crosses creek, being at station 181 plus 00, section "G."

A steel truss bridge over Dos Pueblos Creek where state highway crosses creek, being at station 285 plus 350, section "G."

A reinforced concrete bridge over Gato Canyon where state highway crosses said canyon, said bridge to be at station 379 plus —, section "G."

A reinforced concrete bridge over El Capitan Creek, where state highway crosses creek at station 488 plus 50, section "G."

A reinforced concrete bridge over Corral Canyon Creek, where state highway crosses creek, at station 60 plus 25, section "F."

A reinforced concrete bridge over Tajiguas Canyon Creek where state highway crosses creek, being at station 243 plus 80, section "F."

A reinforced concrete bridge over Arroyo Sucmada where state highway crosses arroyo, being at station 306 plus 00, section "F."

Two steel truss bridges over Gaviota Creek between Gaviota Gorge and the Pacific Ocean at points where state highway crosses creek, to wit: One bridge at station 104 and one bridge at station 109, both in section "E."

A steel truss bridge at Gaviota Gorge over Gaviota Creek where state highway crosses creek, being at station 149 plus 00, section "E."

A reinforced concrete bridge over Las Cruces Creek at place known as Sheep Camp, where state highway crosses creek, being at station 312 plus —, section "E-2."

Four bridges across Najoqui Creek at points where state highway crosses creek in Cuesta Canyon, said bridges to be located at the following points on the official survey of state highway: one reinforced concrete bridge at station 2 plus 50; one reinforced concrete bridge at station 160 plus —; one reinforced concrete bridge at station 218 plus —; one steel truss bridge at station 248 plus —, all in section "D."

A bridge across Santa Ynez River at the point where state highway crosses river near mouth of Zaca Creek, the cost to said county to construct and build said bridge not to exceed \$50,000; the cost in excess of said sum to be paid by the State of California.

Six reinforced concrete girder bridges over Zaca Creek between Santa Ynez River and Zaca Station at points on Zaca Creek where said state highway crosses Zaca Creek, indicated on official survey of state highway as follows, to wit: One bridge at station 309 plus —; one bridge at station 418 plus —; one bridge at station 472 plus —; one bridge at station 562 plus —; one bridge at station 566 plus 00, and one bridge at station 575 plus 00, all in section "D."

Three reinforced concrete girder bridges between Zaca Station and Los Alamos at points indicated on official survey of state highway as follows: one bridge at station 165 plus 75; one bridge at station 382 plus 25; and one bridge at station 399 plus 25, all in section "C."

RESTAURANT—1 story, frame. Cost not stated. Watts, Los Angeles Co., Cal. Architect, Fred Noonan, Brockman Bldg., L. A. Owner, A. Levy. Will contain an area of 134 by 153 feet, and

will contain besides a main dining room seating 700 people, kitchen, office, dance pavilion, rest rooms and lobby. Interior finish plaster board. Steam heat, modern plumbing and electric work. Exterior covered with rustic. Plans being prepared.

110 feet. Reinforced concrete walls, exterior cement plaster. Plans complete and figures being taken.

WAREHOUSE—2 story and base, Class A construction. Cost not stated. Los Angeles, Cal. Architect, Thomas Preston, Investment Bldg., L. A. Owners, National Transfer Co. Location, Ann street, covering an area of 50 by 200 feet, metal window sash and frames, floors and roof slabs. Steel rolling

RESIDENCE—2 story and base, frame. Cost not stated. Los Angeles, Cal. Architects, De Remer & Hewitt, title Insurance Bldg., L. A. Owner, W. H. Baback Co. Location, Fremont Place. Will contain twelve rooms, three baths, sleeping porch and separate garage. Interior finish pine, hardwood and white enamel with hardwood floors throughout. Steam heat, open fire places and tile mantels. Tile wainscot and floors in baths. Hot water circulating system. Exterior cement plaster on metal lath. Plans being prepared.

PAVING—Cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be received by the Board of Supervisors up to 11 a. m. on September 21, 1915, for paving the extensions to the Bardsdale bridge in accordance with plans and specifications on file in the office of the Board. The work will require about 23,340 square feet bituminous macadam pavement of an average thickness of three inches. Certified check for 10 per cent is required. J. B. McCloskey is the County Clerk.

BOULEVARD CONSTRUCTION—Cost not stated. Santa Ana, Orange Co., Cal. Engineer, County Surveyor, Santa Ana. Owners, Orange County. Bids will be opened on September 21st for constructing and rebuilding Section No. 2 of the Irvine Boulevard. Plans can be secured from the County Clerk.

Contracts Awarded.

RESIDENCE—1 story and base, reinforced concrete, \$44,130. Chino, San Bernardino Co., Cal. Architect, Myron Hunt, Hibernian Bldg., L. A. Owner, Mrs. E. M. Fowles, Pasadena. Contractors, Cresmer Mfg. Co., Riverside. Contract price, \$44,130.

RESIDENCE—2 story and base, frame, \$15,885. Covina, Los Angeles Co., Cal. Architect, Robert M. Taylor, Marsh-Strong Bldg., L. A. Owner, Mrs. J. D. Seitz. Contractors, F. O. Engstrom Co., 5th and Seaton streets, L. A. Contract price, \$15,885.

RESIDENCE—2 story and base, brick and frame, \$65,000. Santa Barbara, Santa Barbara Co., Cal. Architect, A. H. Stibolt, 1242 Valley Road, Casa Verdugo. Owner, E. B. Brison. Contractors, Hudson & Shaw, Central Bldg., L. A. Contract price, \$65,000.

SCHOOL—1, 2 and 3 story and base, brick, \$79,740. San Diego, San Diego Co., Cal. Architect, Joseph B. De Remer, Title Insurance Bldg., L. A. Owners, City of San Diego. Contractors, Crasmer Co., Riverside. Contract price, \$79,740.



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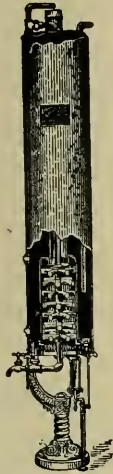
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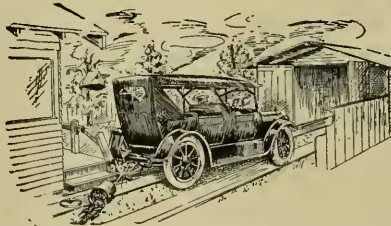
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Benj. G. McDougall, Architect.
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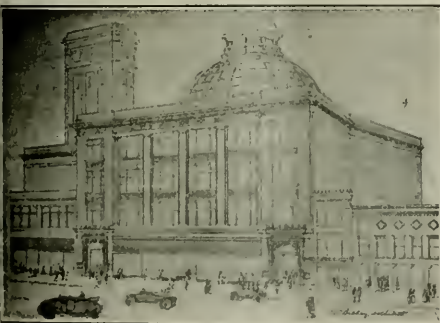
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C. W. Dickey, Architect

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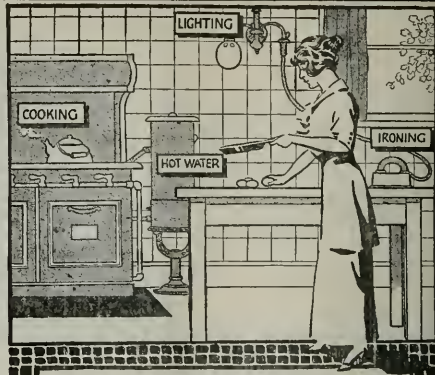
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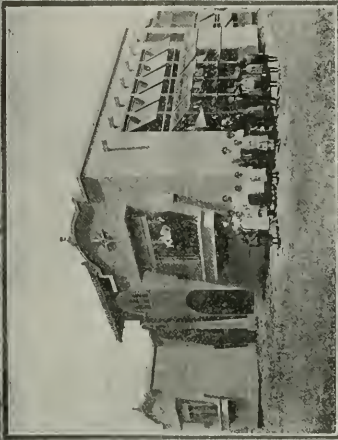
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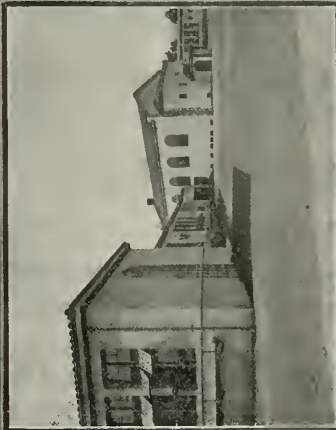
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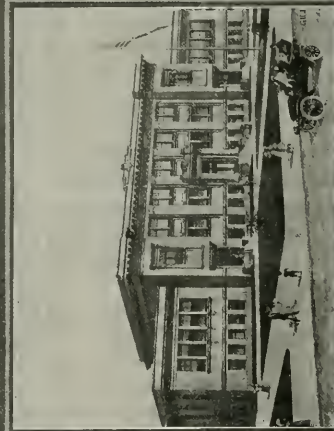
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Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
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San Francisco, September 22, 1915

Fifteenth Year, No 38

The need for an outlet through Bunker Hill north of Third street has been generally recognized in Los Angeles for a decade or more and it has long been a foregone conclusion that some means of direct communication between the downtown district and the rapidly advancing western and northwestern parts of the city would sooner or later have to be provided. When it has come to the question of deciding upon methods to be employed in overcoming the obstacle to traffic and proper city development presented by this huge natural barrier, however, the doctors have disagreed.

Some have urged a major surgical operation to remove the entire hill bodily, thereby bringing the whole area now comprised within the confines of the elevation down to the level of the districts all around it. Other topography correctors a little less drastic have wanted to confine the cutting to the area extending through the hill between First and Second streets. Tunnels at both First and Second streets, a tunnel at Second street alone, a bore at first street only, have been in their turn strongly advocated.

Each of these plans has at one time or another been officially approved by the municipal authorities and brought almost to the point of consummation, only to be held up at the last minute through the failure of the proponents of the various schemes to agree upon and work untidily for some one method of opening the hill to traffic. Delay in the realization of the great objective itself has been the inevitable consequence. On another page will be found a discussion of the various methods and their cost.

Sir William Van Horne, for years prominent in trans-continental railroad development in Canada, died in the Royal Victoria Hospital in Montreal.

Sir William had been seriously ill for more than two weeks. He went to the hospital for an operation for abdominal abscess.

Sir William Van Horne rose from the foot of the ladder to wealth and fame as one of the so-called empire builders of Canada. Although he was born in the United States in Will County, Illinois, February 3, 1843, and gained railway experience through many years' connection with railroads in the Central and Western United States, it was after his moving to Canada and becoming general manager of the Canadian Pacific Railway in 1882 that he achieved his most notable triumph by pushing the railway to completion across the continent.

Sir William was the son of Cornelius Covenhoven Van Horne, who was a lawyer at Joliet, Ill. The death of his father left young Van Horne to fight the battle of life when he was only 13 years of age. It appears he was fascinated from the first with the life of a railway man, for his first job was in the railroad yards. He soon afterward became a telegraph operator for the Illinois Central, and his strides ahead in various capacities with the Michigan Central Railway and the Chicago and Alton brought him up to his first important executive position as general superintendent of the St. Louis, Kansas City and Northern in 1872. Before going to Canada he also served as general manager of the Southern Minnesota Railway and general superintendent of the Chicago and Alton and the Chicago, Milwaukee and St. Paul.

He superintended the extension of the Canadian Pacific to the Western Coast, and was present at the driving of the last spike on November 7, 1885. The total mileage which later came under his control was over 3,500. He was said to be the "Hill and Harriman" of Canada.

He was knighted by Queen Victoria in May, 1904, in recognition of his remarkable work in Canada, which included not only his railway and industrial interest, but semi-public service as governor of McGill University, the Royal Victoria Hospital and numerous other institutions.

The State Railroad Commission has been asked by the Pacific Telephone and Telegraph Company to undertake an investigation of the company's rates, tolls and rentals and to fix such charges uniform throughout the State on the basis of a fair return on the capital invested. It has agreed to comply with the findings of the commission.

The company hopes in this way to obviate complaints arising over charges of sectional discrimination. It has promised to supply the commission with inventories of all its California holdings.

In its application to the Railroad Commission for a uniform schedule of tariffs the telephone company pointed out that its California system is an integral unit of its system in Nevada, Washington, Oregon and Idaho, and that exchanges in each individual instance should be considered in their relation to the whole system when uniform rates are being fixed.

The application of the company stated that it was its desire that rates not only fair to itself, but fair also to the public, be fixed.

Experts of the company have been working for some time on the valuations of the California units. The inventories of its San Francisco and Los Angeles operative and non-operative properties have been accomplished and are ready for submission to the commission. The work of inventory will be continued.

Some time ago the Railroad Commission upon complaint of the company's patrons made various reductions in the company's rates, decreasing the annual return by \$400,000.

An injunction to prevent the city of Los Angeles from purchasing Monolith cement from the county for aqueduct construction work was denied by Superior Judge Wellborn. The suit was brought several days ago by the Riverside Portland Cement Company, which contended that the county's bid did not conform either with the terms of the advertisement for bids or with the city charter provisions.

Particular exception was made to the failure of the county to accompany its bid with a certified check to guarantee the signing of the contract. Attorneys for the cement company announced they would appeal.

The essential principles of the Cottonwood Creek and Division Creek hydro-electric plants of the Los Angeles aqueduct are involved in a suit for hearing before Judge Trippett of the United States District Court for September 16.

The suit is brought by George J. Henry, an electrical and civil engineer of San Francisco, against the city. Attorneys for both sides say that should the plaintiff win the case the city will be liable to injunction proceedings and will be forced to pay big royalties.

Santa Barbara County is threatening an injunction suit to prevent San Luis Obispo County from building a deflection dam on Santa Maria River.

Santa Barbara County maintains the deflection dam on which bids were to have been opened will throw the Santa Maria River storm water on to Santa Barbara County, where it will tear out roads, bridges and fertile farming land.

Los Angeles Northwest Outlook.

Collected by George Nelson, C. E.

With a view to hastening as much as possible the creation of a northwest outlet which is to be more than ever imperative now that the great San Fernando Valley irrigation zone has become a part of the city, the Public Works Committee of the City Council asked the City Engineer to prepare careful estimates of costs and damages for a plan that has never as yet been officially considered and which seems to afford a satisfactory solution of the problem for all concerned. The idea calls for an open cut along the line of First street and including sixty feet of ground on either side of that thoroughfare. The scheme is well worth considering because it bids fair to be an extremely economical way out of the dilemma.

It is conceded that the proposed open cut from First to Second street would offer the best permanent solution of the problem, but the enormous cost associated with a project of such magnitude makes it out of the question at present. The cheapest, easiest, quickest way through the hill is the one which ought to be supported by all. Tunnels at both First and Second streets would fill the bill, but these would cost too much and would take too much time to construct, besides being less desirable than a route or routes open to daylight and outside ventilation.

One of the main arguments for the cut at First street, as against the wide chasm between First and Second, is that it would be quite feasible to bridge the narrow gap at Olive, Grand, Bunker Hill, Oak, Flower and Figueroa, leaving these streets without breaks, such as would be necessitated in the event the larger project were to be undertaken. The cost of this plan as compared with that of the huge open cut approved by the last Council, would be small.

The open-cut plan as it stands at present—that from First to Second street—Would involve the regrading of an area approximately 900 feet from north to south and 2,500 feet from east to west. The lowest estimates fix the amount of dirt to be removed at 3,500,000 yards and the cost of the whole project at \$3,700,000. The cost of actual excavation need not be over a fifth of that amount in the narrow cut at First street.

It is proposed that the Council order a postcard vote be taken among the property owners within a district that might reasonably be asked to participate in the expense of the enterprise. If this brings evidence of strong public approval everything will be done to carry the thing through to completion.

Something must be done soon to open a route through Bunker Hill, both as a means of giving West and Northwest Los Angeles and all the territory beyond decent access to the downtown district and of relieving the congestion on Sixth and Seventh streets. New traffic arteries are urgently needed all through this great area and these must have a direct outlet downtown. The city cannot have all the enormous and growing traffic of the most rapidly developing quarter of Los Angeles and of the San Fernando Valley and Cahuenga region beyond straggling indefinitely on a roundabout course around Bunker Hill into a part of the business section that is already almost hopelessly congested. It must settle once and for all upon the plan we expect to follow in opening the hill to traffic and then get to work.

The proponents of the open cut from First to Second streets have not as yet shown any inclination to yield to another plan, holding that the street-level values that would be created on the wide floor of such an artificial valley as they propose would more than justify the greater expenditure. There are also many who have never been willing to agree to anything but tunnels. The plan of boring a roomy, well-lighted and airy tunnel at First street alone has numerous advocates. The question of cost inclines a large number to waver on any plan, as it appears to be settled that the improvement notwithstanding its immeasurable benefit to the city at large, will have to be paid for by an assessment district. So there are many to be heard from.

The postcard vote promises to play an important part in determining whether the property owners directly interested are willing to go ahead with anything at this time, as well as in ascertaining the point as to whether the proponents of the various plans that have been suggested for overcoming the hill barrier will be able to "get together" for concerted effort on one scheme.

The three separate plans for easy access to the business district from the west and north, through First street, have been summarized by the City Engineer at the request of the Public Works Committee of the Council. The cost of each of these improvements has also been estimated with care and, according to the plan of Chairman Topham of the Public Works Committee, the cost to each individual property owner will now be estimated and the question of the open cut, tunnel or wide cut through Bunker Hill will be placed squarely before the people interested.

One of the plans which have been under discussion is for a double-bore tunnel in First street from Hill to Figueroa street. This, according to the City Engineers estimates, may be built at a cost of \$939,628, not including damages.

The second proposal, which was suggested and looked upon with favor by the Public Works Committee, provides for an open cut through First street from Broadway to Fremont street and including 110 feet each side of First street, with bridges over the cut at Grand avenue, Olive, Hope and Flower streets. This, according to the City Engineer's estimate, would cost \$1,204,553, exclusive of damages. In addition, a new street opened along the cut would cost \$80,000, bringing the total cost of the improvement to \$1,284,553.

The third proposal, which is practically the "original" proposition, calls for an open cut through Bunker Hill, extending from 120 feet south of Second street to 120 feet north of First street. This plan for the improvement will, in the estimation of the City Engineer, cost \$2,076,655 for the actual work and another \$1,654,040 for damages, while the expense that will be incurred by the public utility companies in reconstructing their facilities is not estimated.

The City Engineer's estimate on the cost of a double-bore tunnel in First street, from Hill to Figueroa street, the tunnel to serve the surface of Hill street and to have the same approach grades as the proposed open cut, are as follows:

2,000 lin. ft. double bore tunnel at \$400.....	\$800,000
Portal structures and walls at ends of tunnel.....	41,360
Underpin city's part of Hill street tunnel.....	32,000
Regrade and pave streets outside ends of tunnel..	63,268
Change in water pipes and sewers.....	3,000
Damages to property between Broadway and Hill, and between Figueroa and Hill, but same as for cut	
Damages to property on Hill over tunnel less than for cut	
Total not including damages	\$939,628

Second Plan Cost.

The estimate for cutting First street and 110 feet each side from Broadway to Fremont street, using 3 per cent grades between Hill and Fremont, is as follows:

930,983 cubic yards cut at 50c.....	\$ 465,467
246,318 square feet pavement at 20c.....	49,264
8,665 lineal feet curb at 30c.....	2,581
87,464 square feet sidewalk at 11c.....	9,621
Underpin city's part of Hill street tunnel.....	32,000
Changes in water pipes and sewers.....	6,000
Value of buildings destroyed (Assessor's estimate)	471,620
Bridge across cut at Grand avenue.....	42,000
Bridges across cut at Olive, Hope and Flower....	126,000
Damages to property between Broadway and Hill and between Figueroa and Fremont unknown, but same as for tunnel.....	
Damages to property on hill outside of cut unknown, but greater than for tunnel.....	

\$1,204,553

to open a new street along one side of cut is estimated at \$0,000

..... \$1,234,553

Note—The land area consumed by slopes at the sides of the cut amounts to 150,000 square feet. The value of this is about \$50,000

Most Costly Scheme.

The biggest proposal for an open cut through Bunker Hill from 120 feet north of First street to a point 120 feet south of Second street, is itemized by the City Engineer as follows:

grading streets, 1,331,000 cubic yards at 35c....	\$ 466,900
grading property, 2,407,000 cubic yards at 35c....	\$42,450
changes in sanitary sewers	\$7,000
maintaining sewers during construction	3,000
changes in storm drain	1,500
changes in water pipes	25,000
airways and retaining walls	\$86,400
lowering city's portion of the Hill street tunnel..	\$2,000
payment for street improvements destroyed	132,405
superintendence, legal expenses condemning land, etc., and other incidental expenses not above included	50,000

\$2,076,655

In addition the following sum should be added for damages. These items are based on the Assessor's estimate of the market value:

cost of land for new streets	\$ 271,450
payment for improvements now on site of new streets	129,560
payment for improvement on private property which is to be lowered	1,000,000
damages due to grade changes outside razed area	253,000

\$1,654,040

Total

Expense which will fall upon public utility companies constructing their facilities not included. \$3,730,695

CALIFORNIA INLAND WATERWAYS ASSOCIATION CONVENTION IN LOS ANGELES.

Declaring for a national mercantile marine, the conservation of flood waters and the development of water ways in California, the Inland Waterways Association of California began its fourth convention in Blanchard Hall, Los Angeles.

Following is the convention program:

FRIDAY.

At 10 a. m.—Address of welcome, Mayor Sebastian; address, "Purpose of the Association," President Jacobs; appointment of chairmen of committees on credentials, resolutions and finance.

At 2 p. m.—Address, "California Harbors," Congressman Stephens, Congressman Randall, Congressman Kettner; address, "Conservation," Willis S. Jones.

SATURDAY.

At 10 a. m.—Address, "Los Angeles County and its Relation to the Inland Waterways Association," R. W. Pridham; "Flood Control, Los Angeles County," J. B. Lippincott; address, "United States Government and its Relation to Our Internal Improvements," George H. Maxwell.

FRIDAY.

Isidor Jacobs, president of the association, in the opening speech of the convention, vigorously attacked the dictators of various chambers of commerce for the part they played in the defeating the ship purchase bill. That they are being controlled by the ship trust pool, with headquarters in England, was his open charge.

"Many persons in the northern part of the state have been much exercised by reports industriously spread regarding the American merchant marine," he said in part. "One might be led to imagine from these reports that the merchant flag was being driven from the seas. That is false. As a matter of fact the total ship tonnage in foreign trade under the American flag is greater than at any time in the history of the country since 1863."

"I believe that California will double in population within seven years after the war closes," said Isidor Jacobs. "I believe that it is for us to say whether the expansion of the state in an agricultural and industrial way shall be finite or circumscribed."

Due to the press of official business, Governor Johnson was not able to attend the convention and deliver an address. A note from the Governor, expressing regret at not being able to attend, was read by President Jacobs.

David B. Livingstone, secretary of the Long Beach Chamber of Commerce, was unanimously elected secretary of the convention.

That the people of Los Angeles County will never stand for any system of flood control in which conservation is not the paramount consideration was the assertion of Chairman Pridham of the Board of Supervisors.

"I believe that we should first determine the amount of water that can be retained in the mountains, then the quantity that can be forced into the underground reservoirs by seepage and conserved in reservoirs. Afterward we can take up other problems of flood control," said Mr. Pridham.

Surveying the work that has been done by the County Board of Engineers, Flood Control, Mr. Lippincott threw the engineering problems into high relief.

"The water level of the wells from Compton to Santa Ana and through the whole artesian belt is falling," he said. "In the city wells at Long Beach the drop has averaged two feet a year for some years past. There is a real necessity of augmenting the supply."

But that reforestation of the Coast Range as one means is more alluring than practicable was unequivocally asserted by Mr. Lippincott. He showed by records that it is nearly impossible to grow trees on the southern slope of this range. He pointed out that of 40,000 trees planted by the park department in Griffith Park there are but fifty now growing.

"As for reservoir sites," he said, "our board surveyed many and decided on one impounding dam, that at the Devil's Gate in the Arroyo Seco. However, this dam will impound 406,000 acre feet of water. But the people of this county should not pin too much faith to reservoirs. It is a solution that promises much and many times realizes nothing."

Regulation by spreading the waters for percolation was suggested as extremely desirable by Mr. Lippincott, who pointed out that ranchers along the Santa Ana River have long been forcing water underground at a cost of 14 cents an acre foot.

This same water for irrigation purposes costs \$7.50 an acre foot," he said, "so the profit is appreciable."

Retardation of the waters by a series of intercepting dams in the mountains has yet to prove itself, according to Mr. Lippincott.

"In my opinion," he said, "there will never be a successful handling of the flood problems of this county until there is a series of levees from the mountains to the sea. But these levees will have to be heavily ripped, and their policing and maintenance must be assured."

How one portion of the State has handled the instrument of water with results that have astonished the world was told by Col. W. H. Holabird, receiver of the California Development Company. It was the story of the Imperial Valley told by a man whose part in the development work has been second to none.

The opening of the conference brought a little tilt on the subject of State unity, with President Jacobs urging that the north and south have interests in common. This brought the retort from Frank H. Olmsted of Los Angeles that the interests of the north seemed to be principally in getting the south's tax money and applying it to its own use.

Addresses by Willis S. Jones on "Conservation," George H. Maxwell on "The United States Government and its Relation to Our Internal Improvements," and by Congressman Stephens concluded the first day's program.

SATURDAY.

After spirited controversy the Inland Waterways Association of California yesterday went on record as favoring the Newlands-Broussard bill, a Federal measure providing for the appropriation of \$600,000,000 for river regulation and flood control.

This bill gives the Federal government authority to initiate, and money necessary to carry out, plans for the control of stream freshets, the use of surplus waters in the promotion of agriculture, power, and other developments, and furthering of navigation interests in the eight districts. For the California-Pacific division the appropriation is \$50,000,000 and for the Colorado River division a similar amount. The Missouri River-Great Plains-Gulf division, and the lower Mississippi, Ohio River and Appa-

lachian-Atlantic divisions get \$100,000,000 each, and the Mississippi-Great Lakes division \$50,000,000.

There was strong opposition to indorsing the bill as a whole, the committee on resolutions reporting that the principle of the measure only was favored. This aroused those who had demanded that the bill be indorsed without equivocation, and it was declared that if the principle only were supported by the association it would be a move to play into the hands of the railroads and other large corporations that would profit by obstructing the improvement of waterways.

"It is just what the big railroads want and have been trying to get in their sly and crafty way," declared George H. Maxwell, managing director of the National Reclamation Association. "They want the principle of the bill indorsed, but they don't want the bill indorsed. It would cut into them too hard."

Isidor Jacobs of San Francisco, president of the association, and A. W. Frye of Hynes, lead in the effort to have the principle and not the bill indorsed, but they gracefully gave their support to a resolution to indorse the whole bill when they found a majority of those in attendance at the conference so desired.

Following is the resolution as it was finally adopted:

RESOLVED, That the Inland Waterways Association of California reiterates its indorsement of the Newlands-Broussard river regulation bill and urges the early enactment of legislation by Congress to secure co-operation between the Nation and States, municipalities and other local agencies and districts looking to the complete conservation of all forest and water resources, control of floods and the regulation and standardization of the flows of all rivers and source streams for all beneficial uses and to promote irrigation and navigation.

The association also went on record as favoring an appropriation by the Federal government of approximately \$1,750,000 for the diversion of the Los Angeles River into Alamitos Bay, though George H. Maxwell took exception to the arbitrary ruling of the Board of Engineers for Rivers and Harbors, War Department, on the matter.

"We should make it plain," he said, "that we don't propose to be bound by the stupidity and stubbornness of army engineers that say that the government can only build a dam to keep the silt out of the harbor, when everybody knows that the silt comes from mountains that are owned by the government."

Indorsement was also given President Jacobs' proposition in his semi-annual report for closer co-operation between Southern and Northern California in matters of Federal appropriations.

"Such co-operation," said resolutions that were passed without a dissenting vote, "will make the people of the State present a solid front on all propositions of conservation and flood control in which Federal appropriations are desirable or imperative."

The association also gave its indorsement to the project to connect Long Beach and Los Angeles Harbors by a connecting channel, thus making them twin ports. Bonds to aid in this work have already been voted by the City of Long Beach, and the matter of government aid is under advisement. The project has been indorsed by Maj. R. R. Raymond, district engineer.

Indorsement was also given by the association to the plan of flood control favored for Los Angeles County by the board of engineers. This is the plan submitted several months ago calling for conservation of waters and a reservoir system.

A step towards broadening the scope of the association and increasing its activities was taken by establishing an auxiliary to the Inland Waterways Association in Southern California. A. W. Frye was appointed executive officer and David B. Livingstone of Long Beach, secretary.

SHOULD DETAILS BE FURNISHED BEFORE A CONTRACT IS SIGNED?

By G. Alexander Wright.

The difficulty of obtaining full detailed information of what is really wanted when bidding upon work is one of the serious problems which confronts the contractor today, for it is largely the "detail" which determines what work is really worth.

Ordinary small scale drawings and specifications which are sometimes lacking in information certainly do not sufficiently disclose what may possibly be insisted upon,

in detail, after a bidder has signed a contract—some owners imagine they do, and that they tell a bidder all that is necessary. Others are indifferent. It's up to the contractors they think; whilst still others may secretly hope that some things may slip through without being noticed. This is the particular type of owner who is ever ready to profit by a bidder's error.

Of late years, however, there has arisen among contractors a strong desire, arising partly from numerous sad experiences to know more of what is required "before" a contract is signed, rather than be obliged to await the details afterwards, as so often happens. In common fairness there should be some way of disclosing the details beforehand, or at least as far as may be possible so that all bidders may receive reliable and identical data to figure upon. Not only that, but if for any reason the character of any of the details should be simplified, after a contract is let, it would be more likely to serve to check against any possible unfairness.

In estimating the cost of building work, the writer knows of no legitimate reason why all the cards should not be laid upon the table face side up.

Fortunately for the building industry there are many architects who give as well as expect a square deal. These gentlemen are well known by bidders and they are very properly honored and respected as men and as members of an honorable profession. But it seems to be now very generally understood that there are others, and it is from the office of this latter class principally that the contractors obtain a more accurate idea of what is wanted, "after" the contract is signed, than it is possible for them to get before. Then it is too late. Many a contractor has been caused financial difficulty because of the, shall we say (?) peculiar temperament (?) or business viewpoint (?) such architects display, not provided for of course by any clause in the contract. These men are well known and scheduled in the contractors' mind just where they belong. The better type of contractors avoid such offices, or when invited to figure, they discreetly raise their bids high enough to cover possible contingencies, and in the long run somebody suffers.

But the point under consideration is, whether details should be furnished before or after a contract is let? To fair minded men it is obvious that there can be only one answer to the question. If details are not ready when the job is being figured they should certainly be in the hands of the contractor before he is called upon to sign up. It would surely be a more equitable way of letting a contract. Now as details must be prepared and furnished at some time, is there any logical reason why this should not be done at a time when such information would be of the greatest value to the bidder? I. e., when he is making up his prices. Why this keeping back of vital information at that time? It is not to the bidder's advantage of course. Who is it that benefits? Is it the owner? Or is it for the greater convenience of the architect? But whatever the reason, can it be regarded as fair to the bidder? It is obvious that an individual bidder is helpless. He cannot force the issue himself in any particular instance. But collectively through their organizations contractors might make reasonable and proper representations of these facts to their local architects with a view to betterment of the conditions named.

Certain remedies have been suggested from time to time. One is the quantity system which would go a long way towards determining all details beforehand, but pending the general adoption of this modern method of inviting bids, some other remedy is necessary. One that would seem to afford desired relief without causing hardship to anyone, would be the passage of a city ordinance providing that applications for building permits, for work above a certain estimated cost, should be accompanied, not only by the usual plans and specifications, but by details to a scale of say, not less than 1½ inches to the foot, or sufficient to indicate the character of the work which is to be performed in detail.

It takes no longer to study the details of a structure before a contract is entered into, than afterward. It has to be done sometime. The owner who is now so often unduly impatient to see his building started, would soon learn to adapt himself to the new condition, if he realized his architect was simply conforming to the law. There would be just as many buildings erected, and bidders would understand more clearly what it was they were bidding upon.

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APARTMENT HOUSES.

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vertised for the work, which will cost in the neighborhood of \$5,000.

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SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—An election will be held in the San Luis Obispo School District on October 1st to decide the question of issuing and selling bonds of \$100,000, the proceeds to be used in the purchase of school lots, erecting one or more school buildings, making additions to the present schools and the purchase of the necessary apparatus.

ABERDEEN WASH.—It has been made known that the City Council will exceed the bond limit if it issues bonds of \$500,000 to build the proposed water system recently voted by the people. What steps will now be taken has not been decided upon. According to bond men the city can issue only to the amount of \$409,000.

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SAN RAFAEL, MARIN CO., CAL.—The Clerk of the Supervisors has been directed to notify the State Highway Commission that the county is ready to pay \$35,000, its portion of the cost of constructing the Black Point cut-off and the bridge over the Petaluma River, whenever the work is progressing.

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SALEM, ORE.—State Engineer Lewis has approved plans for the Suttles Lake Irrigation District for issuance of \$600,000 in bonds for the irrigation of 12,000 acres, including the construction of a 58-foot dam, with 21,500 acre feet of water capacity and 15 miles of canal. George S. Young is project engineer. O. Laugaard of Portland is consulting engineer.

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NEWPORT BEACH, ORANGE CO., CAL.—According to statements of a local newspaper, enough signatures have been secured to insure the preliminary surveys of the Newport harbor line. L. C. Wallace, who is interested in the work, says: "Newport Beach will be just as good as her boast and immediately prepare for the bond election to vote the \$100,000 necessary

Iachian-Atlantic divisions get \$100,000,000 each, and the Mississippi-Great Lakes division \$50,000,000.

There was strong opposition to indorsing the bill as a whole, the committee on resolutions reporting that the principle of the measure only was favored. This aroused those who had demanded that the bill be indorsed without equivocation, and it was declared that if the principle only were supported by the association it would be a move to play into the hands of the railroads and other large corporations that would profit by obstructing the improvement of waterways.

"It is just what the big railroads want and have been trying to get in their sly and crafty way," declared George H. Maxwell, managing director of the National Reclamation Association. "They want the principle of the bill indorsed, but they don't want the bill indorsed. It would cut into them too hard."

Isidor Jacobs of San Francisco, president of the association, and A. W. Frye of Hynes, lead in the effort to have the principle and not the bill indorsed, but they gracefully gave their support to a resolution to indorse the whole bill when they found a majority of those in attendance at the conference so desired.

Following is the resolution as it was finally adopted:

RESOLVED, That the Inland Waterways Association of California reiterates its inorsement of the Newlands-Broussard river regulation bill and urges the early enactment of legislation by Congress to secure co-operation between the Nation and States, municipalities and other local agencies and districts looking to the complete conservation of all forest and water resources, control of floods and the regulation and standardization of the flows of all rivers and source streams for all beneficial uses and to promote irrigation and navigation.

The association also went on record as favoring an appropriation by the Federal government of approximately \$1,750,000 for the diversion of the Los Angeles River into Alamitos Bay, though George H. Maxwell took exception to the arbitrary ruling of the Board of Engineers for Rivers and Harbors, War Department, on the matter.

"We should make it plain," he said, "that we don't propose to be bound by the stupidity and stubbornness of army engineers that say that the government can only build a dam to keep the silt out of the harbor, when everybody knows that the silt comes from mountains that are owned by the government."

Indorsement was also given President Jacobs' proposition in his semi-annual report for closer co-operation between Southern and Northern California in matters of Federal appropriations.

"Such co-operation," said resolutions that were passed without a dissenting vote, "will make the people of the State present a solid front on all propositions of conservation and flood control in which Federal appropriations are desirable or imperative."

The association also gave its indorsement to the project to connect Long Beach and Los Angeles Harbors by a connecting channel, thus making them twin ports. Bonds to aid in this work have already been voted by the City of Long Beach, and the matter of government aid is under advisement. The project has been indorsed by Maj. R. R. Raymond, district engineer.

Indorsement was also given by the association to the plan of flood control favored for Los Angeles County by the board of engineers. This is the plan submitted several months ago calling for conservation of waters and a reservoir system.

A step towards broadening the scope of the association and increasing its activities was taken by establishing an auxiliary to the Inland Waterways Association in Southern California. A. W. Frye was appointed executive officer and David B. Livingstone of Long Beach, secretary.

SHOULD DETAILS BE FURNISHED BEFORE A CONTRACT IS SIGNED?

By G. Alexander Wright.

The difficulty of obtaining full detailed information of what is really wanted when bidding upon work is one of the serious problems which confronts the contractor today, for it is largely the "detail" which determines what work is really worth.

Ordinary small scale drawings and specifications which are sometimes lacking in information certainly do not sufficiently disclose what may possibly be insisted upon,

in detail, after a bidder has signed a contract—some owners imagine they do, and that they tell a bidder all that is necessary. Others are indifferent. It's up to the contractors they think; whilst still others may secretly hope that some things may slip through without being noticed. This is the particular type of owner who is ever ready to profit by a bidder's error.

Of late years, however, there has arisen among contractors a strong desire, arising partly from numerous sad experiences to know more of what is required "before" a contract is signed, rather than be obliged to await the details afterwards, as so often happens. In common fairness there should be some way of disclosing the details beforehand, or at least as far as may be possible so that all bidders may receive reliable and identical data to figure upon. Not only that, but if for any reason the character of any of the details should be simplified, after a contract is let, it would be more likely to serve to check against any possible unfairness.

In estimating the cost of building work, the writer knows of no legitimate reason why all the cards should not be laid upon the table face side up.

Fortunately for the building industry there are many architects who give as well as expect a square deal. These gentlemen are well known by bidders and they are very properly honored and respected as men and as members of an honorable profession. But it seems to be now very generally understood that there are others, and it is from the office of this latter class principally that the contractors obtain a more accurate idea of what is wanted, "after" the contract is signed, than it is possible for them to get before. Then it is too late. Many a contractor has been caused financial difficulty because of the, shall we say (?) peculiar temperament (?) or business viewpoint (?) such architects display, not provided for of course by any clause in the contract. These men are well known and scheduled in the contractors' mind just where they belong. The better type of contractors avoid such offices, or when invited to figure, they discreetly raise their bids high enough to cover possible contingencies, and in the long run somebody suffers.

But the point under consideration is, whether details should be furnished before or after a contract is let? To fair minded men it is obvious that there can be only one answer to the question. If details are not ready when the job is being figured they should certainly be in the hands of the contractor before he is called upon to sign up. It would surely be a more equitable way of letting a contract. Now as details must be prepared and furnished at some time, is there any logical reason why this should not be done at a time when such information would be of the greatest value to the bidder? I. e., when he is making up his prices. Why this keeping back of vital information at that time? It is not to the bidder's advantage of course. Who is it that benefits? Is it the owner? Or is it for the greater convenience of the architect? But whatever the reason, can it be regarded as fair to the bidder? It is obvious that an individual bidder is helpless. He cannot force the issue himself in any particular instance. But collectively through their organizations contractors might make reasonable and proper representations of these facts to their local architects with a view to betterment of the conditions named.

Certain remedies have been suggested from time to time. One is the quantity system which would go a long way towards determining all details beforehand, but pending the general adoption of this modern method of inviting bids, some other remedy is necessary. One that would seem to afford desired relief without causing hardship to anyone, would be the passage of a city ordinance providing that applications for building permits, for work above a certain estimated cost, should be accompanied, not only by the usual plans and specifications, but by details to a scale of say, not less than 1½ inches to the foot, or sufficient to indicate the character of the work which is to be performed in detail.

It takes no longer to study the details of a structure before a contract is entered into, than afterward. It has to be done sometime. The owner who is now so often unduly impatient to see his building started, would soon learn to adapt himself to the new condition, if he realized his architect was simply conforming to the law. There would be just as many buildings erected, and bidders would understand more clearly what it was they were bidding upon.

ADVANCE NEWS

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to start the jetty which must be built to try the theories of the engineers and experienced mariners who say that the bay can be scoured of sand and mud by the outgoing tides when the jetty has been built."

WOODBURN, ORE.—The election to vote \$10,000 for a new high school carried, and a site for the structure has already been purchased. An architect will be selected immediately.

YREKA, SISKIYOU CO., CAL.—The bonds of the Summit Union High School District, amounting to \$6,500, have been sold to Blyth, Witter & Company at a premium of \$142. Bids for the construction of the building will be called for at once.

MARTINEZ, CONTRA COSTA CO., CAL.—Hollis A. Lasell has purchased lot 10, block 3, in the Tormey-Merriethew Addition. The site is one of the choice pieces in the tract. Lasell will erect a building on the site.

VICTORVILLE, SAN BERNARDINO CO., CAL.—Bonds of \$30,000 have been voted, which assures the voters of the Victorville School District a new high school.

MANHATTAN BEACH, LOS ANGELES CO., CAL.—An election will be held on September 25th to vote bonds of \$20,000 for the purchase of a city hall site and \$6,000 for fire protection.

MARTINEZ, CONTRA COSTA CO., CAL.—An election will be held some time in October to decide the question of issuing and selling bonds of \$13,000 for a municipal water system. The Board of Trustees will set the date at a later meeting.

GLENDALE, LOS ANGELES CO., CAL.—An election will be called at an early date by the Trustees of La Canada School District, near Glendale, to vote on an issue of \$25,000 school bonds, \$20,000 of which will be for a new school building, and \$5,000 for site, etc.

POMONA, LOS ANGELES CO., CAL.—The City Council contemplates calling a special election in November to vote bonds in the sum of \$50,000 for municipal needs. A portion of the funds will be used for the erection of a chamber of commerce building.

LAMANDA PARK, LOS ANGELES CO., CAL.—A special election will be held at Lamanda Park to vote on the question of installing an ornamental lighting system on the principal streets of the city. The cost is estimated at approximately \$25,000.

VISALIA, TULARE CO., CAL.—The Supervisors of Tulare County are planning this year to spend about \$400,000 for roads, including the bridges and depreciation in State Highway bonds.

FAIRFAX, MARIN CO., CAL.—The question of issuing bonds of \$17,000 for a new school will be voted on October 9th.

FAIRVIEW, ORE.—At the regular city election in December this city will vote on a proposal to install municipal water system. Bond issue of \$12,600 will be voted to drill well and lay pipe.

MODESTO, STANISLAUS CO., CAL.—The question of erecting additional schools is now being considered by the school officials, owing to the large attendance in the present buildings.

BRIDGES, DAMS AND HARBOR WORK.

BAKERSFIELD, KERN CO., CAL.—Pile bridges, culverts and head walls. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids will be opened by the Board of Supervisors on October 1th for construction of pile bridges, culverts and reinforced concrete head walls on Division 5, Section 4, Bakersfield-McKittrick road, being that portion lying between the end of Section 3 and Lo-Kern; length approximately 8 miles. Plans can be secured from the County Surveyor.

MERCED, MERCED CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor. Merced. Owners, Merced County. The County Surveyor has been directed to prepare plans and specifications for the construction of a concrete bridge to be erected over the Santa Rita Slough on the road from Dos Palos to Los Banos. Bids will soon be called.

CHICO, BUTTE CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. Two bridges have been ordered built under the "Emergency Act" on the Biggs-Princeton road. One bridge is to be built on Lone Pine avenue over Chico Creek near Chico, and will cost \$3,000. The other bridge is to be built over Campbell's Creek on the Shasta road near the Tehama County line north of Chico.

WILLOWS, GLENN CO., CAL.—Bridges, 4, reinforced concrete. Cost not stated. Engineer, County Surveyor Bayard Knock. Willows. Owners, Glenn County. The County Supervisors have instructed County Surveyor Bayard Knock to prepare plans and specifications for four bridges, one at Newville, 190 feet long, of concrete, one at Butte City, some 40 feet in length, also of concrete, and two small concrete structures on the State Highway.

SAN JOSE, SANTA CLARA CO., CAL.—Culverts, 9, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the County Supervisors the County Surveyor was instructed to prepare plans for the following work: One concrete culvert on Scott Lane; two concrete culverts on Kifer road; two concrete culverts on Coffin road, and four concrete culverts on Mt. View and Alviso road. Further information may be had from the County Surveyor.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete. Cost stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications were presented at the last meeting of the Supervisors by the County Surveyor for a reinforced concrete bridge on Payne avenue over San Tomas Aquinas Creek in Santa Clara County. Bids will be opened on October 4th at 11 a. m. Plans and full information may be had from the County Surveyor at San Jose.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete. Cost stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The County Engineer has been directed to prepare plans and specifications

for a reinforced concrete bridge over Campbell Creek on the Prospect road. On completion and adoption of plans bids will be called.

VENTURA, VENTURA CO., CAL.—Bridge, reinforced concrete and steel, \$15,000. Engineer, County Surveyor, Petitt. Owners, Ventura County. The County Supervisors have accepted the plans and specification prepared by County Surveyor Petitt for the construction of the La Croc bridge. The plans call for a structure with a 150-foot span, 19 feet above the creek, and four openings on the north side each 24 feet. Bids will be called for this week.

MARTINEZ, CONTRA COSTA CO., CAL.—Culvert, reinforced concrete, \$900. Engineer, County Surveyor, Martinez. Owners, Contra Costa County. All bids received by the Trustees for the concrete culverts on the Bay Point Pittsburg road were rejected, as a were considered too high. The bids received were: Uppsbrom, Dalin Barmwell, \$1,235; Macrae & Layaz, \$1,414. The culvert has a span of about 12 feet and it is believed can be built for under \$900. New bids will probably be called.

MARTINEZ, CONTRA COSTA CO., CAL.—Viaduct, steel and concrete. Cost not stated. Engineer, County Surveyor, Ralph R. Arnold. Martinez. Owner, Contra Costa County. Plans and specifications for the overhead crossing of the Southern Pacific tracks at Payette on the line of the Martinez-Bay Point road have been completed by County Surveyor Ralph R. Arnold. A call for bids for building the steel crossing is to be issued soon. The bridge is to be built jointly by the railroad and the county, each paying half of the cost in conformance with the orders of the Railroad Commission issued some time ago.

PETALUMA, SONOMA CO., CAL.—Furnishing and placing piles. Cost follows. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. The City Council has ordered plans and specifications prepared for the placing of piles on the east bank of the Petaluma River. The cost is estimated at approximately \$7 a front foot for 24 feet. Further information relative to the work may be had from the City Engineer.

Contracts Awarded.

SAN JOSE, SANTA CLARA CO., CAL.—By-pass construction, \$10,230. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, M. E. Kilcourse, 55 West Santa Clara avenue, San Jose. Contract price, \$10,230. Note: The by-pass will be known as the Canoas By-Pass.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete, \$1,919. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, S. Sciarino, San Jose. Contract price, \$1,912. Bridge over Penitence Creek at Noble avenue.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete, \$6,340. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, M. I. Kilcourse, 55 West Santa Clara avenue, San Jose. Contract price, \$6,340. Bridge over Guadalupe Creek

SAN ANSELMO, MARIN CO., CAL.—Bridge repairs. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Contractor, E. Harrington, San Anselmo. Contract price not stated.

DIXON, SOLANO CO., CAL.—Bridge construction, \$30,500. Engineer, County Surveyors, Fairfield and Woodland. Owners, Solano and Yolo Counties. Contractors, Clinton Fireproofing Co., Modanock Bldg., S. F. Contract price, \$30,500. At a joint session of the Supervisors of Yolo and Solano Counties it was decided to proceed with the construction of a bridge across the creek on the line where the west side of the State Highway passes from Yolo into Solano County. Some months ago the two Boards of Supervisors entered into a joint contract with the Clinton Fireproofing Co. for the construction of the bridge, but the Yolo Board rescinded its part of the contract when the State Highway Commission failed to relieve Yolo County of the interest on the bonds of the Yolo Causeway between Davis and Sacramento. Recently the Yolo Board decided to build. The structure will cost \$30,500 and will unite the two units of the State Highway system in Yolo and Solano Counties.

MODESTO, STANISLAUS CO., CAL.—Bridges, 9, reinforced concrete, \$14,525. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Contractors, Barrett & Hilp, Sharon Bldg., S. F. Contract price, \$14,525.

EUREKA, HUMBOLDT CO., CAL.—Bridge, \$2,523. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractors, Mercer-Fraser Co., Eureka. Contract price, \$2,523.

OROVILLE, BUTTE CO., CAL.—Bridges, reinforced concrete. Cost as follows. Engineer, County Surveyor, Oroville. Owners, Butte County. Contractors, Chico Construction Co., Chico, 8 bridges between Nelson and Butte Creek. Contract price, \$12,927. Chico Construction Co., Chico, Burnham Slough bridge. Contract price, \$1,190, and O. A. Peter, Oroville, North Channel of Butte Creek bridge. Contract price, \$2,713.

FACTORIES AND WAREHOUSES

SAN PEDRO, LOS ANGELES CO., CAL.—Reinforcing steel. Cost not stated. Engineer, Harbor Engineer, Los Angeles. Owners, City of Los Angeles. Bids will be received by the Board of Harbor Commissioners up to 10:30 a. m. September 29th, 1915, for furnishing the city with the reinforcing steel required for the erection of a six-story reinforced concrete warehouse on Municipal Dock No. 1 at San Pedro, in accordance with plans and specifications on file in the office of the Harbor Engineer. Forms of proposals, contract and bond and instructions to bidders will be furnished upon application. Certified check for ten per cent is required. A. C. Matson is secretary of the board. Bids will also be opened on the same date for furnishing spiral reinforcing for the same structure.

BERKELEY, ALAMEDA CO., CAL.—Laundry, 1 story and base, reinforced concrete, \$30,000. Architect, John Galen Howard, 604 Mission street, S. F. Own-

ers, Regents of the University of California. Location, University Campus. Will have a capacity of 3,000 pieces daily. Interior finish, pine. Concrete floor. Steam heat and hot water system. Special machinery. Exterior facing with cement plaster. Plans being prepared.

PITTSBURG, CONTRA COSTA CO., CAL.—Auxiliary pumping plant, \$40,000. Engineer's name not given. Owners, Contra Costa Gas Co., Pittsburg. The Contra Costa Gas Company is installing an auxiliary pumping system in Pittsburg. The new pumps will have a capacity of 15,000 cubic feet of gas and will supply the towns of Pittsburg, Antioch, Concord and Martinez.

ASTORIA, ORE.—Grain elevator, reinforced concrete and steel. Cost not stated. Engineers, Port of Astoria Commission, Astoria. Owners, City of Astoria. Plans and specifications have been completed by the engineers of the Port of Astoria Commission, and bids are now being taken for the construction of a large grain elevator. Bids close September 28th, 2 p. m. The contract is to include excavation, sheet piling, reinforced concrete work and iron work necessary to construct the superstructure. The approximate quantities follow: 3,600 yards sand excavation, 360 feet sheet piling, 1,300 cubic yards concrete, 115 tons reinforcing steel, 5 tons structural steel, 150 quarts waterproofing, 16 tons miscellaneous cast and wrought iron.

FIRE REPORT

SANTA ROSA, SONOMA CO., CAL.—Fire destroyed the Forestville Winery, about fourteen miles from Santa Rosa and one of the largest independent wineries in this county, last week. The building loss is estimated at \$50,000 and which is partly covered by insurance.

MADERA, MADERA CO., CAL.—A grass fire near Oakdale destroyed more than 250 feet of the Madera-Sugar Pine Lumber flume last Saturday. A barn owner by C. W. Meyers was also destroyed. The rebuilding of the flume will commence immediately.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—Fire destroyed the entire contents of the concrete warehouse owned by R. E. Katz and leased by Heap & Heap, just south of Rialto avenue and west of H street. The loss is \$10,000. Work on repairing the building will commence in a few days, according to the lessees.

REDDING, SHASTA CO., CAL.—The Presbyterian Church and parsonage and a dwelling on the south was destroyed by fire here last week. The loss is estimated at \$8,700.

KENNETT, SHASTA CO., CAL.—At a loss of \$6,000, the home of Albert Kopping was destroyed by fire.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, Carl Lemerding. Location, south Union near Hyde. Will contain two six room flats and a basement garage. Interior finished in pine and elm panels. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms

finished in tile. Automatic water heaters. Exterior cement plaster on metal lath. Plans complete and figures being taken.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architects, Koenig & Christiansen, Humboldt Bank Bldg., S. F. Owner, H. C. Christiansen. Location, north Cabrillo west 7th avenue. Will contain two flats and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors and open fire places. Mantels tile. Tile wainscot in bath rooms. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats and store, 2 story and base, frame, \$7,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. Location, 48th avenue and J street. Will contain one store and two flats of four and five rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with rustic and cement plaster on metal lath. Plans being prepared.

SAN FRANCISCO—Flats, 3, 2 story and base, frame, \$4,000 each. Architects, Oliver & Thomas, Pantages Theatre Bldg., Oakland. Owner, Mr. Read. Location, south Filbert between Pierce and Steiner. Will contain two flats each. Interior finish pine, white enamel and hardwood. Hardwood floors. Open fire places, tile or brick mantels and automatic water heaters. Bath rooms finished in tile. Exteriors covered with cement plaster and ship-lap. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$2,000. Architect, none. Owner, Michael Cain, 1277 21st avenue, S. F. Location, west 21st avenue north of Irwin, covering an area of 25 by 44 feet. Will contain two flats of five rooms. Interiors finished in pine and white enamel with some hardwood floors. Open fire places and tile mantels. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 3 story and base, frame, \$7,500. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, G. De Martini. Location east Mason south of Broadway. Will contain three flats of six rooms each. Interior finish, pine with some hardwood floors. Open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters. Exterior, brick veneer and cement plaster on metal lath. Plans being prepared.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architect, none. Owner, Mrs. Marie Sterner, 1621 Lake street, S. F. Location, east 6th avenue north of Geary, covering an area of 25 by 66 feet. Will contain two flats of five and six rooms and a basement garage. Interior finished in pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Tile in the bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster on

metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architect, none. Owner, G. Lindner, 4029 26th street, S. F. Location, east Castro north of 26th, covering an area of 33 by 49 feet. Will contain two flats of six rooms and a basement garage. Interiors finished in pine with elm panels and hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$2,500. Architect, none. Owners, G. W. Renish and Mrs. Boyle, 1781 9th avenue, S. F. Location, west Ritch north Brannan. Will contain two flats of five rooms and bath. Interior finish pine. Some oak floors. Open fire place and tile mantel. Imitation tile wainscot in bath room. Exterior covered with rustic and shiplap. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Flats, 4, 2 story and base, frame, \$4,000 each. Architects, Hutchinson & McLean, 470 13th street, Oakland. Owner, T. Cullen, 1630 Filbert street, Oakland. Location, east 16th west of 11th avenue. Will contain two flats of six rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster on metal lath. Plans complete and owner taking segregated figures.

GARAGES

SAN FRANCISCO—Garage, 1 story and base, brick, \$10,000. Architect, Henry C. Smith, Humboldt Bank Bldg., S. F. Owner's name withheld. Location, west Valencia between 18th and 19th streets, covering an area of 75 by 100 feet. Will contain mezzanine floor, storage space, wash room and repair shop. Concrete floor. Exterior faced with pressed brick. Plans complete and figures being taken.

GOVERNMENT WORK & SUPPLIES

San Francisco Circular No. 34.

The following awards have been made by the depot quartermaster, San Francisco, Cal., under office circular No. 24, opened August 13:

1. Bid 1. Boesch Lamp Co., 1135 Mission street, San Francisco, Cal.
2. Keystone Bros., 130 2nd street, San Francisco, Cal.
3. Union Cooperage Co., St. Louis, Mo.

4. Mark-Lally Co., 235 2nd street, San Francisco, Cal.
5. F. S. Johnson Co., 576 Howard street, San Francisco, Cal.

6. Van Arsdale-Harris Lumber Co., 5th and Brannan streets, San Francisco, Cal.

8. G. M. Josselyn & Co., 58 Sacramento street, San Francisco, Cal.

9. California Steam and Plumbing Supply Co., 671 5th street, San Francisco, Cal.

10. California Barrel Co., Monadnock Building, San Francisco, Cal.

11. J. E. Higgins Lumber Co., 423 6th street, San Francisco, Cal.

12. Baker & Hamilton, 4th and Brannan streets, San Francisco, Cal.

13. White Bros., 5th and Brannan streets, San Francisco, Cal.

14. H. E. Holmes & Co., 744 Folsom street, San Francisco, Cal.

15. W. T. Garratt & Co., 299 Folsom street, San Francisco, Cal.

16. H. C. Magnus & Co., 257 California street, San Francisco, Cal.

17. The George Lawrence Co., Portland, Ore.

18. C. W. Marwedel, 76 1st street, San Francisco, Cal.

19. Singer Sewing Machine Co., 142 4th street, San Francisco, Cal.

20. Levenson & Co., 325 Market street, San Francisco, Cal.

23. James H. Hardy Co., Channel and 4th streets, San Francisco, Cal.

24. Western Pad and Nail Co., 176 Haight street, San Francisco, Cal.

25. Western Electric Co., 680 Folsom street, San Francisco, Cal.

26. W. Pike & Co., 711 Mission street, San Francisco, Cal.

27. C. J. Hendry Co., 46 Clay street, San Francisco, Cal.

28. National Brass and Copper Tube Co., 639 Mission street, San Francisco, Cal.

29. Marshall-Newell Supply Co., 142 Steuart street, San Francisco, Cal.

30. Johnson & Joseph Co., 34 Sacramento street, San Francisco, Cal.

32. John A. Roebeling's Sons Co., 624 Folsom street, San Francisco, Cal.

33. Larkin Asphalt Co., 4876 18th street, San Francisco, Cal.

34. Marshall - Wells Hardware Co., Portland, Ore.

36. Pacific Tool and Supply Co., Mission and Fremont streets, San Francisco, Cal.

37. Noise-Klinkner Co., 1212 Market street, San Francisco, Cal.

39. Coffin - Redington Co., 35 2nd street, San Francisco, Cal.

40. Holbrook, Merrill & Sletson, 6th and Bluxume streets, San Francisco, Cal.

41. Judson Mfg. Co., 819 Folsom street, San Francisco, Cal.

42. John Clark Saddlery Co., Portland, Ore.

43. Patrick & Co., 560 Market street, San Francisco, Cal.

44. Schwabacher-Frey Stationery Co., 543 Market street, San Francisco, Cal.

45. M. Greenberg's Sons Co., 225 Beale street, San Francisco, Cal.

48. Crane Co., 2nd and Brannan streets, San Francisco, Cal.

50. Dunham, Carrigan & Hayden Co., 140 Kansas street, San Francisco, Cal.

52. Independent Pneumatic Tool Co., 61 Fremont street, San Francisco, Cal.

54. Waterhouse & Lester Co., 754 Howard street, San Francisco, Cal.

55. Electric Novelty Works, 533 Mission street, San Francisco, Cal.

58. Acme Lumber Co., 6th and Channel streets, San Francisco, Cal.

57. Hart-Wood Lumber Co., 5th and Berry streets, San Francisco, Cal.

60. Pacific Mill and Timber Co., Portland, Ore.

61. Eccles & Smith, 71 1st street, San Francisco, Cal.

Item 1. 12 coolers, water, 5-gal—\$5.91 ea, bid 3.

2. 36 do, 10-gal—\$3.6 ea, do.

3. 150 lbs iron, Norway—\$3.95 cwt, bid 12.

4. 25 pine, escutcheon—32c lb, bid 31.

5. 500 ft pipe, wrought, 1 in—\$7.50 per 100 ft bid 12

6. 24 reducers, hose, 2½ in—65c ea, bid 50.

7. 1 machine, valve reseating—\$175, bid 12.

8. 12 lbs sal ammoniac, lump—15c lb, bid 39.

9. 50 bolts, carriage, common, ¼ x 3 in—70c per 100, bid 31.

10. 50 do, ¼ x 4 in—80 per 100, do.

11. 50 do, ¾ x 2½ in—\$1 per 100, do.

12. 50 do, ¾ x 3½ in—\$1 per 100, do.

13. 50 do, ¾ x 4 in—\$1.05 per 100, do.

14. 50 do, ¾ x 5 in—\$1.20 per 100, do.

15. 50 do, ¾ x 6 in—\$1.32 per 100, do.

16. 50 do, ¾ x 8 in—\$1.80 per 100, do.

18. 50 do, 1½ x 9 in—\$1.95 per 100, do.

18. 50 do, 1½ x 2 in—\$1.70 per 100, bid 31.

19. 50 do, 1½ x 3 in—\$2.10 per 100, bid 31.

20. 50 do, 1½ x 3½ in—\$2.25 per 100, do.

21. 50 do, 1½ x 4 in—\$1.90 per 100, bid 25.

22. 50 do, 1½ x 5 in—\$2.70 per 100, bid 31.

23. 50 do, 1½ x 8 in—\$3.60 per 100, do.

24. 50 do, 1½ x 10 in—\$4.25 per 100, do.

25. 50 do, ½ x 12 in—\$4.90 per 100, do.

26. 50 braces, bench, brass—90c ea, bid 55.

27. 50 brackets, curtain, brass—30c ea, do.

28. 12 sheets brass, half hard, 14x36 in—34c lb, bid 28.

29. 6 sheets do, 12x24 in—31c lb, do.

30. 5 sheets do, 12x24 in, 10 gauge—31c lb, do.

32. 1 roll cloth, brass—19½c sq ft, bid 32.

33 and 24. 2 sheets copper planished tin—32c lb, bid 40.

35. 4 drills, twist, No. 110—19c ea, bid 12.

36. 12 do, No. 1044—45c ea, do.

37. 24 elbows, street, ¾ in—2c ea, bid 4.

38. 24 do, ½ in—3.2c ea, do.

39. 24 do, ¾ in—4.3c ea, do.

40. 24 tees, ½ in—3.7c ea, bid 9.

41. 24 unions, brass, ¾ in—39c ea, do.

43. 50 handles, hatch, galvanized—13c ea, bid 27.

44. 100 hooks, curtain, brass—72c doz, bid 31.

45. 12 hasps, hinge, Boston — \$2.75 doz, bid 31.

46. 6 prs hinges, spring butt, 4 in—\$1.02 pr, bid 12.

47. 6 prs do, 5 in—\$1.30 pr, do.

48. 12 prs hinges, butt, brass, 2x2 in—23c pr, bid 27.

49. 12 prs do, 2½ x 2 in—35c pr, do.

50. 12 prs do, 3½ x 2½ in—65c pr, do.

51. 12 hooks, cabin door, brass—75c ea, bid 45.

52. 100 do, mess table—\$1.50 set, bid 45.

54 to 58. 26 bars iron round, per lb—¾ in, 5c; ½ in, 4½c; ¾ in, 4½c; 1 in, 4½c, bid 27.

59 to 61. 6 bars iron, refined, round, per lb—¾ in, 2.2c; ½ in, 2c; ¾ in, 2c, bid 12.

62 to 67. 24 bars iron, flat, galvanized, per lb—3/16 in x 1½ in, 5.7c; ¼ x 1½ in, 5.5c; ½ x 1½ in, 5.5c; ¾ x 1½ in, 5.8c, bid 12.

68. 2 bars iron, angle, galvanized—5.7c lb, bid 41.

69. 10 sheets steel, galvanized, 36x 120 in—3.9c lb, bid 12.

70. 10 sheets, do, 36x96 in—4.4c lb, do.

71. 50 ft lacing, belt, wire—60c per 100 ft, bid 50.

72. 200 lbs lead, sheet, 6 lb—9c lb, bid 40.

73. 200 lbs do, 8 lb—9v lb, do.

74. 12 locks, wardrobe, cylinder—\$4.40 doz, bid 26.

75. 100 lb in ft moulding, ash—\$27.50 lot, bid 13.

76. 500 ft lumber, ash, ½ x 12 in—\$99 M, bid 13.

77. 300 ft do, 1x12 in—\$105 M, bid 57.

78. 300 ft do, 1½ x 12 in—\$105 M, do.

79. 300 ft do, 1½ x 16 in—\$105 M, do.

80. 200 ft do, 2x10 in—\$134.50 M, bid 13.

81. 192 ft do, 2x18 in—\$105 M, bid 57.

82. 600 ft do, 3x12 in—\$144.50 M, bid 13.

82A. 400 ft do, 3x6 in—\$105 M, bid 57.

83. 50 ft do, hickory, 1½ x 6 in—\$120 M, do.

84. 600 ft do, spruce, ½ x 12 in—\$25 M, bid 60.

85. 299 ft do, sugar pine, 1x8 in—\$65 M, bid 6.

86. 304 ft do, 1x12 in—\$75 M, do.

87. 299 ft do, 1½ x 16 in—\$75 M, do.

88. 280 ft do, 2x24 in—\$110 M, bid 57.

89 to 93. 5,000 ft do, Oregon pine, rough, per M ft—1x6 in, \$8; 2x6 in, \$8; 4x4 in, \$9; 4x6 in, \$9, bid 60.

94. 600 ft do, Oregon pine, clear, 1x12 in—\$22 M, do.

95. 200 ft do, 2x12 in—\$25 M, bid 56.

96. 300 ft do, 2x3 in—\$20 M, bid 60.

97. 300 ft do, 2x4 in—\$20 M, do.

98. 200 ft do, 2x6 in—\$20 M, do.

99. 600 ft do, 3x14 in—\$31.97 M, bid 28.

100. 304 ft do, flooring, 1x4 in—\$22 M, bid 60.

101. 200 lbs oakum, marine—9½c lb, bid 27.

102 to 107. 36 parts air hammer, price each—Barrels, Boyer, \$8; handles, Boyer, \$7.75; barrels, Thor, \$14.62; handles for Thor No. 1, \$13.59; barrels for Thor A, \$14.02; handles for Thor A, \$13.59, bid 53.

108. 100 dowels, birch, ¼ x 24 in—75c per 100, bid 12.

109. 100 do, 1 x 24 in—75c per 100, do.

110. 100 do, ½ x 24 in—\$1 per 100, do.

111. 24 bands, brass hose—2c ea, bid
112. 24 plates, brass, padlock—20c ea,
bid 45.
113 to 120, 48 places, name, brass—
ea, bid 16.
124 and 125, 20 lbs rings, clinch—12c
bid 31.
126, 50 sockets, wall, curtain—10c
bid 55.
127, 10 lbs rivets, tinner's—8c lb, bid
128, 200 rivets, brass—6½c ea, bid 45.
129, 100 do, button head—12c ea, bid
130, 50 screws, lag, ¾x4 in—\$1.05 per
do, bid 25.
131, 2 gr screws, machine, brass, 1¼-
in-10c gr, bid 28.
132, 2 gr do, 1¼-in—66c gr, do.
133, 2 gr do, 2-in—\$1.28 gr, do.
134, 1 gr do, 2-in, 16-thread—\$3.37
do.
135, 2 gr do, 1¼-in—48c gr, bid 61.
136, 2 gr do, 2-in—\$1.28 gr, bid 29.
137, 2 gr nuts, brass, No. 8—60c gr,
bid 12.
138, 4 gr do, No. 14—65c gr, do.
139, 4 gr do, No. 14—50c gr, do.
140, 1 gr do, No. 20—62 gr, bid 34.
142, 5 lbs washers, iron, ¼-in—10c
bid 34.
143, 10 lbs do, ¾-in—9c lb, do.
144, 10 lbs do, ½-in—7.85c lb, bid 41.
145, 4 wheels, baggage truck, \$3.50
bid 14.
146, 2 sheets zinc, 48x96 in—30c lb,
bid 24.
147, 100 lbs nails, wire, common, 6d
4-10c lb, bid 27.
148, 100 lbs do, finishing, 6d—4.45c
bid 50.
149, 100 lbs do, 8d—4.35c lb, do.
150, 1 anvil, loop—\$1, bid 5.
151, 1 bbl asphaltum—\$4.50 bbl, bid
48.
152, 24 batteries, Columbia—25c ea,
bid 34.
153, 1 bit, twist drill, 3-16 in—57c
bid 34.
154, 1 do, ½-in—71c, do.
155, 50 lbs borax, lump—4.5c lb, bid
156, 2 gr buttons, cushions, black—
c gr, bid 54.
157, 2 gr do, russet—50c gr, do.
158, 50 yds canvas, white duck—32c
bid 31.
159, 288 clips, hame—29c doz, bid 17.
161, 100 yds cloth, enamel—42c yd,
bid 17.
161, 100 yds cloth, enamel—42c yd,
bid 17.
162, 1 gr crayons, metal workers—
16c gr, bid 36.
163, 12 crocks, white stoneware—61c
bid 20.
164, 1 duplicator, Neostyle—\$45, bid
50.
166, 1 set grommet, for No. 2 grom-
mets—\$1.23, bid 61.
167, 1 do for No. 4 grommets—\$1.45,
bid 31.
168, 18 hammers, farriers—\$1.15 ea,
bid 50.
169, 10 bars iron, Swedish, 5-16x2¼
—\$3.90 cwt, bid 12.
170, 10 bars do, ¾x¾ in—\$4.10 cwt,
bid 12.
171, 6 bars do, ¾x4 in—\$5 cwt, bid
12.
172, 10 bars do, ½x1½ in—\$5 cwt,
bid 12.
173, 1,000 links, repair, open, ¼-in—
c gr, bid 50.
174, 1,000 do, 5-16 in—\$1.15 gr, do.
175, 1,000 do, ¾-in—\$1.80 gr, bid 12.
176, 1,000 do, 7-16 in—\$2.45 gr, bid
12.
176A, 3 gr do, ¼-in—56c gr, do.
176B, 3 gr do, 5-16 in—\$1.15 gr, do.
177, 6 prs lines, cheek—\$3.20 pr, bid
12.
179, 24 prs lines, do, russet—\$5.35 pr,
bid 12.
180, 24 prs do, 4-horse—\$4.10 pr, do.
181, 252 ft lumber, hickory, 2x6 in—
\$3 M, bid 11.
182, 240 ft do, oak, 4x10 in—\$134 M,
bid 11.
183, 242 ft do, 2x8 in—\$114 M, do.
184, 252 ft do, 2x6 in—\$175 M, bid 13.
185, 242 ft do, 3x12 in—\$134 M, bid 11.
186, 252 ft do, white pine, ½x14 in—
4.50 lot, bid 11.
187, 240 ft do, 1x6 in—\$24.50 lot, do.
188, 264 ft do, poplar, ½x16 in—\$25-
lot, bid 11.
189, 243 ft do, ¼x18 in—\$19.23 lot,
bid 13.

190, 1 machine, sewing, No. 6 Big
Shuttle—\$195, bid 17.
191, 5 doz papers needles, lining, No.
12—\$1.83 gr, bid 54.
192, 5 doz papers do, No. 14—\$1.68
gr, do.
193, 6 doz papers nails, tufting, 1½-
in—\$1.20 doz papers, bid 54.
195, 3 doz needles, for Big Shuttle
machine—70c doz, bid 17.
176, 197 and 198, 72 needles, sad-
dler's, Lands—70 doz, bid 17.
195 to 204, 6 doz do, saddler's, leath-
er and cloth—50c doz, bid 19.
206, 18 ft chain, for Stewart's clip-
ping machine—\$4 lot, bid 12.
207, 18 ft shaft, flexible, do—\$4.32 lot,
bid 50.
208, 6 eccentric rolls, do—5c ea, bid
2.
209, 6 nuts, tension, do—4c ea, bid 12.
210, 48 plates, bottom, do—\$1.12 ea,
do.
211, 48 plates, upper, do—74c ea, do.
212, 1 can paste, chain—50c lb, bid 18.
213, 5 gr patches, knob—30c gr, bid
54.
215, 1 can powder, ink—90c, bid 2.
216, 432 rosettes, harness—\$5.40 gr,
do.
217, 1 sharpener, pencil, "Webster"—
\$3, bid 43.
218, 864 straps, harness, double end—
\$4.30 gr, bid 42.
219, 864 do, open eye—\$1 gr, do.
220, 36 sockets, whip—\$3.50 doz, bid
54.
221, 14 stamps, dating, band—18c ea,
bid 17.
222, 388 staples, hame—\$2.15 gr, bid
42.
223, 5 bars steel, spring, ¼x1½ in—
3½c lb, bid 41.
224, 5 bars do, ¼x1½ in—3½c lb, do.
225, to 232, 1350 bars do, tire, assorted
sizes—\$2.50 cwt, bid 34.
238, 10 oilstones, extra Washita—37c
ea, bid 50.
246, 12 spools thread, linen, black,
No. 40—\$2.45 doz spools, bid 5.
247, 12 spools do, white, No. 35—\$3-
35 doz spools, do.
249, 12 spools do, black, No. 35—\$3-
35 doz spools, do.
251, 12 centers, neckyoke—\$7.25 doz,
bid 42.
252, 3 bars iron, Swedish, 2-in—\$3-
90 cwt, bid 12.
253, 1 bbl tar, best quality—\$.6, bid
27.
254, 6 prs pads, hook—52c pr, bid 24.
255, 50 gal acid, carbolic, crude—34c
gal, bid 39.
256, 100 barrels, slack, pine—70c ea,
bid 10.
257, 2 bits, for Star auger—\$1.60 pr,
bid 54.
260 and 261, 20 pcs lumber, spruce,
clear—\$29.88 lot (for 2 lots), bid 57.
262, 6 pieces do, oak, 2½x4 in—\$14-
40 lot, bid 13.
263, 2,000 ft do, Oregon pine, 1x3 in—
\$8 M, bid 60.
264, 2,000 ft do, 1x4 in—\$8 M, do.
265, 1,000 ft do, 1x5 in—\$8 M, do.
266, 1 machine, hub-boring—\$26, bid
54.
267, 268, and 269—11 prs pads, hoof,
rubber—68c pr, bid 24.
270, 60 spokes, wagon—\$15 lot, bid
54.
271 and 272, 4 jaws, Rover's bolt
clipper—90c ea, bid 50.
273, 800 lbs iron, Norway, round—
\$4.40 cwt, bid 12.
274, 600 lbs do, flat, ¾x1½ in—\$3.30
cwt, do.
275, 1,000 lbs do, ¾x2½ in—\$3.55
cwt, bid 50.
276, 400 lbs do, ½x1½ in—\$4.95 cwt
for 138, bid 34; \$7.50 cwt for 130 lbs,
bid 41.
277, 500 lbs do, ¾x1½ in—\$3.90 cwt,
bid 12.

Reclamation Service, Steel Bridge.

The following bids were received by
the chief engineer, U. S. reclamation
service, Washington, D. C., for
installing and erecting a steel bridge of
three 100-foot spans and a structural-
steel movable crest with operating
machinery, for the Vandalla dam, Milk
River project, Montana:

Item 1, 3 100-foot steel bridge spans;
2, 3 sets movable crest gates; 3, 3 pairs
cast-iron pler plates; 4, erection of

structural steel work; 5, 3 sets hold-
ing and operating equipment; 6, erec-
tion of above.

Vulcan Iron Works, Denver, Colo.,
item 5, \$6,166; time, Jan. 1, 1916.

Minneapolis Steel Machinery Co.,
Minneapolis, Minn., item 1, total, \$8-
457; 2, \$2,278; 3, \$110; 105 days.

The Security Bridge Co., Minneapolis,
Minn., item 1, \$2,317; 2, 3.5c; 3, \$120; 4,
\$6,700; 5, \$5,588; 6, \$3,840; time, items
1 to 3, March 1; 4, June 1; 5, March 1;
6, June 1.

Zelch & Wahton, St. Paul, Minn., item
1, \$2,666; 2, \$2,759; 3, \$201; 4, \$4,675; 5,
total, \$13,649; 6, \$4,520; time, items 1
to 3, 141 days; 4, May 1; 5, 141 days; 6,
July 1.

Hardie-Tynes Mfg. Co., Birmingham,
Ala., item 5, total, \$24,039; 95 days;
alternate, using ball bearings, \$22,611
and \$18,762.

The Lakeside Bridge and Steel Co.,
North Milwaukee, Wis., item 1, total,
\$6,337.50; 2, 3.25c; 3, \$180; 4, \$4,200; 5,
\$18,801; 6, \$3,000; time, items 1 to 3,
85 days; 4, 30 days after arrival of mat-
terial; 5, 85 days; 6, 45 days after ar-
rival of material.

Fulton Engine Works, Los Angeles,
Cal., item 1, 5c per lb; 2, 7.5c per lb; 3,
\$471; 5, \$27,951, total; time, items 1 to
3, Dec. 15; 5, Jan. 31.

Olympia, Wash., Painting.

The following bids were received by
the supervising architect, Treasury De-
partment, Washington, D. C., for paint-
ing plastering in the U. S. post office at
Olympia, Wash.:

Arthur Webb, Jennings, La., \$194.85.
D. J. Inman, Danville, Ill., \$703.

Grohne Contracting Co., Joliet, Ill.,
\$779.

J. P. Sullivan, Chicago, Ill., \$892.
M. J. Graham, Philadelphia, Pa., \$1-
089.

Kendrick & Son, Olympia, Wash., \$1-
200.

F. E. Farrinton, Olympia, Wash., \$1-
537.60.

Panama Canal, Drinking Fountains.

Bids were opened at the office of the
Panama Canal for furnishing, item 1,
4 drinking fountains; item 2, 100 feet
block tin pipe, as follows:

Crane Co., Washington, D. C., item
1, \$40; 2, \$30; time, 30 days.

J. H. Leonard & Co., New York City,
item 1, \$35.60; time, 30 days.

Nason Mfg. Co., New York City, item
1, \$31; 2, \$25; time, 14 days.

Ward & Co., Washington, D. C., item
1, \$110, \$50, and \$98; time, 30 days.

Panama Canal Conduits.

Bids were opened at the office of the
Panama Canal for furnishing 13 con-
duits, as follows:

Crouse-Hinds Co., Syracuse, N. Y.,
total, \$205.34; ship 10 days.

Central Electric Co., Chicago, Ill.,
15.795c ea and 10.54c ea, electro galva-
nized; no time stated.

National Electrical Supply Co.,
Washington, D. C., 15.795c ea and 10.53c
ea; time 20 days.

Western Electric Co., New York City,
15.79c ea; time 12 days.

Port Townsend, Wash., Elevator.

As previously reported, the contract
for the installation of an electric pas-
senger elevator in the U. S. marine hos-

pital, Port Townsend, Wash., was awarded to the Otis Elevator Company, Washington, D. C., at \$3,838. In the prosecution of the work, fixtures and material manufactured by the following firms will be used: Lightning arrester, Westinghouse; rubber covered conductor, Simplex Wire & Cable Co.; elevator, Otis; ammeter and voltmeter, Weston Electrical Instrument Co.

Denver, Colo., Paintings.

The contract for mural paintings for the U. S. post office building, Denver, Colo., has been awarded to H. T. Schladermundt, Bronxville, N. Y., at \$3,000.

Fort Rosecrans, Storehouse.

The contract for constructing a militia storehouse at Fort Rosecrans, Cal., has been awarded to L. A. Geisler & Son at \$918.

San Francisco, Cal., Window Grilles.

The contract for furnishing bronze window grilles for the U. S. subtreasury at San Francisco, Cal., has been awarded to Rudgegar-Merle Co., San Francisco, Cal., at \$2,200.

HALLS AND SOCIETY BUILDINGS

SEATTLE, WASH. — Lodge hall, 3 story and base, brick and terra cotta, \$150,000. Architect, George W. Lawton, Alaska Bldg., Seattle. Owners, Seattle Masonic Hall Association. Location, Harvard and Pine streets. Will have a complete steel frame, brick walls, faced with terra cotta and pressed brick. Interior finish pine and hardwood. Hardwood floors. Hollow tile interior partitions, metal window sash and frames. Ornamental plaster. Marble and tile. Plans complete and figures being taken. Bids open September 27th.

LOS ANGELES, CAL.—Lodge hall and stores, 3 story and base, brick. Cost not stated. Architect, I. H. Seehorn, 328½ Clay street, L. A. Owners, Woodmen of the World. Location Main street between 11th and 12th streets. Will contain stores on the first floor and lodge rooms and offices above. Interior finish, pine and hardwood with some hardwood floors. Patent store fronts, elevator service and steam heat. Exterior faced with pressed brick. Plans being prepared.

HOSPITALS.

SEATTLE, WASH.—Hospital, 2 story and base, brick or concrete, \$30,000. Architect, B. Marcus Pretica, Pantages Theatre Bldg., Seattle. Owners, Council of Jewish Women. Location, 18th avenue South and Main street, covering an area of 48 by 112 feet. Will contain private rooms, wards and operating rooms. Interior finish, pine and white enamel. Hardwood floors, steam heat and vacuum cleaning. Exterior faced with pressed brick. Plans complete and figures being taken.

BERKELEY, ALAMEDA CO., CAL.—Hospital completion. Cost as follows. Architect, State Architect George B.

McDougall, Sacramento. Owners, State of California. Bids opened on September 16th for completion of work at the Berkeley State Home for the Blind show the following low bidders: R. H. Pearce at \$967 for tank tower, and Frank Gallagher and F. E. Nelson both at \$999 for concrete walls and sidewalks. A complete list of the bidders will be found under the heading of Oakland and Alameda County.

Contracts Awarded.

OAKLAND, CAL.—Hospital ward and dormitory, frame construction. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, Alameda County. Contractors, Robinson & Place, Oakland. Contract price, \$5,248. A complete list of the bids received will be found under the heading of Oakland and Alameda County.

PATTON, SAN BERNARDINO CO., CAL.—Hospital cottages, \$34,999. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Contractors, W. E. Kier Construction Co., San Diego. Contract price, \$34,999. A complete list of the bids will be found under the heading of Los Angeles and Southern California.

HOTELS.

SAN FRANCISCO—Hotel and stores, 2 story and base, brick, \$20,000. Architect, William H. Crim, Jr., 425 Kearny street, S. F. Owner, Jeremiah Lynch. Location, north George east of Jones. Will contain five stores on the first floor and a number of single rooms above. Interior finish pine throughout. Steam heat, oil burning system and hot water system. Patent store fronts. Exterior faced with pressed brick. Plans complete and figures being taken.

Contracts Awarded

LOS ANGELES, CAL.—Hotel and stores, 3 story and base, brick and steel, \$38,000. Architect, A. S. Heineman, San Fernando Bldg., L. A. Owner, H. C. Halpenny. Contractor, Herbert S. Heineman, San Fernando Bldg., L. A. Contract price, \$38,000.

IRRIGATION PROJECTS

MADERA, MADERA CO., CAL.—Cost not stated. Madera, Madera Co., Cal. Engineer, none. Owners, Madera Irrigation District. Preliminary steps to form a co-operative irrigation district to cover all of Madera County, including 500,000 acres, were taken at a meeting held recently by ranchers and business men of Madera. A committee consisting of one member from each school district will be appointed to hire an engineer and gather preliminary data. This engineer and committee will investigate the legal steps, estimate the cost, and make tentative plans for an irrigation system. Water will be taken from the San Joaquin and Fresno Rivers, if the co-operative district is formed.

MADERA, MADERA CO., CAL.—Irrigation project. Cost not stated. Engineer, none. Owners, Madera Irrigation District. Preliminary steps to form a co-operative irrigation district to cover all of Madera County, including 500,000 acres, were taken at a meeting held recently by ranchers and

business men of Madera. A committee consisting of one member from each school district will be appointed to hire an engineer and gather preliminary data. This engineer and committee will investigate the legal steps, estimate the cost, and make tentative plans for an irrigation system. Water will be taken from the San Joaquin and Fresno Rivers, if the co-operative district is formed.

MODESTO, STANISLAUS CO., CAL.—Wiers, etc, reinforced concrete. Cost not stated. Engineer, F. C. Herrmann. Modesto. Owners, Modesto Irrigation District. Plans and specifications for eleven concrete weirs and drops, lateral No. 6, and plans and specifications for lining certain portions of the main canal between Mortan and Salte fills were adopted by the directors of the Modesto Irrigation District. Bid for the work will be opened at a meeting of the Board October 2nd.

LIBRARIES.

LOS ANGELES, CAL.—Library, story and base, brick and concrete, \$35,000. Architect, W. J. Dodd, Marsh Strong Bldg., L. A. Owners, City of Los Angeles. Location, First and Sol streets. Revised plans have been completed and new figures are being taken for the building. Bids will close on September 24th.

RAILROAD CONSTRUCTION AND EQUIPMENT.

STOCKTON, SAN JOAQUIN CO., CAL.—Railroad construction. Cost not stated. Engineer's name not given. Owners, Tidewater Southern Railroad Co., Stockton. Application has been filed with the City Council by the Tidewater Southern Railroad Company for a franchise along Sutter street for a single track along the center line of that thoroughfare from Hazelton avenue to Main street. The construction of freight sheds is also included in the proposed work. Byron A. Bearce is president of the company.

RESIDENCES.

SAN FRANCISCO — Residence, story and base, frame, \$3,300. Architect, none. Owner, C. Anderson, 95 Haight street, S. F. Location, west 26th avenue north Judah. Will contain seven rooms and bath. Interior finish pine with elm panels and white enamel. Hardwood floors, open fire places and tile or brick mantels. Tile wainscot in bath room. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residence, story and base, frame, \$2,000. Architect, none. Owner, W. P. Smith, 10 Brazil street, S. F. Location, north Brazil east London. Will contain five rooms and bath. Interior finish pine and redwood. Some oak floors. Open fire place and tile mantel. Tile in bath room. Exterior covered with rustic and shiplap. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 17, story and base, frame, \$8,500 each. A

Architects, Koenig & Christensen, Humoldt Bank Bldg., S. F. Owner, Mrs. William Koenig. Location, properly bounded by 12th and 13th avenues, Balboa and Cabrillo streets. Will contain eight and nine rooms, two baths and basement garage. Interiors finished in tile, hardwood and white enamel. Hardwood floors, open fire places, brick and tile mantels, furnace heat and automatic water heaters. Bath rooms finished in tile. Landscape gardening. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, R. McCormack, 389 39th street, Oakland. Location, north 39th street west of Market. Will contain five rooms and bath. Interior finished in tile with white enamel. Hardwood floors and open fire place. Mantel tile or brick, automatic water heater and tile floor and wainscot in bath room. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Henry J. Miller, 2521 Hillegas avenue, Berkeley. Location, south Eunice west Glenn. Will contain five rooms, bath and sleeping porch. Interior finish, tile with some white enamel and hardwood floors. Open fire place and tile or brick mantel. Bath room tile floor. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, H. Mason, 3811 Webster street, Oakland. Location, east Webster south of 12nd street. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel with some hardwood floors. Open fire place and tile or brick mantel. Tile wainscot and floor in the bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$1,300. Architect, none. Owner, Leo L. Nichols, 1764 Broadway, Oakland. Location, east Grand avenue north Weldon avenue. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel with hardwood floors. Furnace heat, open fire places, tile and brick mantels and tile floor and wainscot in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, Frank W. Barker, 858 2nd street, Oakland. Location, north Thirton west College. Will contain five rooms and bath. Interior finish pine and white enamel with hardwood floors. Open fire place and tile or brick mantel. Bath room tile floor and wainscot. Automatic water heater. Exterior covered with rustic and cement

plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,250. Architect, none. Owner, William F. Reed, 942 Alleen, Oakland. Location, east Colby north 62nd street. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel and hardwood floors. Open fire place, tile mantel and automatic water heater. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Alteration for residence, \$8,500. Architect, F. Holberg Reimers, 2145 Shattuck avenue, Berkeley. Owner, W. W. Mackie. Location, Shasta street. Work will include interior and exterior carpentry work, hardwood trim and floors, painting, plastering, plumbing and electric work. Furnace heat, open fire places, brick and tile mantels and tile wainscot and floors. Automatic water heater. Exterior cement plaster on metal lath. Plans being prepared.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$2,500. Architect, Thomas Finlayson, 634 Townsend street, S. F. Owner, William D. Jones. Location, north Keith avenue west Broadway. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel with some hardwood floors. Open fire place and tile or brick mantel. Tile wainscot in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

BURLINGAME, SAN MATEO CO., CAL.—Residence, 2 story and base. Class A construction, \$150,000. Architect, Willis Polk, Hobart Bldg., S. F. Owner, W. B. Bourn. Location, near Crystal Springs Lake. Will contain in the neighborhood of twenty rooms, several baths, sleeping porches and numerous out buildings. Reinforced concrete and steel construction, design classic. Interior finish, pine, hardwood and white enamel. Hardwood floors, tile bath rooms. Steam heat, oil burning equipment, vacuum cleaning, elevator service. Tile and marble in bath rooms. Exterior faced with pressed brick and terra cotta. Plans for excavating and concrete work being figured.

PORTLAND, ORE. — Residence, 3 story and base, frame and hollow tile, \$25,000. Architect, D. C. Lewis, Couch Bldg., Portland. Owner, Gordon Voorhes. Location, Golf Park. Will contain fourteen rooms, several baths and sleeping porches. Interior finish pine and hardwood. Hardwood floors, central heating system, hot water circulating system and vacuum cleaning. Open fire places and tile or brick mantels. Tile bath rooms. Exterior cement plaster. Plans complete and figures under advisement.

SAN FRANCISCO — Residence, 1 story and base, frame, \$2,000. Architect, Paul P. De Martini, 2123 Powell street, S. F. Owner's name withheld. Location, Ocean View. Will contain five rooms and bath. Interior finish pine with some hardwood floors. Open

fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. — Residence, 1½ story and base, frame, \$2,700. Architects, Universal Drafting Bureau, 1811 5th avenue, Oakland. Owner, R. A. McWilliams. Location, Fourth Avenue Terrace. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FRUITVALE, ALAMEDA CO., CAL.—Residence, 1½ story and base, frame, \$2,200. Architects, Universal Drafting Bureau, 1811 5th avenue, Oakland. Owner, P. Lindeblad. Location, Fruitvale. Will contain five rooms, bath and sleeping porch. Interior finish pine throughout. Hardwood floors and open fire place. Mantel, brick. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residences, 10, 1 story and base, frame, \$2,000 each. Architects, Universal Drafting Bureau, 1811 5th avenue, Oakland. Owner, M. P. Brasch. Location, Northbrae. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel with some hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with rustic, cement plaster and shingles. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, H. P. Patton, 2906 Telegraph avenue, Oakland. Location, east Hearn south 57th. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood veneer and white enamel. Hardwood floors, open fire places and tile or brick mantels. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$5,000. Architect, James W. Plachek, Acheson Bldg., Berkeley. Owner, Mrs. M. Anderson. Location, Spruce street near Cedar. Will contain eight rooms, bath and sleeping porch. Interior finished in pine, hardwood and white enamel. Hardwood floors and open fire places. Furnace heat. Mantels tile or brick. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and segregated figures being taken.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,700. Architect, Chester H. Miller, Balziel Bldg., Oakland. Owner, Frederick R. Jones. Location, Thousand Oaks. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors, furnace heat and open fire place, Mantel, tile or brick. Bath room finished

in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans being prepared.

ALAMEDA, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, J. M. Lundholm, 1717 Wood street, Alameda. Location, 2525 Santa Clara avenue. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

ALAMEDA, ALAMEDA CO., CAL.—Residences, 2, 1 story and base, frame, \$2,000. Architect, none. Owners, West End Building Association, 1600 Webster street, Alameda. Location, Taylor street. Will contain five and six rooms and bath. Interiors finished in pine with some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Bath rooms finished in tile. Exteriors cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architects, Bowen & Davis, McKenzie Bldg., Fresno. Owner, Mr. Shapazian. Location N street. Will contain seven rooms, bath, sleeping porch and garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans being prepared.

SAN JOSE, SANTA CLARA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner J. F. Ralston, 725 Miller street, San Jose. Location, Miller street. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place. Automatic water heater. Tile mantel. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL.—Residence, 2 story and base, hollow tile. Cost not stated. Architect, E. B. Rust, Title Insurance Bldg., L. A. Owner, Frank A. Keith. Location, Kingsley Drive and 4th street. Will contain twelve rooms, three baths and sleeping porch. Separate garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Bath rooms finished in tile. Central heating system, open fire places and tile mantels. Hot water circulating system. Vacuum cleaning. Exterior covered with cement plaster. Plans being prepared.

SCHOOLS.

SAN JOSE, SANTA CLARA CO., CAL.—School addition, 1 story and base, frame, \$20,000. Architect, Charles S. McKenzie, Bank of San Jose Bldg., San Jose. Owners, City of San Jose. Bids will be opened on October 5th for the construction of a frame and plaster addition to the present High School Building. Plans can be secured from the architect.

SUISUN, SOLANO CO., CAL.—School, 1 story and base, frame, \$20,000. Architects, W. H. Crim, Jr., and Edward

J. Symmes, Pacific Bldg., S. F. Owners, Suisun School District. Working drawings are being completed and bids will be called for within a week or ten days for this building. There will be six class rooms. Exterior covered with cement plaster.

MODESTO, STANISLAUS CO., CAL.—School addition, frame. Cost not stated. Architect, none. Owners, City of Modesto. Bids will be opened on September 28th for a one-story addition to the present school building. Plans can be secured from the Secretary of the Board of Education.

DINUBA, TULARE CO., CAL.—School, 1 story and base, brick. Cost not stated. Architects, Glass & Buttner, Republican Bldg., Fresno. Owners, Town of Dinuba. The building will contain four class rooms. Interior finish pine with maple floors. Modern plumbing and central heating system. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

LOMITA, LOS ANGELES CO., CAL.—School, 2 story and base, brick, \$22,929. Architect, Julius W. Krause, Higgins Bldg., L. A. Owners, Town of Lomita. Contractor, John B. Lawson, Fay Bldg., L. A. Contract price, \$22,929.

BEAVERTON, ORE.—School, 1 story and base, hollow tile, \$18,965. Architects, Tourtellotte & Hummell, Rothchild Bldg., Portland. Owners, City of Beaverton. Contractor, A. W. Kutsche, Yeon Bldg., Portland. Contract price, \$18,965.

PRAIRIE CITY, ORE.—School, 1 story and base, brick, \$13,294. Architect, E. E. McClaren, Lumber Exchange Bldg., Portland. Owners, Prairie City. Contractor, C. W. Frazier, 1396 Curtis street, Portland. Contract price, \$13,294.

HUBBARD, ORE.—School, 2 story and base, brick, \$12,300. Architects, Brown & Forbes, Mohawk Bldg., Portland. Owners, Hubbard City. Contractors, Stehinger Bros., 626 Broadway, Portland. Contract price, \$12,300.

SEWERS, STREET WORK & WATER SYSTEMS.

SAN FRANCISCO—Clearing reservoir site, \$35,000. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Three figures were received at the Wednesday afternoon meeting of the Board of Public Works for clearing a portion of the Hetch Hetchy reservoir site. Karl Ehrhart submitted the low bid at \$24,984.50. Other bids were as follows: A. J. Reeder, \$43,987; MacArthur Bros., \$45,217.75.

OAKLAND, CAL.—Retaining walls, etc. Cost not stated. Engineer, County Surveyor, Oakland. Owners, Alameda County. Bids will be opened on September 27th for the construction of culverts, concrete wing walls, retaining walls, etc., and grading work on a portion of the main county road between Mission San Jose and Warm Springs. Plans can be secured from the County Clerk at Oakland.

SAN ANSELMO, MARIN CO., CAL.—Sewer construction. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. At the last meeting of the Town Trustees. Trustee Schrader offered a resolution adopting the plans and speci-

cations for the construction of a storm sewer on Willow avenue, and on its adoption of Resolution of Intention No. 13, ordering the work done, was passed. Bids on the work will soon be taken.

SAN ANSELMO, MARIN CO., CAL.—Street improvement. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. At the last meeting of the Town Trustees, Trustee Crisp introduced a resolution establishing the elevation of the curb grade of Medway road and Forest avenue which was read and adopted by the Board. Mr. Crisp also offered a resolution adopting the plans and specifications for the improvement of Forest avenue, and after its adoption offered resolution of Intention No. 14 to order the work done, which was also adopted.

SAN ANSELMO, MARIN CO., CAL.—Furnishing crushed rock. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. The Town Engineer has been instructed by the town officials to secure bids for furnishing 25 or 30 cars of crushed rock to be used on the roads this winter.

PETALUMA, SONOMA CO., CAL.—Street improvements. Cost not stated. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. The City Engineer has been directed by the Council to prepare plans and specifications for the establishing of the grade of Webster street from the Hill tract to Hayes Lane, and for Hayes Lane from Hill street to the city limits. A resolution has been passed by the City Council for the improvement of Kent street from the northeast line of Howard street to the west line of Walnut street.

PITTSBURG, CONTRA COSTA CO., CAL.—Sewer construction. Cost not stated. Engineer, Town Engineer, Pittsburg. Owners, Town of Pittsburg. Plans and specifications for the construction of a sewer in East Third street from the city limits to the east line of Los Medanos street have been approved. Bids on this work will soon be called for.

SAN JOSE, SANTA CLARA CO., CAL.—Street pavement. Cost not stated. Engineer, City Engineer Maggini, San Jose. Owners, City of San Jose. Work on paving all streets about Washington Square will be started shortly. City Engineer Maggini has been instructed to prepare plans and specifications for the work and bids will be opened by the City Council on September 27th. Further information relative to this work may be had from the City Engineer.

SAN JOSE, SANTA CLARA CO., CAL.—Road construction and improvement. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications have been adopted by the County Supervisors and bids will be received up to 11 a. m. September 27th for the repair and construction of 4.65 miles of the Stevens Creek road and Saratoga avenue in Road District No. 4 of Santa Clara County. Further information may be had from the County Surveyor at San Jose.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer,

with San Francisco. Owners, South San Francisco. At the last meeting of the City Trustees bids for paving and avenue between Chestnut avenue and Mission road were opened. They were as follows: F. R. Ritchie & Co., Chronicle Bldg., S. F., \$3,687.50; Patton & Smith, 407 11th street, S. F., \$213, and Blanchard-Brown Co., 660 Market street, S. F., \$1,229. The awarding of the contract was laid over until next meeting.

BURLINGAME, SAN MATEO CO., CAL.—Paving, sidewalks and curbs. Cost not stated. Engineer, Town Engineer, Burlingame. Owners, Town of Burlingame. Bids will be received for a few days only for cement sidewalks, curbing and laying of concrete base for paving. Specifications obtainable from J. J. Farey, Superintendent, Burlingame Subdivision 17, O. Box 6, Easton, Cal., or phone Burlingame 90.

MODESTO, STANISLAUS CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Modesto. Owners, City of Modesto. The City Council has directed City Clerk O. W. Thompson to advertise for bids for the paving of L Street from Seventh to Ninth. Further information may be had from the City Clerk or Engineer at Modesto.

BAKERSFIELD, KERN CO., CAL.—Road pavement. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids will be opened on October 7th by the Board of Supervisors for grading and construction, Section 1, Bakersfield-McKittrick road, being that portion lying between the westerly end of the Kern River bridge and Rosedale; length approximately 6 miles. Plans can be secured from the County Surveyor's office.

VISALIA, TULARE CO., CAL.—Road construction, \$18,850. Engineer, County Surveyor, Visalia. Owners, Tulare County. The Tulare County Supervisors have taken all bids received for the construction of the Three Rivers road to connect the valley with a trunk line to the hills under advisement until September 15th, at which time the contract will be awarded. The bid of J. E. Hines to build the road for the sum of \$18,850 was the lowest received. This bid was so much below the estimated cost that the Supervisors desired to look into the matter thoroughly before entering into the contract.

BAKERSFIELD, KERN CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids will be opened on October 7th by the Board of Supervisors for grading and construction of concrete pavement on Division 10, Section 5, being that portion known as the Weed Patch Loop, beginning at the State Highway at the northwest corner of Section 17, T. 31 S., R. 28 E. and extending in an easterly direction 5 miles to the northeast corner of Section 13, T. 31 S., R. 28 E. Plans can be secured from the County Surveyor.

GRASS VALLEY, NEVADA CO., CAL.—Street improvement. Cost not stated. Engineer, Town Engineer, Grass Valley. Owners, Town of Grass Valley. The Board of Trustees has ordered the City Engineer to prepare plans for the widening of lower Main street.

SAN FRANCISCO—Esplanade construction, \$50,000. Engineer, City Engineer, Temporary City Hall, S. F.

Owners, City and County of San Francisco. The Board of Public Works has approved plans and specifications for the proposed esplanade at the ocean beach and has requested the Board of Supervisors to permit them to call for bids on the work, which is estimated to cost \$50,000. This amount was appropriated in the last budget, and provided for the construction of 650 linear feet of esplanade south from the Cliff House. Bids were opened by the Board of Public Works for the construction of a boulevard through the city property from Corbett avenue to the Twin Peaks Reservation. F. R. Ritchie presented the low bid at \$34,745.

COLUSA, COLUSA CO., CAL.—Street lighting system. Cost not stated. Engineer, County Surveyor, Colusa. Owners, Colusa County. No bids were received by the Supervisors for the installation, etc., of a lighting system in the Arbuckle Lighting District, and the Clerk was instructed to advertise again for bids to be opened on October 5th, 5 p. m. Further information may be had from the Clerk of the Supervisors at Colusa.

DURHAM, BUTTE CO., CAL.—Water system. Cost not stated. Engineer's name not given. Owner, Frank Barnard, Durham. Application has been made to the Butte County Supervisors by Frank Barnard, of Butte County, for a franchise to lay water pipes and conduits in certain streets and roads in Butte County, as follows: In all of the streets, alleys and public highways in the Town of Durham, and also all other roads, streets, alleys and public highways situate within the boundaries of Section 30, Township 21. Also to replace, repair, enlarge and extend the same along such roads, streets, alleys and other public highways. All for the purpose of furnishing, selling and supplying water to the inhabitants of the Town of Durham and vicinity.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving, etc. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. Bids will be opened on September 24th for work provided for under the following resolution: That Scotts avenue, from Lincoln street to Monroe; Van Buren street, from Taylor avenue to Hazelton avenue; Monroe street, from Scotts avenue to Hazelton, etc., be graded, curbed and guttered, having the curb portion thereof 13 inches deep and 6 inches wide, and the gutter portion thereof 24 inches wide and 6 inches thick after being rolled, bound with liquid asphaltum applied hot, using one and three-quarter gallons to the square yard of pavement.

STOCKTON, SAN JOAQUIN CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. Bids will be opened on September 24th for work provided for under the following resolution: That Della street, from Fair Oaks avenue to the Jensen Addition, and Lafayette street, from East street to Locust street, be graded, curbed and guttered with combined concrete curb and gutter, having the curb portion thereof 12 inches deep and 6 inches wide and the gutter portion thereof 21 inches wide and 6 inches thick; the roadways paved with mac-

adam 4 inches thick after rolling, bound with liquid asphaltum applied hot, using one and three-quarter gallons to square yard of pavement. That concrete sidewalks 5 feet wide and 4 inches thick be constructed on both sides of said Della and Lafayette streets, as above described, except where already laid.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. A resolution of intention providing for laying sanitary sewers in South Stockton from South to Ninth street, inclusive, and from McKinley avenue to the Southern Pacific tracks was passed at the last meeting of the City Council. Bids will soon be called for.

SONOMA, SONOMA CO., CAL.—Street improvements. Cost as follows. Engineer, City Engineer, Sonoma. Owners, City of Sonoma. At the last meeting of the City Trustees the following appropriations were set aside for improvements to be made in Sonoma: \$1,200 for a concrete bridge on France street, \$1,500 for the Plaza improvement and 1,500 for street work.

RICHMOND, CONTRA COSTA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. Bids will be opened on September 27th for work to be done under the following resolution: That 31st street, from Cutting Boulevard to the City of Pullman Tract, be graded and paved with Richmond Standard Macadam, consisting of rock and asphaltum having a penetration of from 125 to 140 degrees, District of Columbia Standard, and guttered and curbed and sidewalked with cement concrete, and that an open drain of cement concrete be constructed across the existing alley. Also that Anita avenue, from the south line of the City of Pullman Tract to the north line of Potrero avenue, be graded, paved with Richmond Standard Macadam.

SAN RAFAEL, MARIN CO., CAL.—Sewer construction. Cost not stated. Engineer, County Surveyor, San Rafael. Owners, Marin County. Bids will be opened on September 23rd for the construction of a wooden box storm sewer in Pastori road from the San Rafael and Olema county road to the Arroyo San Anselmo; also for the construction of an iron stone pipe sewer (in lieu of said wooden box).

SALINAS, MONTEREY CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Salinas. Owners, City of Salinas. The City Council has ordered bids received for the parking and improvement of North Main street. Plans and specifications may be had from the City Engineer.

SALINAS, MONTEREY CO., CAL.—Earth approach. Cost not stated. Engineer, County Surveyor, Salinas. Owners, City of Salinas. The City Council ordered received by the County Supervisors for the construction of earth approaches for the Espinosa bridge on the Salinas-Castroville road. Bids close September 21th. Further information may be had from the County Surveyor at Salinas.

RIVERSIDE, RIVERSIDE CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, River-

side. Owners, City of Riverside. The City Engineer has been directed to prepare plans and specifications for the improvement of Jurupa avenue from New Magnolia to Brockton. Bids will be called on approval of the plans.

Contracts Awarded

SAN ANSELMO, MARIN CO., CAL.—Street improvement. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Contractors, Sunset Construction Co., 62 Post street, S. F. Contract price not stated. The contract covers the improvement of Pine and Cedar streets and San Anselmo avenue.

HANFORD, KINGS CO., CAL.—Furnishing asphaltum. Cost as follows. Engineer, County Surveyor. Owners, Kings County. Contractors, Standard Oil Co. Contract price, 4,800 tons at \$1.35 per barrel f. o. b. cars at Seguro.

STOCKTON, SAN JOAQUIN CO., CAL.—Street improvement, \$1,509.88. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractor, E. Bishop, Stockton. Contract price, \$1,509.88.

SACRAMENTO, CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, McGillivray Construction Co., 1007 7th street, Sacramento. Contract includes improvement of Front street from Q to S and from N to Q street. Contract price not stated.

RIVERSIDE, RIVERSIDE CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Riverside. Owners, Riverside County. Contractors, C. L. Hyde Construction Co., 954 3rd street, San Diego. Contract price not stated.

STORES AND OFFICES.

SAN FRANCISCO—Wholesale building, 3 story and base. Cost not stated. Architect, none. Owners represented by Edgar Painter, Kohl Bldg., S. F. Mr. Painter, Secretary of the North Central Improvement Association, states that a corporation is about to have plans prepared for a three-story and basement brick and steel building to be erected on Broadway, occupying the entire frontage between Battery and Front streets. It is understood that an architect has already submitted plans for the building, but details and the owners' names are withheld for a few days.

CALEXICO, IMPERIAL CO., CAL.—Stores and offices, 2 story and base, steel and concrete, \$34,000. Architects, Zimmer & Tichenor, Calexico. Owner, M. Harris. Location, on southwest corner 2nd and Rockwood. Will contain a number of stores on the first floor and modern offices above. Interior finish, pine and hardwood. Patent store fronts. Marble base and wainscot. Exterior covered with cement plaster. Plans complete and figures being taken. Bids close on October 1st.

PITTSBURG, CONTRA COSTA CO., CAL.—Offices, 2 story and base, reinforced concrete, \$15,000. Architect, none. Owners, Grabstein Bros., Pittsburg. Location, Railroad avenue and East 3rd street. Ground floor will contain stores and upper floor has been arranged for offices. Interior finish pine. Central heating system, patent

store fronts and oil burning equipment. Exterior faced with cement plaster. Plans complete and figures being taken by the owners.

PORTLAND, ORE.—Stores and offices, 2 story and base, reinforced concrete, \$25,000. Architect, Martin Schacht, Yeon Bldg., Portland. Owners, Harrington Estate. Location, Broadway, covering an area of 100 by 100 feet. Will contain sales rooms on the first floor and offices above. Interior finish, pine and hardwood. Central heating system, patent store fronts. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

PORTLAND, ORE.—Office building plastering, \$40,000. Architect's name not given. Owners, First National Bank. Contractor, A. Knowles, 985 Folsom street, S. F. Contract price, \$40,000.

SEATTLE, WASH.—Stores and offices, 4 story and base, reinforced concrete, \$50,000. Architects, Carl Gould and Charles Bebb, associated, Denny Bldg., Seattle. Owners, Puget Sound News Co. Contractors, A. W. Quist Co., Hoge Bldg., Seattle. Contract price, \$50,000.

MARTINEZ, CONTRA COSTA CO., CAL.—Office, 1 story and base, reinforced concrete, \$3,421. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owners, Pacific Gas and Electric Co. Contractors, Ludden & Lambley, Martinez. Contract price, \$3,421.

SEALED PROPOSALS

PROPOSALS FOR CEMENT.

CEMENT—U. S. Engineering Office, 2nd District, Portland, Ore.—Sealed proposals for cement will be received here until **11 a. m. October 7, 1915**, and then opened. Further information on application.

NOTICE TO CONTRACTORS.

SEALED bids will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock, noon, Monday, October 18, 1915**, said bid, then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of buildings to be known as "Two Cottages" and "Detention Building," California School for Girls, near Ventura, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work and must be submitted on plans prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Twenty-five (\$25.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Two Cottages" and "Detention Building," California School for Girls, near Ventura, California."

(Signed) W. F. McCLURE,
State Engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 966—Proposals for Wrought Iron or Steel Pipe, Cast Iron Pipe, Steel Boiler Tubes, Steel Tubing, Chain, Locomotive Driving Wheel Tires, Dust Guards for Journals, Grip Nuts, Twist Drills, Journal Jacks, Steel Hand Trucks, Platinum Wire, Air-brake Hose, Glass Packing, Putty Knives, Window Flaxes, Crash Toweling and Fish Oil.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. September 24, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Bids and general information relating to this circular (No. 966) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal., also from the engineering offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Stable at Puget Sound" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m. September 25, 1915**, and then and there publicly opened, for a stable at the naval hospital, Navy yard, Puget Sound, Wash. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard, Bremerton, Wash. W. M. SMITH, acting chief of bureau.

Proposal for Building.

BUILDING—Sealed proposals indorsed "Proposals for Marine Barracks, Mare Island," will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m. September 25, 1915**, and then and there publicly opened, for a three-story and basement marine barracks building of reinforced concrete construction with steel trusses. Plans and specifications may be obtained on application to the bureau or to the commandant of the navy yard, subject to a deposit of \$25 to insure their return, or may be seen at the navy yard, New York, N. Y. W. M. SMITH, acting chief of bureau.

ELECTRIC STARTER AND OTHER STATISTICS.

No less than 261,860 cars were equipped with electric lighting and starting systems during 1914, out of a total production of 611,695 cars. The value of this equipment exceeded \$10,000,000. The total wholesale value of the 611,695 cars was \$380,000,000, which figures out an average value of \$621.50 per car, dealer's price. An idea of the quantities of raw materials used up in the manufacture of motor cars in 1914 in this country may be obtained from the following partial list: Steel, 670,000 tons; aluminum and alloys, 4,020 tons; brass, 2,141 tons; hair for upholstery, 1,068 tons; moss, 2,050 tons; hides, 67,232, on the basis of one third hide per car, where real leather was used; artificial leather, 3,280,000 square yards; upholstery fittings, \$917,542 worth; burlap, 6,560,000 yards; top materials, 11,405,250 yards, valued at \$2,447,780; manufactured cotton in tires on new cars only, 7,950 tons; celluloid, 300,000 pounds; rubber and compounds, 9,338 tons; hinges, 2,446,780 pairs; door catch fittings, 2,446,780 pairs; carpet, 489,356 square yards; linoleum, 612,908 square yards; boards for floors, wheels and bodies, 8,450,000 running feet.

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

RESIDENCE—2 story and base, frame, \$3,300. San Francisco. Architect, none. Owner, C. Anderson, 981 Eighth street, S. F. Location, west 6th avenue north Judah. Will contain even rooms and bath. Interior finish pine with elm panels and white enamel. Hardwood floors, open fire place and tile or brick mantel. Tile wainscot in bath room. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,000. San Francisco. Architect, none. Owner, W. P. Smith, 109 Brazil street, S. F. Location, north beach east London. Will contain five rooms and bath. Interior finish pine and redwood. Some oak floors. Open fire place and tile mantel. Tile in bath room. Exterior covered with rustic and shiplap. Plans complete and work to be done by ay Labor.

RESIDENCES—17, 2 story and base, frame, \$5,500 each. San Francisco. Architects, Koenig & Christensen, Humboldt Bank Bldg., S. F. Owner, Mrs. William Koenig. Location, property bounded by 12th and 13th avenues, Balboa and Cabrillo streets. Will contain eight and nine rooms, two baths and basement garage. Interiors finished in pine, hardwood and white enamel. Hardwood floors, open fire places, brick and tile mantels, furnace heat and automatic water heaters. Bath rooms finished in tile. Landscape gardening. Exteriors covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

ESPLANADE CONSTRUCTION—\$50,000. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. The Board of Public Works has approved plans and specifications for the proposed esplanade at the ocean beach and has requested the Board of Supervisors to permit them to call for bids on the work, which is estimated to cost \$50,000. This amount was appropriated in the last budget, and provided for the construction of 650 linear feet of esplanade south from the Cliff House. Bids were opened by the Board of Public Works for the construction of a boulevard through the city property from Corbett avenue to the Twin Peaks Reservation. F. R. Ritchie presented the low bid at \$54,745.

APARTMENT HOUSE—3 story and base, frame, \$15,000. San Francisco. Architect, Earl R. Scott, Humboldt Bank Bldg., S. F. Owner's name withheld. Location, Taylor, between Clay and Washington streets. Will contain twelve suites of two rooms each. In-

terior finish, pine. Ornamental plaster in lobby. Steam heat, hot water system, coal furnace, tile in bath rooms and wall beds. Marble wainscot in entrance. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

APARTMENT HOUSE—4 story and base, brick and steel, \$25,000. San Francisco. Architect, Edward E. Young, 251 Kearny street, S. F. Owner, Herman Hogrefe, 110 Upper Terrace. Location, south Bush west of Jones, covering an area of 30 by 79 feet. Will contain eight suites of three and four rooms. Interior finish pine and hardwood with some hardwood floors. Steam heat, automatic elevator, oil burning plant, hot water system and vacuum cleaning. Wall beds. Bath rooms finished in tile. Exterior faced with pressed brick. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, Carl Lamerdin. Location, south Union near Hyde. Will contain two ix-room flats and a basement garage. Interior finished in pine and elm panels. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior, cement plaster on metal lath. Plans complete and figures being taken.

FLATS—2 story and base, frame, \$4,000. San Francisco. Architects, Koenig & Christensen, Humboldt Bank Bldg., S. F. Owner, H. C. Christensen. Location, north Cabrillo west 7th avenue. Will contain two flats and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors and open fire places. Mantels tile. Tile wainscot and floors in bath rooms. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FLATS AND STORE—2 story and base, frame, \$7,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. Location 48th avenue and J street. Will contain one store and two flats of four and five rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with rustic and cement plaster on metal lath. Plans being prepared.

FLATS—3, 2 story and base, frame, \$4,000 each. San Francisco. Architects, Oliver & Thomas, Pantages Theatre Bldg., Oakland. Owner, Mr. Read. Location, south Filbert between Pierce and Steiner. Will contain two flats each. Interior finish, pine, white enamel and hardwood. Hardwood floors.

Open fire places, tile or brick mantels and automatic water heaters. Bath rooms finished in tile. Exteriors covered with cement plaster and shiplap. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$2,000. San Francisco. Architect, none. Owner, Michael Cain, 1277 21st avenue, S. F. Location, west 21st avenue north of Irwin, covering an area of 25 by 44 feet. Will contain two flats of five rooms. Interiors finished in pine and white enamel with some hardwood floors. Open fire places and tile mantels. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FLATS—3 story and base, frame \$7,500. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, G. De Martini. Location, east Mason south of Broadway. Will contain three flats of six rooms each. Interior finish, pine with some hardwood floors. Open fire places and tile or brick mantels. Bath rooms will have tile wainscot. Automatic water heaters. Exterior brick veneer and cement plaster on metal lath. Plans being prepared.

FLATS—2 story and base, frame, \$4,000. San Francisco. Architect, none. Owner, Mrs. Marie Sterner, 1621 Lake street, S. F. Location, east 6th avenue north of Geary, covering an area of 25 by 66 feet. Will contain two flats of five and six rooms and a basement garage. Interior finished in pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Tile in the bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$4,000. San Francisco. Architect, none. Owner, G. Linner, 4029 26th street, S. F. Location, east Castro north of 26th covering an area 0 33 by 49 feet. Will contain two flats of six rooms and a basement garage. Interiors finished in pine with elm panels and hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owners, G. W. Renish and Mrs. Boyle, 1781 9th avenue, S. F. Location, west Ritch north Brannan. Will contain two flats of five rooms and bath. Interior finish pine. Some oak floors. Open fire places and tile mantels. Imitation tile wainscot in bath rooms. Exterior covered with rustic and shiplap. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. Location, Ocean View. Will contain five rooms and bath. Interior finish pine with some hardwood floors. Open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

GARAGE—1 story and base, brick, \$10,000. San Francisco. Architect, Henry C. Smith, Humboldt Bank Bldg., S. F. Owner's name withheld. Location, west Valencia street between 18th and 19th streets, covering an area of 75 by 100 feet. Will contain mezzanine floor, storage space, wash room and repair shop. Concrete floor. Exterior faced with pressed brick. Plans complete and figures being taken.

HOTEL AND STORES—2 story and base, brick, \$20,000. San Francisco. Architect, William H. Crim, Jr., 425 Kearny street, S. F. Owner, Jeremiah Lynch. Location, north Geary east of Jones. Will contain five stores on the first floor and a number of single rooms above. Interior finish, pine throughout. Steam heat, oil burning system and hot water system. Patent store fronts. Exterior faced with pressed brick. Plans complete and figures being taken.

WHOLESALE BUILDING—3 story and base. Cost not stated. San Francisco. Architect, none. Owners represented by Edgar Painter, Kohl Bldg., S. F. Mr. Painter, Secretary of the North Central Improvement Association, states that a corporation is about to have plans prepared for a three-story and basement brick and steel building to be erected on Broadway, occupying the entire frontage between Battery and Front streets. It is understood that an architect has already submitted preliminary plans for the building, but details and the owners' names are withheld for a few days.

Contracts Awarded.

CLEARING RESERVOIR SITE—\$35,000. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Three figures were received at the Wednesday afternoon meeting of the Board of Public Works for clearing a portion of the Hetch Hetchy reservoir site. Karl Ehrhart submitted the low bid at \$24,984.50. Other bids were as follows: A. J. Reeder, \$43,987; MacArthur Bros., \$45,217.75.

Fourteen Millions For Building Construction.

Building Inspector Horgan Reports on Building Activities For Past Fiscal Year.

Building operations in the City and County of San Francisco for the past fiscal year, ending June 30th, 1915, amounted to \$14,226,125, according to figures compiled in the report of Chief Building Inspector John P. Horgan, and which will be submitted to the Board of Public Works immediately.

During this time 6,387 permits were granted and the fees collected aggregated \$24,348.90, of which \$202 was for billboard permits. In addition to the granting of building permits Horgan reports having received 7,023 applications in all, among which were 175 to raze buildings; 57 to move; 362 complaints and 122 applications withdrawn or rejected.

"The majority of applications withdrawn were in direct violation of the Building Law and would not be made in compliance therewith," says Horgan. "Approximately sixty per cent of the total number of applications filed required revision of minor and major importance, and upon such being complied with the permits were granted."

The complete and tabulated report of Horgan follows:

Character of	Permits	No. Amount
Class "A"	17	\$1,029,600
Class "B"	5	151,300
Class "C"	149	3,524,662
Frames	1794	5,984,425
Alterations, additions & repairs (general)	4370	1,731,151
Exposition Bldgs.	39	1,152,877
Public Bldgs.	13	652,110
Total	6387	\$14,226,125

City Bids Opened

Board of Works Opens Bids for First Work of Clearing Reservoir Site for Hetch Hetchy Project.

Three figures were received at the Wednesday afternoon meeting of the Board of Public Works for clearing a portion of the Hetch Hetchy reservoir site. Karl Ehrhart submitted the low bid at \$24,984.50. Other bids were as follows:

Clearing Reservoir Site.	
A. J. Reeder.....	\$43,987.00
Karl Ehrhart	24,984.50
MacArthur Bros.	45,217.75

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Amt.
2638	Billier	Billier	12700
2639	Hencken	Montgomery	3750
2640	Devlin	Nelson	7895
2641	Sherry	Sherry	800
2642	Lindner	Lindner	400
2643	Haner	Haner	500
2644	Rhoda	Rhoda	400
2645	Verga	Ponsero	600
2646	Browne	Leigh	450
2647	Boese	Boese	400
2648	Mission Ter	Neal	6150
2649	Clark	Johnson	4950
2650	Laubscher	Ahlbach	690
2651	Same	Carlson	5030
2652	Lerer	Olsen	500
2653	Braden	Sinclair	450
2654	Douglas Rity	Jossa	400
2655	Rhodes	Rhodes	400
2656	Ralsch	Newton	600
2657	Pac Brwing	Mission Con	4000
2658	Morrison	Ellingson	5285
2659	Sherman	Stranahan	1000
2660	Yager	Yager	10000
2661	Springer	Wilhelm	2250
2662	De Luchi	Marcone	4750
2663	Smith	Smith	2000
2664	Anderson	Anderson	3200
2665	Sterner	Sterner	4000
2666	Meloche	Nyman	600
2667	Larsen	Larsen	400
2668	Winship	Pink	500
2669	Dean	Dean	1000
2670	Shean	Brandt	5155
2671	Hebel	Thunberg	3300

2672	Jenkins	Pockman	7700
2673	Baraco	Dulfer	2350
2674	Brown	Brown	1850
2675	Pottrell	Heaphy	600
2676	Mamizi	Segeri	1000
2677	Zeller	Lemser	3390
2678	Rauh	Cavaglieri	2000
2679	Workman	Workman	400
2680	Hogrefe	Hogrefe	15000
2681	Gerard	Koldenstrodt	5463
2682	Steffens	Sampson	16560
2683	Depierre	Hofmeister	2300
2684	Same	Same	2550
2685	Mulligan	Carson	4400
2686	Marin Co	Owner	400
2687	Torre	Torre	800
2688	Jorgensen	Jorgensen	1000
2689	Luce	Luce	1000
2690	Salem Baptist	Knudson	1000
2691	Christian	Owner	4000
2692	Koenig	Koenig	3000
2693	Same	Same	3000
2694	Same	Same	3000
2695	Same	Same	3000
2696	Hannon	McKinnon	3050
2697	Green	Lee	3400
2698	Corr	Dahlberg	11600

FRAME APARTMENTS

(2638) SE VALLEJO AND POLK. Three-story and basement frame (14) apartments.
Owner.....John Billier, 460 Montgomery, San Francisco.
Architect...John H. Powers, 460 Montgomery, San Francisco.
Day's work. COST, \$12,700

FRAME FLATS

(2639) W CONNECTICUT 74-6 S Mariposa S 91-6xW 100. All work for two story frame flats.
Owner.....Mrs. M. Hencken, 1900 Hyde, San Francisco.
Architect...Frederick D. Boese, New Call Bldg., San Francisco.
Contractor..E. J. Montgomery, 1318 Broadway, San Francisco.
Filed Sept. 11, '15. Dated Sept. 10, '15.
Roof rafters on & rough plumbing in\$937.50
Brown coated 937.50
Completed and accepted..... 937.50
Usual 35 days..... 937.50
TOTAL COST, \$3750.00
Bond, \$1875. Sureties, Chas. Schlesinger and Jno. H. Erickwedel. Limit, 90 days Forfeit, \$3. Plans and specifications filed.

FRAME STORE AND ROOMS

(2640) W MISSION 115 N 17th N 23-6x W 100. All work for three-story frame store and rooms.
Owner.....Frank R. Devlin.
Architect...Chas. E. J. Rogers, Kohl Bldg., San Francisco.
Contractor..A. D. Nelson, 110 Jessie, San Francisco.
Filed Sept. 11, '15. Dated Sept. 8, '15.
Frame completed\$1973.75
Enclosed and roof on and brown coated 1973.75
Completed and accepted..... 1973.75
Usual 35 days..... 1973.75
TOTAL COST, \$7895.00
Bond, \$3947.50. Surety, U. S. Fidelity & Guaranty Co. Limit, 75 days after Sept. 11. Forfeit, \$10. Plans and specifications filed.

(2641) NO. 1443 McKINNON. One-story and basement frame dwelling.
Owner.....Frank Sherry, 1433 McKinnon Ave., San Francisco
Architect...None.
Day's work. COST, \$800

FRAME FLATS

(2642) E CASTRO 26 N Twenty-sixth. Two-story and basement frame (4) flats.

wner.....G. Lindner, 4029 26th, S. F.
rchitect...None.
ay's work..... COST, \$1000

ALTERATIONS
(2613) SE UTAH AND NINETEENTH.
Alter dwelling.
wner.....John F. Haner, 3580 20th,
San Francisco.
rchitect...None.
ay's work..... COST, \$500

ALTERATIONS
(2614) NO. 917 PLYMOUTH. Raise
dwelling, cement floor and add two
rooms.
wner.....P. Rhoda, Premises.
rchitect...None.
ay's work..... COST, \$400

ALTERATIONS
(2615) NO. 312 COLUMBUS AVE. Alter
meat market.
wner.....G. D. Verga, Premises.
rchitect...None.
ontractor...Ponsero Bros., Stark near
Stockton, S. F.
COST, \$600

ALTERATIONS
(2616) NO. 1322 PAGE. Alter dwelling
into flats.
wner.....E. A. Browne, Premises.
rchitect...None.
ontractor...Leigh & Schultz, 419 21st
Ave., San Francisco.
COST, \$450

REPAIR DWELLING
(2617) NO. 23 SEVENTH AVE. Repair
fire damage to dwelling.
wner.....F. Boese, Premises.
rchitect...None.
ay's work..... COST, \$400

UNGALOWS
(2618) S SANTA ROSA AVE, bet. San
Jose Ave and Capistrano Ave; Pln
Lots 42 to 45 Blk "D" Mission Terrace
All work for three one-story bung-
alow buildings.
wner.....Mission Terrace Co., 275
Santa Rosa Ave., S. F.
rchitect...None.
ontractor...Jos. Neal, 3305 College Ave
Berkeley and D. Birming-
ham, 3005 Fulton, Berkeley
Filed Sept. 13, '15. Dated Sept. 8, '15.

Frame work up.....\$1500
1st coat plaster on..... 1500
Completed and accepted..... 1500
Usual 35 days..... 1650
TOTAL COST, \$6150
Bond, none. Limit, Jan. 1, 1916. For-
feit, none. Plans and specifications filed

FRAME FLATS
(2619) E TENTH AVE 225 S Balboa S
25x6 120 O L 372. All work except
mantels, shades, lighting fixtures,
finish hardware and wall paper for
two-story and basement frame flats.
wner.....George Clark, 1431 Eddy,
San Francisco.

rchitect...Paul F. De Martini, 2123
Powell, San Francisco.
ontractor...J. Johnson, 150 17th Ave.,
San Francisco.
Filed Sept. 13, '15. Dated Sept. —, '15.
Frame up and rafters on.....\$1237.50
Brown coated 1237.50
Completed and accepted..... 1237.50
Usual 35 days..... 1237.50
TOTAL COST, \$4950.00

Bond, \$2475. Surety, Pacific Coast
Casualty Co. Limit, 90 days after Sept.
4. Forfeit, \$5. Plans and specifica-
tions filed.

(2620) W FOURTH & CLEMENTINA
SW 155 NW 80 SW 25 SE 80 NE 25
to beg. Plumbing, gas fitting and
sewerage for three-story and base-
ment frame (3) flats.
Owner.....Louis Laubscher.
Architect...H. Geffuss & Son, 46 Kear-
ny, San Francisco.

Contractor...Ahlbach & Mayer, 85 Dor-
land, San Francisco.
Filed Sept. 13, '15. Dated Sept. 6, '15.
Roughed in\$258
Completed and accepted..... 258
Usual 35 days..... 174
TOTAL COST, \$690

Bond, \$345. Surety, Fidelity & De-
posit Co. of Maryland. Limit, 5 days
after carpenter completed. Forfeit, \$10
Plans and specifications filed.

Carpenter, roofing, mill and stair
work, glazing, plastering and hard-
ware, etc., on above.
Contractor...P. Carlson and E. J. Wade,
71 Pierce, San Francisco.

Filed Sept. 13, '15. Dated Sept. 6, '15.
Frame up\$ 942
Brown coated 942
White coated 943
Completed and accepted..... 943
Usual 35 days..... 1260
TOTAL COST, \$5030

Bond, \$2515. Surety, Maryland Casu-
alty Co. Limit, 90 days from recording.
Forfeit, \$10. Plans and specifications
filed.

REPAIRS
(2652) NO. 391 ELEVENTH. Repair
fire damage.
Owner.....Das. Lerer, Premises.
Architect...None.
Contractor...A. Olsen, 239 Fell, S. F.
COST, \$500

GARAGE
(2653) NO. 5718 CLAY (rear). One-
story frame garage.
Owner.....J. Braden, Premises.
Architect...None.
Contractor...A. Sinclair, Asti Hotel, 8th
and Folsom, S. F.
COST, \$450

MARQUISE
(2654) NO. 908 MARKET. Erect mar-
quise.
Owner.....Douglas Realty Co., Mills
Bldg., San Francisco.
Architect...None.
Contractor...Jossa Iron Works, 1342
Mission, San Francisco.
COST, \$100

FRAME DWELLING
(2655) E JULIAN AVE 244 S 14th.
One-story frame dwelling.
Owner.....E. K. Rhodes, 49 Julian
Ave., San Francisco.
Architect...None.
Day's work..... COST, \$400

TAR AND GRAVEL ROOF
(2656) SW WASHINGTON & WEBSTER
Tar and gravel roof.
Owner.....W. C. Raisch, 281 Church,
San Francisco.
Architect...None.
Contractor...John Newton, 165 Frank-
lin, San Francisco.
COST, \$600

BREWERY
(2657) NOS. 677-679 TREAT AVE; Lot
55x133. Concrete and steel work ex-
cept forms for concrete for brewery
building.

Owner.....Pacific Brewing & Maltng
Co., 675 Treat Ave., S. F.
Architect...C. A. Darmer, 675 Treat
Ave., San Francisco.

Contractor...Mission Concrete & Mosalc
Co., 331 Guerrero, S. F.

Filed Sept. 14, '15. Dated Sept. 1, '15.
Foundation walls poured.....\$573.75
Walls for brew house poured to
2nd floor 992.00
All work except floor complet-
ed 977.25
35 days after completion, except
floor 850.00
Completion of floor..... 450.00
Usual 35 days..... 150
TOTAL COST, \$4000.00

Bond, \$2000. Surety, Fidelity & De-
posit Co. of Maryland. Limit, as soon
as possible. Forfeit, none. Plans and
specifications filed.

FRAME RESIDENCE
(2658) E SEVENTH AVE 482-534 N
Lake N 30x6 120. All work except
plumbing and painting for two-story
frame residence.

Owner.....Emma C. Morrison.
Architect...None.
Contractor...E. Ellingson, 110 Jessie,
San Francisco.

Filed Sept. 14, '15. Dated Sept. 13, '15.
Foundations in and retaining walls
in place\$ 900
Ready for plaster..... 800
Plastering done 500
Finish mill work on job..... 800
Completed 1023
Usual 35 days..... 1342
TOTAL COST, \$5365

Bond, \$2682.50. Surety, New Amster-
dam Casualty Co. Limit, 90 days. For-
feit, \$10. Plans and specifications filed.

NOTE:—Plans prepared by Architect
Albert Farr, 68 Post, S. F.

FRAME RESIDENCE
(2659) S JACKSON 127-6 E Buchanan
E 37-5 S 127-84 W 27-6 N 7-84 W 10
N 120. Painting, tinting and paper
hanging (paper furnished by owner)
for three-story and basement frame
residence.

Owner.....Lucia H. K. Sherman, 2125
Jackson, San Francisco.
Architect...J. R. Miller, Lick Bldg.,
San Francisco.

Contractor...Stranahan & Son, 619 Ar-
guello Blvd., S. F.

Filed Sept. 14, '15. Dated Sept. 2, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$1000

Bond, \$500. Surety, United States Fi-
delity & Guaranty Co. Limit, as fast
as required. Forfeit, none. Plans and
specifications filed.

FRAME FLATS
(2660) S LAKE 82-6 W 12th Ave W 50
xS 100. All work for two two-story
and basement frame flats.

Owner.....Grace Yager, 1539 Clay,
San Francisco.

Architect...None.
Contractor...W. W. Yager, 1239 Polk,
San Francisco.

Filed Sept. 14, '15. Dated Sept. 13, '15.
Roof on\$2500
1st coat plaster on 2500
Completed and accepted..... 2500

Usual 35 days..... 2500
TOTAL COST, \$10,000
 Bond, none. Limit, 85 days. Forfeit,
 none. Plans and specifications filed.

FRAME DWELLING

(2661) S NATOMA 100 E Ninth S 75x
 E 25. All work for four one-story
 frame dwellings.
 Owner.....Geo. W. Springer, 635
 Hayes, San Francisco.
 Architect...None.
 Contractor...A. H. Wilhelm, 180 Jessie,
 San Francisco.
 Filed Sept. 14, '15. Dated Sept. 14, '15.
 Frames up\$562.50
 1st coat plaster on..... 562.50
 Completed and accepted..... 562.50
 Usual 35 days..... 562.50
TOTAL COST, \$2250.00
 Bond, none. Limit, 40 days from Sept.
 15. Forfeit, \$5. Plans and specifica-
 tions filed.

FRAME FLATS

(2662) E SHARK ALLEY 112 S Union
 S 25x E 112. All work except founda-
 tions, cement floors, front steps, ce-
 ment plaster on front and vestibule,
 shades and light fixtures for three-
 story and basement frame (3) flats.
 Owner.....G. B. De Lucchi, 35 Jasper
 Place, San Francisco.
 Architect...Paul F. De Martini, 2123
 Powell, San Francisco.
 Contractor...Vincenzo Marcone, 2773
 Railroad Ave., S. F.
 Filed Sept. 14, '15. Dated Sept. 8, '15.
 Enclosed and roof on.....\$1185
 Brown coated 1185
 Completed and accepted..... 1185
 Usual 35 days..... 1195
TOTAL COST, \$4750
 Bond, \$2400. Sureties, A. Lindelli and
 L. Pastorini. Limit, 90 days from Sept.
 14. Forfeit, \$5. Plans and specifica-
 tions filed.

FRAME DWELLING

(2663) N BRAZIL 50 E London. One
 and one-half-story and basement 5-
 room frame dwelling.
 Owner.....W. P. Smith, 109 Brazil,
 San Francisco.
 Architect...None.
 Day's work. **COST, \$2000**

FRAME DWELLING

(2664) W TWENTY-SIXTH AVE 275
 N Judah. Two-story and basement
 frame dwelling.
 Owner.....C. Anderson, 981 Haight,
 San Francisco.
 Architect...None.
 Day's work. **COST, \$3200**

FRAME FLATS

(2665) E SIXTH AVE 150 N Geary.
 Two-story and basement frame (2)
 flats.
 Owner.....Mrs. Marie Sterner, 1621
 Lake, San Francisco.
 Architect...None.
 Day's work. **COST, \$4000**

FRAME DWELLING

(2666) W LEE 75 S Grafton. One-
 story and basement frame dwelling.
 Owner.....Alfred L. Meloche, 1311
 Stevenson, San Francisco.
 Architect...None.
 Contractor...C. Nyman, 314 Day, S. F.
COST, \$600

ALTERATIONS

(2667) NO. 207 ANDERSON. Alter and
 add to dwelling.
 Owner.....Chris. Larsen, Premises.
 Architect...None.
 Day's work. **COST, \$400**

ALTERATIONS

(2668) NO. 243 O'FARRELL. Alter
 grill.
 Owner.....K. D. Winship, 334 Pine,
 San Francisco.
 Architect...Smith & Stewart, 244
 Kearny, San Francisco.
 Contractor...The Fink & Schlinder Co.,
 244 Kearny, S. F.
COST, 500

ALTERATIONS

(2669) NO. 3450 CLAY. Extend attic.
 Owner.....Jas. W. Dean, Premises.
 Architect...None.
 Day's work. **COST, \$1000**

CLASS "C" STORES

(2670) W FILLMORE '00 S Post W
 94-6xS 25. All work for one-story
 Class "C" stores.
 Owner.....Shean Est Co., Merchants'
 National Bank Bldg., S. F.
 Architect...Welsh & Carey, Merchants'
 National Bank Bldg., S. F.
 Contractor...Brandt & Stevens, Hearst
 Bldg., San Francisco.
 Filed Sept. 15, '15. Dated Sept. 13, '15.
 Brick work finished.....\$1500
 Plastering finished 1000
 Finished and accepted..... 1366
 Usual 35 days..... 1289
TOTAL COST, \$1555
 Bond, \$2578. Sureties, D. B. Macdonald
 and N. Capurro. Limit, 40 days. For-
 feit, \$10. Plans and specifications filed.

FRAME RESIDENCE

(2771) E SIXTEENTH AVE 225 S
 Anza 25x127-6. All work for two-
 story and basement frame residence.
 Owner.....S. J. Giebel, 437 31st Ave.,
 San Francisco.
 Architect...None.
 Contractor...Gus E. Thunberg, 740 9th
 Ave., San Francisco.
 Filed Sept. 15, '15. Dated Sept. 10, '15.
 Frame up\$825
 Enclosed and brown coated..... 825
 Completed 825
 Usual 35 days..... 825
TOTAL COST, \$3300
 Bond, none. Limit, 90 days. Forfeit,
 none. Plans and specifications filed.

FRAME RESIDENCE

(2672) W FORTY-EIGHTH AVE 261 N
 Balboa N 70xW 120. All work for
 two-story frame residence.
 Owner.....Horace and Josephine Jen-
 kins, 7555 Geary, S. F.
 Architect...None.
 Contractor...Pockman & Co., Geary and
 30th Ave., S. F.
 Filed Sept. 15, '15. Dated Sept. —, '15.
 Frame up\$1925
 Brown coated 1925
 Completed 1925
 Usual 55 days..... 1925
TOTAL COST, \$7700
 Bond, none. Limit, 100 days. Forfeit,
 none. Plans and specifications filed.

FRAME COTTAGE

(2673) W TWENTY-SIXTH AVE 100
 N Judah N 25xW 120 O L 698. All
 work except wiring and fixtures for

1-story and basement frame cottage.
 Owner.....Gus Baraco, 515 Broderick,
 San Francisco.
 Architect...None.
 Contractor...W. F. Duffer, 519 15th Ave.,
 San Francisco.

Filed Sept. 15, '15. Dated Sept. 15, '15.
 Four equal payments as follows:
 Roof rafters set.....
 Brown coated
 Completed and accepted.....
 Usual 35 days.....
TOTAL COST, \$2330

Bond, none. Limit, 90 days. Forfeit,
 none. Plans and specifications filed.

FRAME DWELLING

(2674) E LISBON 200 N Excelsior.
 One-story and basement frame dwlg.
 Owner.....W. C. Brown, 2945 Harri-
 son, San Francisco.
 Architect...None.
 Day's work. **COST, \$1850**

REPAIRS

(2675) NO. 426 ELLIS. Repair fire
 damage.
 Owner.....Dr. M. J. Fottrell, 2101 Di-
 visadero, San Francisco.
 Architect...None.
 Contractor...J. J. Heaphy, 1721 Lombard
 San Francisco.
COST, \$600

CONCRETE FLOOR

(2676) SE POLK AND WASHINGTON.
 Concrete floor.
 Owner.....H. Mamlzzi et al, 1512 Wal-
 ler, San Francisco.
 Architect...None.
 Contractor...A. Segheri & Bro.
COST, \$1000

FRAME FLATS

(2677) S IRVING 60 E Ninth Ave E 35
 —. All work for two-story frame
 flats.
 Owner.....Mrs. Olga Zeller, 237 Post,
 San Francisco.
 Architect...None.
 Contractor...W. Lemser & F. A. Pliske,
 1363 8th Ave., S. F.
 Filed Sept. 16, '15. Dated Sept. 14, '15.
 Frame up\$972.50
 Brown coated 972.50
 Completed and accepted..... 972.50
 Usual 35 days..... 972.50
TOTAL COST, \$3890.00

Bond, none. Limit, 60 days after Sept.
 15. Forfeit, none. Plans and specifica-
 tions filed.

FRAME COTTAGE

(2678) W SAN BRUNO AVE 60-6 N
 15th. One-story and basement frame
 cottage.
 Owner.....Joe Rauh.
 Architect...None.
 Contractor...G. Cavaglieri, 593 Potrero
 Ave., San Francisco.
COST, \$2000

ALTERATIONS

(2679) NO. 1014 MARKET. Alter food
 store.
 Owner.....Workman Packing Co., 130
 Erie, San Francisco.

Architect...None.
 Contractor...T. J. Fletcher, 1842 Cle-
 ment, San Francisco.
COST, \$400

BRICK APARTMENTS

(2680) S BUSH 77-6 W Jones. Four-

story and basement brick (8) apartments.
Owner.....Herman Hogrefe, 110 Upper Terrace, San Francisco.
Architect...E. E. Young, 251 Kearny, San Francisco.

Day's work. COST, \$15,000

BRICK BUILDING

681) SW BUSH AND JONES 77-6 on Bush by 77-6 on Jones. Brick work, cementing of fire walls, etc., for four story and basement brick building.
Owner.....Gerard Investment Co., Inc 110 Sutter, San Francisco.
Architect...Rousseau & Rousseau, 110 Sutter, San Francisco.
Contractor...Fred Koldenstrodt, 118 Carl, San Francisco.

Filed Sept. 16, '15. Dated Sept. 15, '15.
Brick work up to level of 3rd floor joists\$2050.55
Completed and accepted..... 2050.90
Usual 35 days..... 1367.25
TOTAL COST, \$5469.00
Bond, \$2735. Sureties, Chas. A. Carillon and Wm. Tegeler. Limit, 15 days after notified. Forfeit, \$20. Plans and specifications filed.

CLASS "C" APARTMENTS

682) E HYDE 112-6 S Ellis S 25x76 127-6. All work for four-story Class "C" apartments.
Owner.....J. Edw. and Frida Steffens, 2802 Bush, San Francisco.
Architect...Arthur G. Scholz, Phelan Bldg., San Francisco.

Contractor...Larsen-Sampson Co.
Filed Sept. 16, '15. Dated Sept. 15, '15.
Brick walls and frame up, roof on ready for roofing.....\$4000
Brown coated 4000
Completed and accepted..... 4000
Usual 35 days..... 4560
TOTAL COST, \$16,560
Bond, \$3360. Surety, Pacific Coast Casualty Co. Limit, 90 days. Forfeit, \$13. Plans and specifications filed.

COTTAGE

683) NE EIGHTEENTH AVE AND Noriega. All work for one-story, basement and attic frame cottage.
Owner.....Mrs. Julia Depierre, NW Fillmore and Oak, S. F.
Architect...P. Righetti, 1168 Phelan Bldg., San Francisco.

Contractor...Hofmeister & Berdahl, 629 Cole, San Francisco.
Filed Sept. 16, '15. Dated Sept. 11, '15.
Frame up\$575
Brown coated 575
Completed and accepted..... 575
Usual 35 days..... 575
TOTAL COST, \$2300
Bond, none. Limit, 70 days. Forfeit, \$5. Plans and specifications filed.

ALTERATIONS

684) NW FILLMORE AND OAK. Alterations and additions to three story frame building.
Owner.....Mrs. Julia Depierre, NW Fillmore and Oak, S. F.
Architect...P. Righetti, 1168 Phelan Bldg., San Francisco.

Contractor...Hofmeister & Berdahl, 629 Cole, San Francisco.
Filed Sept. 16, '15. Dated Sept. 11, '15.
House raising, grading and foundations done\$400
Brown coated 400
Marble and plate glass set..... 500
Completed and accepted..... 600

Usual 35 days..... 600
TOTAL COST, \$2550
Bond, none. Limit, 60 days. Forfeit, \$5. Plans and specifications filed.

FRAME FLATS

(2685) W THIRD AVE 125 S Balboa 25x120. All work for two-story and basement frame (2) flats.
Owner.....Bridget Mulligan, 825 Monadnock Bldg., S. F.
Architect...J. C. Hladik, Monadnock Bldg., San Francisco.
Contractor...Otto Carson, 1919 Hayes, San Francisco.

Filed Sept. 16, '15. Dated Sept. 11, '15.
Frame up\$1100
Brown coated 1100
Completed and accepted..... 1100
Usual 35 days..... 1100
TOTAL COST, \$4400
Bond, none. Limit, 75 days. Forfeit, \$5. Plans and specifications filed.

ALTERATIONS

(2686) NO. 25 OAK GROVE AVE. In-stall boiler and smoke stack.
Owner.....Marin County Milk Producers, Premises.
Architect...None.
Day's work. COST, \$400

FRAME STORAGE ROOM

(2687) W GRANT AVE 100 S Bay. One story frame storage room.
Owner.....G. B. Torre & Sons, 105 Bay, San Francisco.
Architect...None.
Day's work. COST, \$800

FRAME DWELLING

(2688) S INNES 125 E Hawes. One and one-half-story and basement frame dwelling.
Owner.....Fred and C. J. Jorgensen, 904 Innes Ave., S. F.
Architect...Harris Bros. Co., 35th and Iron Sts., Chicago.
Day's work. COST, \$1000

FRAME DWELLING

(2689) S CORTLAND near Elsie. One story and basement frame dwelling.
Owner.....A. M. Luce, 635 Minna, San Francisco.
Architect...None.
Day's work. COST, \$1000

ALTERATIONS

(2690) NO. 856 CAPP. Alter residence into church.
Owner.....Salem Baptist Church, 856 Capp, San Francisco.
Architect...C. O. Clausen, Hearst Bldg San Francisco.
Contractor...Ed. Knudsen, 1240 Bush, San Francisco.
COST, \$1000

FRAME FLATS

(2691) N CABRILLO 70 W 7th Ave. Two-story and basement frame (2) flats.
Owner.....H. C. Christiansen, 1345 4th Ave., San Francisco.
Architect...Koenig & Christiansen, Humboldt Bank Bldg., S. F.
Day's work. COST, \$4000

FRAME DWELLING

(2692) W TWENTY-FIRST AVE 29 N Cabrillo. Two-story and basement frame dwelling.
Owner.....Mrs. Wm. Koenig.
Architect...Koenig & Christiansen, 914 Humboldt Bank Bldg., S. F.

Contractor...Wm. Koenig, Humboldt Bank Bldg., S. F.
COST, \$3000

FRAME DWELLING

(2693) W TWENTY-FIRST AVE 57 N Cabrillo. Two-story and basement frame dwelling.
Owner.....Mrs. Wm. Koenig.
Architect...Koenig & Christiansen, 914 Humboldt Bank Bldg., S. F.
Contractor...Wm. Koenig, Humboldt Bank Bldg., S. F.
COST, \$3000

FRAME DWELLING

(2694) W TWENTY-FIRST AVE 85 N Cabrillo. Two-story and basement frame dwelling.
Owner.....Mrs. Wm. Koenig.
Architect...Koenig & Christiansen, 914 Humboldt Bank Bldg., S. F.
Contractor...Wm. Koenig, Humboldt Bank Bldg., S. F.
COST, \$3000

FRAME DWELLING

(2695) W TWENTY-FIRST AVE 113 N Cabrillo. Two-story and basement frame dwelling.
Owner.....Mrs. Wm. Koenig.
Architect...Koenig & Christiansen, 914 Humboldt Bank Bldg., S. F.
Contractor...Wm. Koenig, Humboldt Bank Bldg., S. F.
COST, \$3000

FRAME FLATS

(2696) S DAY 105 E Sanchez E 25xS 114 H A 99. All work for two-story frame flats.
Owner.....Patrick Hannon, 286 30th, San Francisco.
Architect...None.
Contractor...Thomas McCormick, 25 Gladys, San Francisco.

Filed Sept. 17, '15. Dated Sept. 14, '15.
Frame up\$762.50
Brown coated 762.50
Completed 762.50
Usual 35 days..... 762.50
TOTAL COST, \$3050.00
Bond, \$1600. Sureties, Wm. A. Dunne and H. S. Thomson. Limit, 60 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

(2697) E TWENTY-SECOND AVE 200 N Balboa. All work for two-story frame residence.
Owner.....Mabel Green, 72 Freelon, San Francisco.
Architect...None.
Contractor...Louis Lee, 135 Carl, S. F.
Filed Sept. 17, '15. Dated Sept. 17, '15.
Grading finished and frame up...\$1330
Brown coated 690
Completed and accepted..... 690
Usual 35 days..... 690
TOTAL COST, \$3400

Bond, \$1700. Sureties, A. Lionl and L. Comassi. Limit, 50 days. Forfeit, none. Plans and specifications filed.

CLASS "C" STORES

(2698) N HOWARD 215 W Third N 38xW 60. All work for one-story and basement Class "C" brick and concrete stores.
Owner.....Emma T. Corr, 508 Larkin, San Francisco.
Architect...Matthew O'Brien, 68 Post, San Francisco.

Contractor A. Dahlberg, 3225 Sacramento, San Francisco.
Filed Sept. 17, '15. Dated Sept. 16, '15.
On 1st of each month as work progresses 75%
Usual 35 days 25%
TOTAL COST, \$11,600
Bond, \$5800. Surety, New England Equitable Insurance Co. Limit, 60 days. Forfeit, \$15. Plans and specifications filed.

LEASE.

Sept. 11, 1915—W SECOND AVE bet. Hugo & Irving; No. 1281-1283, 1283-A Second Ave. Mara A Dulfer to Jean Macdougall. 2 years. \$1800.
Sept. 13, 1915—NO. 1505 POLK, bet. Sacramento and California. The Bradbury Estate Invt Co to Joseph Goodman. 5 years. \$4140.
Sept. 13, 1915—W POLK 112-6 N California N 25xW 81-3; No. 1527 Polk. Elizabeth McBride to Peter Dicks. 36 months. \$1800.
Sept. 13, 1915—NO. 1313 KEARNY. Antonio Rinaldi to Angelo De Renzi and Giovanni Lucia. 2 years 7 months. \$10.50 per month.
Sept. 15, 1915—NO. 1709 DEVISADERO. Frank Frey to Chas Buchan. Sept. 14, 1916. \$2690.85.

ARCHITECT'S CERTIFICATE.

Sept. 13, 1915—A. S. Heineman has filed his certificate of architecture for San Francisco County.

COMPLETION NOTICES

San Francisco

RECORDED	ACCEPTED
Sept. 8, 1915—S SACRAMENTO 100 W Gough W 25xS 137-6. Thomas F Lyons to whom it may concern.....	Sept. 8, 1915
Sept. 2, 1915—S GEARY 95 W Fillmore W 87-6 S 137-6 E 45 N 6 E 42-6 N 131-6. Congregation Beth Israel to D O Church.....	Aug. 25, 1915
Sept. 10, 1915—WEST END OF W A Blk 749, bdd by Fillmore, Eddy, Webster and Turk. Realty & Rebuilding Co to H S Tittle.....	Sept. 2, '15
Sept. 10, 1915—S CLEMENT 57-6 E Seventeenth Ave S 75x E 25. Michael S and Hannah Keller to Thos Hamil.....	Sept. 10, 1915
Sept. 10, 1915—SW GRANT AVE & Manila Ave (Union Square Ave) No. 127 Grant Ave. The Silk House to Muller Manufacturing Co.....	Sept. 1, 1915
Sept. 10, 1915—W NEWTON 200 S Morse 25x120. John L Cliff to whom it may concern.....	Sept. 10, 1915
Sept. 10, 1915—W ELEVENTH AVE 325 N Balboa N 25x120. Alfred T Morris to whom it may concern.....	Sept. 10, 1915
Sept. 10, 1915—N POST 164-3 E Hyde N 137-6x E 75-9. W H Bowen to whom it may concern.....	Sept. 8, 1915
Sept. 10, 1915—E COMMONWEALTH 266-8 (266.8) S California S 50x E 120. W H Cobb to Parkside Home Bldg Co.....	Sept. 10, 1915
Sept. 13, 1915—BLOCK BDRP BY 3rd, 4th, Townsend and King. Southern Pacific Co to F R Ritchie & Co.....	Sept. 2, 1915
Sept. 13, 1915—NE EXCELSIOR	

(China) Ave 50 SE Madrid SE 25x NE 100 ptn Lot 4 Blk 35, Excel Hd. Camellia A Ware to whom it may concern.....

Sept. 13, 1915—E SCOTT, bet Green and Union 50x135; No. 2820 Scott. Maude James Graves to The Western Bldg Supply Co.....

Sept. 13, 1915—W TWENTY-FIRST Ave 200 S California 50x120. Robert Galway to whom it may concern.....

Sept. 13, 1915—E ROUSSEAU 125 S Bosworth S 25x100. A A McCauley, L Muldowney and C B McCauley to whom it may concern.....

Sept. 13, 1915—E ROUSSEAU 225 S Bosworth S 25x100. L Muldowney to whom it may concern.....

Sept. 13, 1915—W SECOND & SILVER NW 70xSW 90. Clara Mentzel by Jacob Hertz, Attorney and Bertha C Josue to Chas Hock.....

Sept. 13, 1915—N GENEVA AVE 75 W Lisbon 25x100; Lot 3 Blk 7, Crocker Amazon Tract. Gussie A Meyer to whom it may concern.....

Sept. 13, 1915—NW FAIR OAKS AND 22nd 25 on Fair Oaks by 117-6 on 22nd. Lena Ganz to Frank Crothers.....

Aug. 6, 1915—SW GROVE AND Laguna 81.3 on Grove and 120 on Laguna. A S Johnson to W E Whalin.....

Sept. 14, 1915—N POST 164-3 E Hyde N 137-6x E 75-0. W H Bowen to H E Drake.....

Sept. 14, 1915—S WEST PARK 250 W Mission W 25xS 100. T A and Henry Arnke to Mager Bros.....

Sept. 14, 1915—SE QUESADA AVE 132-6 SE Jennings 37-6x120. David Basso to Liebert & Martelli.....

Sept. 14, 1915—W JORDAN AVE 196-8 N Geary N 33-4xW 120. Sidney L Peiser to Ira W Coburn, Inc.....

Sept. 14, 1915—LOT 8 RESBDVN Lots 4 and 5 Blk 12, Market Street Hd Ass'n. Louis Gandet to whom it may concern.....

Sept. 15, 1915—W MISSION 234 N 17th N 23-6xW 100. William and Wm J H Hasselbrock to A Klahn & Son.....

Sept. 15, 1915—SW BROADWAY AND Webster W 107-6xS 38-2½. S Lowenstein to Frederick W Snook.....

Sept. 15, 1915—S NEY 150 E Congdon E 25 S 110 W 25 N 100. Alice Jelm to Gus Jelm.....

Sept. 16 1915—SE TABOR PLACE (Park Lane North) 145 SW 22nd and 100 SE Bryant SW 45 SE to NW South Park Ave E to a point on South Park Ave dist 145 SW Second NW to SE Tabor Place. Brewster F Ames to James P Fletcher.....

Sept. 16, 1915—N OAK 157-6 W Van Ness Ave W 89-9 N 120 E 68-9 S 40 E 21 S 80. The Young Men's Institute Hall Ass'n to The J Looney Co.....

Sept. 16, 1915—W TWENTY-7TH Ave 100 N Balboa N 25x75. Betsey A Holden to whom it may concern.....

Sept. 17, 1915—NO. 921 GRANT AVE E line bet Washington and Jackson. John Gold and Leo Kaufmann

to L A Rose.....

Sept. 17, 1915—E RAMONA AVE 80 S 11th E 75xS 25. William C and Elizabeth Brumfield to Wm A Newsum.....

Sept. 17, 1915—LOT 22 BLK 1, Holly Park Tract. Hugh & Annie Geraty to Thomas McCormick.....

Sept. 17, 1915—S SHIPLEY 125 E 5th E 25xS 75. Jean de Greayer to Iro W Coburn, Inc.....

Sept. 17, 1915—WEST END OF W A Blk 749 bounded by Fillmore, Eddy, Webster and Turk. Realty & Rebuilding Co to G P W Jensen and Siranahan & Son.....

LIENS FILED

SAN FRANCISCO COUNTY.

Sept. 11, 1915—NE COLUMBUS AVE and S Chestnut E 163-11 S 137-6 W 49-5¼ NW 178-11½. D M Costello vs Lewis Packing Co, Ronda & Spivock.....

Sept. 11, 1915—N FULTON 220 W Steiner W 27-6xN 137-6. Loop Lumber Co vs S B Kress, Carl Geilfuss and Jane Doe Geilfuss.....

Sept. 11, 1915—SW CALIFORNIA & Powell S 275xW 206-3. W & J Sloane vs L H Sly.....

Sept. 13, 1915—E THIRTY-FIRST Ave 100 N Clement N 25 E 167-7 S 25-1¼ W 170-5. M Stulsaft Co vs Mrs E M Adair, Julia Wilcox, Claude R Wilcox, T Roy Murray and Philip Wesendunk.....

Sept. 13, 1915—SW TAYLOR AND Washington S 55xW 137-6. L A Hufschmidt Mfg Co vs Dolores Loaliza.....

Sept. 13, 1915—W TWENTY-FIRST Ave 124 N Irving N 25x120. Konkell & Anderson vs Michael Cain and J H Sampel.....

Sept. 14, 1915—SW WASHINGTON & Taylor W 137-6xS. 55. National Mill & Lumber Co vs J H Hjul and Dolores Loaliza.....

Sept. 15, 1915—NE FRANCISCO AND Franklin N 87-7 E 124-3 N 50 E 55 S 137-6 W 179-3; NE Chestnut and Franklin N 275 E 275 S 137-7 W 82-7 S 137-7 W 192-6. Hart-Wood Lumber Co vs L A Williams, M C Goni and H Garcia (as Garcia & Goni), P P I E et al.....

Sept. 16, 1915—SW CALIFORNIA & Powell S 275xW 206-3. Thomas Day Co, \$11,241.98; John Finn Metal Works, Cpn, \$927.77 vs L H Sly.....

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

Sept. 15, 1915—W TWENTY-FIRST Ave 124 N Irving N 25xW 120. Konkell & Anderson to Michael Cain and J H Sampel.....

Sept. 8, 1915—W TWENTY-FIRST Ave 200 S California S 50xW 120. C H Edwards and Henry Cowell Lime & Cement Co to The Pacific Plastering Co and Robert F Galway

Sept. 4, 1915—LOT 41, Lyon & Hoag Sub Ashbury Terrace. M Bertolino to Jas E Brennan.....

Sept. 4, 1915—S TURK 57-6 E Polk E 30xS 85. Dresser-McDonnell & Co to John M Roscus.....

OAKLAND AND ALAMEDA COUNTY,

RETAINING WALLS, ETC. — Cost not stated. Oakland, Cal. Engineer, County Surveyor, Oakland. Owners, Alameda County. Bids will be opened September 27th for the construction of culverts, concrete wing walls, retaining walls, etc., and grading work on a portion of the main county road between Mission San Jose and Warm Springs. Plans can be secured from the County Clerk at Oakland.

RESIDENCE — 1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, R. Cormack, 589 14th street, Oakland. Location, north 14th street west of Market. Will contain five rooms and bath. Interior finished in pine with white enamel. Hardwood floors and open fire place. Mantel tile or brick, automatic water heater and tile floor and wainscot in bath room. Exterior covered with rustic cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,000. Berkeley, Alameda Co., Cal. Architect, none. Owner, Henry Miller, 1521 Hillegass avenue, Berkeley. Location, south Eunice west end. Will contain five rooms, bath and sleeping porch. Interior finished with some white enamel and hardwood floors. Open fire place and tile or brick mantel. Bath room tile floor. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$3,500. Oakland, Cal. Architect, none. Owner, H. Mason, 3311 Webster street, Oakland. Location, east Webster south of 42nd street. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel with some hardwood floors. Open fire place and tile or brick mantel. Tile wainscot and floor in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, \$4,300. Oakland, Cal. Architect, none. Owner, Leo L. Nichols, 1764 Broadway, Oakland. Location, east 17th and avenue north Weldon avenue. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel with hardwood floors. Furnace heat, open fire places, tile and brick mantels and tile floor and wainscot in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, Frank W. Burger, 52nd street, Oakland. Location, 18th Clifton west College. Will contain five rooms and bath. Interior finish pine and white enamel with hardwood floors. Open fire place and tile floor and wainscot. Automatic water heater. Exterior covered with rustic cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,250. Oakland, Cal. Architect, none. Owner, William F. Reed,

912 Alleen, Oakland. Location, east Colby north 62nd street. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel and hardwood floors. Open fire place, tile mantel and automatic water heater. Bath room finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

ALTRATION FOR RESIDENCE — \$8,500. Berkeley, Alameda Co., Cal. Architect, F. Holberg Reimers, 2145 Shattuck avenue, Berkeley. Owner, W. W. Mackie. Location, Shasta street. Work will include interior and exterior carpentry work, hardwood trim and floors, painting, plastering, plumbing and electric work. Furnace heat, open fire places, brick and tile mantels and tile wainscot and floors. Automatic water heater. Exterior cement plaster on metal lath. Plans being prepared.

RESIDENCE — 2 story and base, frame, \$2,500. Oakland, Cal. Architect, Thomas Finlayson, 634 Townsend street, S. F. Owner, William D. Jones. Location, north Keith avenue west Broadway. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel with some hardwood floors. Open fire place and tile or brick mantel. Tile wainscot in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE — 2 story and base, frame, \$7,000. Oakland, Cal. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, Robert Farmer, 11th avenue, Oakland. Location, east 24th street and 11th avenue. Will contain a number of two and three room suites. Interior finish pine and hardwood with hardwood floors. Steam heat, hot water system and wall beds. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE — 4 story and base, brick and steel, \$150,000. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner's name withheld. Will cover an area of 250 by 250 feet and will be erected in three units. Will contain a total of 94 suites of three, four and five rooms. Interior finish, pine and hardwood with ornamental plaster in lobby. Hardwood floors, steam heat, oil burning furnace, hot water system, automatic elevator and vacuum cleaning. Bath rooms finished in tile. Exterior faced with pressed brick. Working drawings being prepared.

FLATS — 4, 2 story and base, frame, \$4,000 each. Oakland, Cal. Architects, Hutchinson & McLean, 470 13th street, Oakland. Owner, T. Cullen, 1620 Filbert street, Oakland. Location, east 16th west of 11th avenue. Will contain two flats of six rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and owner taking segregated figures.

RESIDENCE — 1½ story and base, frame, \$2,700. Oakland, Cal. Architects, Universal Drafting Bureau, 1844 4th avenue, Oakland. Owner, R. A. McWilliams. Location, 4th Avenue Ter-

race. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1½ story and base, frame, \$2,000. Fruitvale, Alameda Co., Cal. Architects, Universal Drafting Bureau 1844 5th avenue, Oakland. Owner, T. Lindeblad. Location, Fruitvale. Will contain five rooms, bath and sleeping porch. Interior finish pine throughout. Hardwood floors and open fire place. Mantel, brick. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.


RESIDENCES — 10, 1 story and base, frame, \$2,000 each. Berkeley, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, M. P. Brasch. Location, Northbrae. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel with some hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with rustic cement plaster and shingles. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, \$3,500. Oakland, Cal. Architect, none. Owner, H. P. Patton, 2906 Telegraph avenue, Oakland. Location, east Hearn south 57th. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood veneer and white enamel. Hardwood floors, open fire places and tile or brick mantels. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, \$5,000. Berkeley, Alameda Co., Cal. Architect, James W. Plachek, Acheson Bldg., Berkeley. Owner, Mrs. M. Anderson. Location, Spruce street near Cedar. Will contain eight rooms, bath and sleeping porch. Interior finished in pine, hardwood and white enamel. Hardwood floors and open fire places. Furnace heat. Mantels, tile or brick. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and segregated figures being taken.

RESIDENCE — 2 story and base, frame, \$3,700. Oakland, Cal. Architect, Chester H. Miller, Dalziel Bldg., Oakland. Owner, Frederick R. Jones. Location, Thousand Oaks. Will contain seven rooms, bath and sleeping porch. Interior finish, pine and hardwood with some white enamel. Hardwood floors, furnace heat and open fire place. Mantel, tile or brick. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans being prepared.

RESIDENCE — 1 story and base, frame, \$2,000. Alameda, Alameda Co., Cal. Architect, none. Owner, J. M. Lundholm, 1717 Wood street, Alameda. Location, 2525 Santa Clara avenue. Will contain five rooms and bath. Interior finish, pine throughout. Some hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Auto-



Structural Steel Contractors

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San Francisco**

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matic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 1 story and base, frame, \$2,000. Alameda, Alameda Co., Cal. Architect, none. Owners, West End Building Association, 1600 Webster street, Alameda. Location, Taylor street. Will contain five and six rooms and bath. Interiors finished in pine with some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Bath rooms finished in tile. Exteriors cement plaster on metal lath. Plans complete and work to be done by Day Labor.

LAUNDRY—1 story and base, reinforced concrete, \$50,000. Berkeley, Alameda Co., Cal. Architect, John Galen Howard, 604 Mission street, S. E. Owners, Regents of the University of California. Location, University Campus. Will have capacity of 8,000 pieces daily. Interior finish, pine. Concrete floor. Steam heat and hot water system. Special machinery. Exterior faced with cement plaster. Plans being prepared.

HOSPITAL COMPLETION—Cost as follows. Berkeley, Alameda Co., Cal. Architect, State Architect George B. McLougall, Sacramento. Owners, State of California. Bids opened on September 16th for completion of work at the Berkeley State Home for the Blind show the following low bidders: R. H. Pearce at \$967 for tank tower, and Frank Gallagher and F. E. Nelson both at \$999 for concrete walks and side-walks. A complete list of the bidders will be found under the heading of Oakland and Alameda County.

Contracts Awarded.

HOSPITAL WARD AND DORMITORY—Frame construction. Oakland, Cal. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, Alameda County. Contractors, Robinson & Place, Oakland. Contract price, \$5,248. A complete list of the bids received will be found under the heading of Oakland and Alameda County.

Award Contract For State Hospital Job.

Low Man Awarded Contract at Patton. Bids Received For Additional Work At Berkeley Institution.

(By Special Wire.)

SACRAMENTO, CAL., Sept. 16th, 1915.—At Thursday's meeting of the State Board of Control an official award of contract for the construction of Cottages X and O at the Southern State

Hospital at Patton was made to W. E. Kier Constr. Co. of San Diego on their bid of \$34,999.

The following bids were also received for construction at the California Institution for the Deaf and Blind at Berkeley:

Completion of Tank Tower.

R. H. Pearce.....	\$ 967
L. W. Murdock.....	990
D. O. Church.....	1,000
Pringle, Dunn Co.....	1,088
Dunnivant-Oakley Co.....	1,251
Robertson & Place.....	1,275
Constr. & Eng. Co.....	1,278
Alfred Olson.....	1,392
Cassius R. Lamburth.....	1,440
Tieslau Bros.....	1,664
Louis Cereghino & Son.....	1,666
John A. Silva.....	1,839
Foster-Vogt Co.....	1,947

Concrete Walls and Side Walks.

Frank Gallagher.....	\$ 999
F. E. Nelson.....	999
Collman & Collman.....	1,049
George W. Buxton & Son.....	1,072
Jansen Bros.....	1,075
D. O. Church.....	1,100
Tieslau Bros.....	1,188
Pringle, Dunn & Co.....	1,145
Oakland Concrete Co.....	1,166
Bluxome Co.....	1,208
Dunnivant-Oakley Co.....	1,381

Open Figures For County Infirmary Job.

Robinson & Place Awarded Contract For Alameda County Dormitory And Ward Buildings.

Thirteen sets of figures were opened by the Alameda County Board of Supervisors at Monday's meeting for constructing a ward building and dormitory at the County Infirmary. Plans were prepared by Architect Henry H. Meyers, Kohl Bldg. Construction will be of frame. Following is a list of the bids received:

Ward Building and Dormitory.

Robinson & Place.....	\$5,248
Phil Sheridan.....	5,802
J. Wandering.....	6,275
R. W. Littlefield.....	5,499
Joe Flittner.....	5,994
E. Anderson.....	5,680
J. S. Hannah.....	6,987
J. Prindle.....	6,650
J. C. Neilsen.....	6,135
William J. Baccus.....	5,486
P. H. Schmidt.....	5,587
W. G. Thornalley.....	5,650
Stockholm & Allen.....	6,777

Contract awarded to Robinson & Place.

Building Contracts Awarded

Oakland

No.	Owner.	Contractor	Amt.
1832	Wood	Dewey	1800
1833	Hitchens	Anderson	2000
1834	Silverman	Forbes	1856
1835	Harris	Hudson	800
1836	Harris	Hudson	700
1837	Gustafson	Gustafson	400
1838	Crossley	Crossley	1000
1839	Cole	Hambleton	700
1840	Leona	Stone	550
1841	Zeppelner	Owner	500
1842	Musser	Musser	400
1843	Kirkland	Schnebley	500
1844	Olanie	Olanie	1500
1845	Smith	Weider	4328
1846	Van Horn	Vaughn	3524
1847	Werum	Brown	1600
1848	Same	Same	1600
1849	Penoyar	Kick	2000
1850	Nelmes	Sims	2000
1851	Calif Steel	Lindgren	4000
1852	Nielsen	Lodge	900
1853	Cuthbert	Cox	1700
1854	Reed	Reed	2250
1855	Jones	Jones	2500
1856	Ghiglieri	Ghiglieri	1600
1857	Stone	Stone	1000
1858	Marehant	Van Sant	15110
1859	Howe	Ellet	6435
1860	Carlie	Knight	1425
1861	Cordy	Peterson	4800
1862	Mason	Mason	2400
1863	Cormick	Cormick	4000
1864	Fernandes	Fernandes	700
1865	Juri	Wald	450
1866	Nichols	Nichols	4500
1867	Tyson	Bertelsen	3385
1868	Cullen	Bullock	4000
1869	Same	Same	4000
1870	Allen	Same	4000
1871	Same	Same	4000
1872	Alameda Co	Stock	16000
1873	Sanford	Stand Bldg	2350
1874	Allen	Dudley	1600
1875	Masonic	Johnson	475
1876	Vrettos	Tonby	400
1877	Wizmann	Clifford	500
1878	Kahn	Yager	350
1879	Kieran	Kieran	500
1880	Burger	Burger	2500
1881	Shredded Wheat	Ne Page	8100
1882	R. C. Archbishop	Silva	4060
1883	Lernhart	Irvine	10973
1884	Henshaw	Henshaw	1000
1885	Bernard	Boeddeker	1100
1886	1st Stv Trust	Kulcher	800
1887	Bray	Stubbe	2500
1888	Penoyar	Kick	2125
1889	Gallagher	Prince	4900

DWELLING

(1832) E SHAFTER AVE 150 S Hudson, Oakland. One-story 5-room dwlg. Owner.....Galo M. and O. R. Wood. 5380 Shafter Ave., Okd. Architect...None. Contractor...W. A. Dewey, 4905 Manila Ave., Oakland. COST, \$1800

DWELLING

(1833) E MARKET 25 S 42nd, Oakland. Two-story 7-room dwelling. Owner...R. Hitchens, Linden and 41st, Oakland. Architect...None. Contractor...L. W. Anderson, 821 16th, Oakland. COST, \$2000

DWELLING

(1834) N APGAR 400 E Grove, Oakland. One-story 5-room dwelling. Owner.....Mr. and Mrs. M. Silverman, 3064 Claremont, Bkly. Architect...None. Contractor...E. C. Forbes, 2828 Prince, Berkeley. COST, \$1856

ALTERATIONS

(1835) E CANON AVE 600 N Hopkins, Oakland. Alterations.

Owner.....Harris & Hudson, 1957 E-38th, Oakland.
 Architect...None.
 Day's work. COST, \$300

ALTERATIONS
 (1836) E CANON AVE 560 N Hopkins, Oakland, Alterations.
 Owner.....Harris & Hudson, 1957 E-38th, Oakland.
 Architect...None.
 Day's work. COST, \$700

ADDITIONS
 (1837) NO. 3311 ABBEY, Oakland, Addition.
 Owner.....J. E. Gustafson, Premises.
 Architect...None.
 Day's work. COST, \$400

DWELLING
 (1838) NW CLEVELAND & CAPELLA, Oakland, One-story 8-room dwlg.
 Owner.....Nat M. Crossley, 1330 Washington, Oakland.
 Architect...C. W. McCall, Central Bk. Bldg., Oakland.
 Day's work. COST, \$10,000

ALTERATIONS
 (1839) NO. 431 ATHOL AVE and rear, Oakland, Alterations and one-story garage.
 Owner.....M. G. Cale, Premises.
 Architect...None.
 Contractor...Fred Hambleton, 575 43rd Oakland.
 COST, \$700

OFFICES
 (1840) S ALAMEDA AVE, foot of 37th Oakland, One-story 3-room offices.
 Owner.....Leona Quarries Co., Okd.
 Architect...None.
 Contractor...E. P. Stone, 1212 Carrison, Berkeley.
 COST, \$550

DWELLING
 (1841) W MAGEE AVE 175 N California, Oakland, One-story 3-room dwlg.
 Owner.....R. Zeperlen, 577 17th, Okd.
 Architect...None.
 Day's work. COST, \$500

ALTERATIONS
 (1842) NO. 1588 WEBSTER, Oakland, Alterations.
 Owner.....Dr. F. R. Musser, 1321 Broadway, Oakland.
 Architect...None.
 Day's work. COST, \$100

ALTERATIONS
 (1843) NO. 326 FIFTEENTH, Oakland, Alterations.
 Owner.....A. W. Kirkland, 1209 Broadway, Oakland.
 Architect...None.
 Contractor...Schnebley, Hostrowser & Pedgrift, 6th & Jefferson, Oakland.
 COST, \$500

DWELLING
 (1844) N BEARST AVE 480 E Lincoln, Oakland, One and one-half-story 5-room dwelling.
 Owner.....C. W. Olanie, 2227 62d Ave. Oakland.
 Architect...None.
 Day's work. COST, \$1500

FRAME RESIDENCE
 (1845) LOT 21 BLK "A" Map East

Piedmont Heights, Oakland, All work for frame residence and garage
 Owner.....W. I. Smith, Oakland.
 Architect...M. I. Diggs, 2444 Bowditch, Berkeley.

Contractor...H. H. Weider, 829 E-19th, Oakland.
 Filed Sept. 11, '15. Dated Sept. 10, '15.
 Ceiling joists in place.....\$965.60
 Brown coated 965.60
 Mill work delivered and sash in place 965.60
 Completed and accepted..... 965.60
 Usual 35 days..... 965.60

TOTAL COST, \$1828.00
 Bond, \$1828. Surety, Lowell Lumber & Milling Co. Limit, 90 days. Forfeit, \$25. Plans and specifications filed.

FRAME DWELLING
 (1846) LOT 165 NOVA PIEDMONT Tract, Piedmont, All work except grading and excavation for one-story and basement frame dwelling.
 Owner.....J. E. Van Horn, 1558 Webster, Oakland.

Architect...None.
 Contractor...M. C. Vaughn, 5833 Ayala Ave., Oakland.
 Filed Sept. 11, '15. Dated ——. Frame up\$1199
 1st coat plaster on 775
 Completed and accepted..... 775
 Usual 35 days..... 775

TOTAL COST, \$3524
 Bond, \$1762. Surety, Maryland Casualty Co. Limit, 70 days. Forfeit, none. Plans and specifications filed.

DWELLING
 (1847) S DAMUTH 60 E Fruitvale, Oakland, One-story 4-room dwelling.
 Owner.....A. F. Werum, 3404 Harper, Oakland.

Architect...None.
 Contractor...W. C. Brown, 1624 64th Ave., Oakland.
 COST, \$1600

DWELLING
 (1848) SE FRUITVALE AVE AND Damuth, Oakland, One-story 4-room dwelling.
 Owner.....A. F. Werum, 3404 Harper, Oakland.
 Architect...None.
 Contractor...W. C. Brown, 1624 64th Ave., Oakland.
 COST, \$1600

DWELLING
 (1849) NW FIFTH AVE AND E-20th, Oakland, One and one-half-story 6-room dwelling.
 Owner.....Mrs. Carrie Penoyar, 123 E-12th, Oakland.
 Architect...None.
 Contractor...P. L. Klick, 3434 Davis, Okd.
 COST, \$2000

COTTAGE
 (1850) N NEVIL 300 E 38th Ave., Oakland, One-story 5-room cottage.
 Owner.....A. H. Nelmes, 1056 56th Oakland.
 Architect...None.
 Contractor...Wm. H. Sims, 1926 64th Ave., Oakland.
 COST, \$2000

SHOP
 (1851) W HARRISON 100 S Second, Oakland, One-story 1-room shop.
 Owner.....California Steel Co., Second and Harrison, Oakland.
 Architect...None.

Contractor...Lindgren Co., Monadnock Bldg., San Francisco.
 COST, \$1000

DWELLING
 (1852) E NINETEENTH AVE 100 S E-17th, Oakland, One-story 4-room dwelling.
 Owner.....Olga T. Nielsen, 1905 E-17th, Oakland.
 Architect...None.
 Contractor...C. F. Lodge, 615 Cleveland, Oakland.
 COST, \$300

DWELLING
 (1853) S SIXTY-FIRST 100 E Idaho, Oakland, One-story 5-room dwelling.
 Owner.....R. B. Culbert, 1017 61st Oakland.
 Architect...None.
 Contractor...L. W. Cox, 2011 13th Ave., Oakland.
 COST, \$1700

DWELLING
 (1854) E COLBY 110 N 62nd, Oakland, One-story 5-room dwelling.
 Owner.....Wm. F. Reed, 912 Aileen, Oakland.
 Architect...None.
 Day's work. COST, \$2250

DWELLING
 (1855) N KEITH AVE 300 W Broadway, Oakland, Two-story 7-room dwelling.
 Owner.....Wm. D. Jones, 3116 Ellis, San Francisco.
 Architect...Thomas Finlayson, 624 Townsend, San Francisco.
 Day's work. COST, \$2500

DWELLING
 (1856) N FORTY-NINTH 200 E Clark, Oakland, One-story 5-room dwlg.
 Owner.....L. Ghiglieri, 5132 Miles Ave., Oakland.
 Architect...None.
 Day's work. COST, \$1600

DWELLING
 (1859) E FRUITVALE 105 N E-14th, Oakland, One-story 3-room dwelling
 Owner.....J. T. Stone, 1418 Fruitvale Ave., Oakland.
 Architect...None.
 Contractor...T. E. Stanley, 1507 50th Ave., Oakland.
 COST, \$1000

FACTORY BUILDING
 (1860) SW STANFORD AVE AND Eighth, containing 1.950 acres m or l, Emeryville, All work for reinforced concrete factory building.
 Owner.....Marchant Calculating Machine Co., Syndicate Bldg., Oakland.
 Architect...W. L. Schmölle, 66 Geary, San Francisco.
 Contractor...Van Sant-Houghton, Hooker-Lent Bldg., S. F.
 Filed Sept. 11, '15. Dated Sept. 8, '15.
 On 1st and 15th of each month 75%
 Usual 35 days..... 25%
 TOTAL COST, \$15,110
 Bond, none. Limit, 70 days. Forfeit, none. Plans and specifications filed.

BRICK STORE
 (1861) N FOURTEENTH 80 W Harrison W 40xN 103, Oakland, All work for one-story brick store building.
 Owner.....Louis P. Howe, 516 Sutter, San Francisco.

Architect...None.
Contractor...A. F. Eliel, 1527 Broadway, Oakland.

Filed Sept. 11, '15. Dated Sept. 8, '15.
Brick walls 10 feet high..... ¼
Brick walls completed and roof on ¼
Completed ¼
Usual 35 days..... ¼
TOTAL COST, \$6448

Bond, none. Limit, 90 days. Forfeit, plans and specifications, none.

DWELLING

(1862) S FORTY-FIRST 100 W Lusk, Oakland. All work for one-story 4-room dwelling.
Owner.....Addie F. Carlie, Oakland.
Architect...None.
Contractor...Harry G. Knight, 3857 Market, Oakland.

Filed Sept. 13, '15. Dated Sept. 7, '15.
Floor joists in place.....\$200
Rafters sheathed 325
Brown coated 325
Completed and accepted..... 325
When contractor shows receipted bills 250
TOTAL COST, \$1425

Bond, none. Limit, 75 days after laying mudsills. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

(1863) S 94-6 OF W 40 Lot 19 Blk "N" Map No. 2 Ptn Central Oakland Tct E Telegraph Ave., Oakland. All work except mirrors, light fixtures, wall beds, plumbing fixtures, heater, shades and wall paper for two-story frame dwelling.

Owner.....Elvira P. Cordy, Oakland.
Architect...None.
Contractor...Alfred Peterson, 1201 19th, Oakland.

Filed Sept. 13, '15. Dated Sept. 10, '15.
Frame up ¼
Brown coated ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$4800

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

DWELLING

(1870) E WEBSTER 75 S 42nd, Oakland. One-story 6-room dwelling.
Owner.....H. Mason, 3811 Webster, Oakland.

Architect...None.
Day's work. COST, \$2400

DWELLING

(1871) N THIRTY-NINTH 103 W Market, Oakland. One-story 5-room dwelling.

Owner.....R. Cormack, 589 39th, Okd.
Architect...None.
Day's work. COST, \$2000

DWELLING

(1872) N E-ELEVENTH 50 W 10th Ave., Oakland. One-story 4-room dwelling.

Owner.....John Fernandes, 946 E-11th Oakland.
Architect...None.
Day's work. COST, \$700

REPAIRS

(1873) NO. 3834 CLARK, Oakland. Fire repairs.
Owner.....Caroline Jurl, 95 Liberty, San Francisco.

Architect...None
Contractor...A. F. Waid, 636 65th, Okd.
COST, \$450

DWELLING

(1874) E GRAND AVE 300 N Weldon Ave., Oakland. Two-story 8-room dwelling.
Owner.....Leo L. Nichols, 1764 Broadway, Oakland.

Architect...None.
Day's work. COST, \$4500

FRAME DWELLING

(1875) ON PROPERTY AS DIRECTED by owner, being N Satello Ave, Piedmont Acres. All work except mill work, glass, sash and doors, lumber, shingles, etc., for two-story 10-room frame dwelling.

Owner.....James Tyson, 9 Sea View Ave., Piedmont.

Architect...Chas. W. McCall, Central Bank Bldg., Oakland.
Contractor...S. J. Bertelsen, 667 39th, Oakland.

Filed Sept. 14, '15. Dated Sept. 11, '15.
Brick chimney built and roof sheathed\$844.00
Exterior covering on..... 844.00
Completed and accepted..... 844.00
Usual 35 days..... 863.90
TOTAL COST, \$3395.90

Bond, \$1700. Sureties, J. C. Neilsen and A. M. Petersen. Limit, 45 days. Forfeit, none. Plans and specifications filed.

FLATS

(1876) S E-SIXTEENTH 75 W 11th Ave., Oakland. Two-story 12-room flats.

Owner.....T. A. Cullen, 1630 Filbert, Oakland.

Architect...Hutchinson & McLean, 470 13th, Oakland.

Contractor...O. M. Bullock, 2215 Santa Rita, Oakland.
COST, \$4000

FLATS

(1877) W ELEVENTH AVE 37½ S E-16th, Oakland. Two-story 12-room flats.

Owner.....T. A. Cullen, 1630 Filbert, Oakland.

Architect...Hutchinson & McLean, 470 13th, Oakland.

Contractor...O. M. Bullock, 2215 Santa Rita, Oakland.
COST, \$4000

FLATS

(1878) S E-SIXTEENTH 115 W 11th Ave., Oakland. Two-story 12-room flats.

Owner.....T. A. Cullen, 1630 Filbert, Oakland.

Architect...Hutchinson & McLean, 470 13th, Oakland.

Contractor...O. M. Bullock, 2215 Santa Rita, Oakland.
COST, \$4000

FLATS

(1879) SW ELEVENTH AVE AND E-16th, Oakland. Two-story 12-room flats.

Owner.....T. A. Cullen, 1630 Filbert, Oakland.

Architect...Hutchinson & McLean, 470 13th, Oakland.

Contractor...O. M. Bullock, 2215 Santa Rita, Oakland.
COST, \$4000

ADDITION

(1881) FIFTH & BROADWAY, Oakland. Two-story brick addition to court house.

Owner.....Alameda County.
Architect...Henry H. Meyers, 1201 Kohl Bldg., S. F.

Contractor...Lester H. Stock, 12 Geary, San Francisco.
COST, \$16,000

ALTERATIONS

(1882) NO. 456 FORTY-FOURTH, Oakland. Alter one-story dwelling to 2-story flats.

Owner.....Mrs. Cora Sanford, Prem.

Architect...None.
Contractor...Standard Bldg. Co., Syndicate Bldg., Oakland.
COST, \$2850

DWELLING

(1895) E ORIN DRIVE 45 N 24th, Oakland. One-story 6-room dwlg.

Owner.....L. E. Allen, 2425 Orin Drive Oakland.

Architect...None.
Contractor...A. Dudley, 876 Broadway, Oakland.
COST, \$1600

ALTERATIONS

(1896) SW FIFTEENTH AND MADISON, Oakland. Alterations.

Owner.....Masonic Cathedral Ass'n., Premises.

Architect...None.
Contractor...Ben O Johnson, 2014 E-30th, Oakland.
COST, \$475

STORE

(1897) NW MATHER AND MONTGOMERY, Oakland. One-story store.

Owner.....Mrs. Vrettos, Premises.
Architect...None.

Contractor...Tonby & Rishel, 3553 Piedmont Ave., Oakland.
COST, \$400

ADDITION

(1898) NO. 3714 MEDVALE AVE., Oakland. Addition.

Owner.....E. A. Wizmann, Premises.
Architect...None.

Contractor...J. B. Clifford, 3747 35th Ave., Oakland.
COST, \$500

MARQUISE

(1899) NO. 1212 WASHINGTON, Oakland. Marquise.

Owner.....Kahn Realty Co., Prem.

Architect...None.
Contractor...Yager Sheet Metal Works, 3509 Chestnut, Oakland.
COST, \$350

DWELLING

(1900) N NOBLE 176 E 62nd Ave., Oakland. One-story 4-room dwlg.

Owner.....Edward Kieran, 6125 Noble Oakland.

Architect...None.
Day's work. COST, \$500

DWELLING

(1901) N CLIFTON 160 W College Ave., Oakland. One-story 6-room dwelling.

Owner.....Frank W. Burger, 858 52d, Oakland.

Architect...None.
Day's work. COST, \$2500

ELECTRIC WIRING

(1) LOTS 3 TO 24 INCL and ptn
ts 4, 5, 6, 7 and 25 to 32 incl Map
J. McMullen's Sbdvn of Blk 576,
Oakland. Electric wiring for four-
story reinforced concrete factory.
er.....Pacific Coast Shredded
Wheat Company.

itect...None.
ractor...Ne. Page McKenny Co.,
Hearst Bldg., S. F.
d Sept. 16, '15. Dated Sept. 8, '15.
Monthly payments of..... 75%
ual 35 days..... 25%
TOTAL COST, \$3100
\$4050. Surety, U. S. Fidelity &
Guarantee Co. Limit, 120 days from
Sept. 15. Forfeit, \$10 per day. Specifi-
cations only filed.

ROME CHURCH.

(1) E NINTH 175 E 23rd Ave be-
gging Lots 1 to 6 incl Blk "R" Mar-
lowles & Potter Sbdvn of Kennedy
act, Oakland. All work for one-
story frame church.

er.....Roman Catholic Arch-
bishop of S. F. and Rev.
Father Joseph Gallio.

itect...None.
ractor...J. M. Silva and Eugenio
Luvisone, 2569 Ford, Okd.
d Sept. 16, '15. Dated Aug. 31, '15.
ame up..... 1/4
own coated..... 1/4
ompleted and accepted..... 1/4
ual 35 days..... 1/4
TOTAL COST, \$4060
\$4060. Sureties, Luigi Luvisone
Donisio A. Rodrigues. Limit, 90
days. Forfeit, none. Plans and specifi-
cations filed.

BRICK STORE AND LODGE BLDG.

(1) SW MAIN, being Lots 2, 3, 4,
evens Tract, Centerville. All work
for one-story and two-story brick
store and lodge building.

er.....Mrs. A. Lernhart, Sonke
Hansen, F. L. Dusterberry
and John G. Mattos Jr.,
Centerville.

itect...A. F. Helde, 46 Kearny,
San Francisco.
ractor...Robert Irvine, Irvington.
d Sept. 16, '15. Dated Sept. 7, '15.
very 2 weeks..... 80%
ual 35 days..... 20%
TOTAL COST, \$10,979.67
\$5500. Surety, American Surety
Co. Limit, 100 days. Forfeit, none.
Plans and specifications filed.

RES.

(1) N FORTIETH 74 W Broadway,
Oakland. One-story 3-room stores.
er.....Henshaw & McNeill, 1443
6th Ave., Oakland.

itect...A. W. Paltiani, Merchants'
National Bank Bldg., S. F.
s work. COST, \$1800

WELLING

(1) W BOEHMER 25 N Peterson,
Oakland. One-story 4-room dwelling
er.....Joe Bernard, 3035 E-10th,
Oakland.

itect...None.
ractor...Joe Boeddeker, 1814 34th
Ave., Oakland. COST, \$1100

ALTERATIONS

(1) SE SIXTEENTH & SAN PABLO
ave., Oakland. Alterations.

Owner.....1st Savings & Trust Co.,
Premises.
Architect...None.
Contractor...S. Kulchar & Co., 5th Ave
and E-10th, Oakland.
COST, \$300

DWELLING

(1909) W 106TH AVE 100 S S. P. R.
R. Tracks, Oakland. One-story five-
room dwelling.
Owner.....Geo. G. Bray, 126 7th, Okd.
Architect...None.
Contractor...R. E. Stubbe, 1209 E-19th,
Oakland. COST, \$2500

DWELLING

(1912) NW FIFTH AVE AND NE E-
20th NW ST 1/2 X NE 50, Oakland. All
work for one-story dwelling.
Owner.....Mrs. Carrie C. Penoyar, 123
E-12th, Oakland.
Architect...L. F. Hyde, 2745 26th Ave.,
Oakland.
Contractor...P. L. Kick, 3434 Davis, Okd.
Filed Sept. 17, '15. Dated Sept. 10, '15.
Frame up and roof on..... 1/4
Brown coated..... 1/4
Completed and accepted..... 1/4
36 days after..... 1/4
TOTAL COST, \$2125
Bond, \$1000. Surety, A. Rosa. Limit,
55 days after Sept. 11. Forfeit, none.
Plans and specifications filed.

BRICK STORES

(1913) E TELEGRAPH AVE 32.17 S
25th E 106.55 S 62 W 106.12 N 62,
Oakland. All work or one-story
brick stores.
Owner.....N. Gallagher, 2440 Tele-
graph Ave., Oakland.
Architect...None.
Contractor...N. W. Prince and H. W.
Barnes, 2710 West, Oakland
Filed Sept. 17, '15. Dated Sept. 15, '15.
1st story joists placed.....\$ 900
2nd story joists placed..... 875
Roof completed..... 875
Brown coated..... 1000
Usual 35 days..... 1250
TOTAL COST, \$4900
Bond, \$1250. Surety, Commonwealth
Bonding & Casualty Insurance Co.
Limit, 60 days. Forfeit, none. Plans
and specifications filed.

Building Contracts Awarded

Berkeley.

No.	Owner	Contractor	Amt.
1856	Rutherford	Morton	450
1857	Gunderson	Owner	1500
1864	Scott	Thaxter	1000
1865	Roberts	Roberts	1000
1866	Miller	Miller	1000
1867	Morrill	King	3500
1868	Marston	Kidder	4500
1869	Wingate	Mallanen	2500
1880	Owen	Rollins	2000
1883	Dickinson	Riddell	6617
1904	Hiller	Asuna	4639
1910	Burch	Boldt	420
1911	Jensen	Texdahl	2500

ALTERATIONS

(1856) NO. 2014 ROSE, Berkeley. Al-
terations.
Owner.....R. Rutherford, Premises.
Architect...None.
Contractor...M. Morton, 1300 Alcatraz
Ave., Berkeley. COST, \$450

(1857) S ALSTON WAY 40 E Bryon,
Berkeley. One-story 6-room dwlg.
Owner.....H. Gunderson, 2140 Byron,
Berkeley.
Architect...None.
Day's work. COST, \$1500

ALTERATIONS

(1864) NO. 1929 CALIFORNIA. Ber-
keley. Alterations and repairs.
Owner.....W. R. Scott, 2718 Regent,
Berkeley.
Architect...None.
Contractor...F. W. Thaxter, 2454 Ash-
by Ave., Berkeley. COST, \$1000

DWELLING

(1865) E CURTIS 200 S Bancroft, Ber-
keley. One-story dwelling.
Owner.....C. B. Roberts, 1823 Curtis,
Berkeley.
Architect...None.
Day's work. COST, \$1000

DWELLING

(1866) S EUNICE 124 W Glen Ave.,
Berkeley. One-story 5-room dwlg.
Owner.....Henry W. Miller, 2521
Hillegass Ave., Berkeley.
Architect...None.
Day's work. COST, \$2000

ALTERATIONS

(1867) NO. 2980 ADELINE, Berkeley.
Alter two-story flats into halls.
Owner.....Enoch Morrill, 1927 Stuart,
Berkeley.
Architect...None.
Contractor...Geo. F. King, Morrill Apts.
Berkeley. COST, \$3500

DWELLING

(1868) W ARCH 175 S Vine, Berkeley.
Two-story 8-room dwelling.
Owner.....Captain W. H. Marston,
1500 Arch, Berkeley.
Architect...None.
Contractor...Kidder & McCullough, 2075
Addison, Berkeley. COST, \$4500

DWELLING

(1869) E JOSEPHINE 124 S Hopkins,
Berkeley. One-story 5-room dwlg.
Owner.....Donald P. Wingate, Sbat-
tuck & Addison, Berkeley.
Architect...None.
Contractor...Otto Mallanen, 1726 10th,
Berkeley. COST, \$2500

DWELLING

(1880) W LINWOOD 200 N E-38th,
Berkeley. One-story 6-room dwlg.
Owner.....Mary A. Owen, 2127 Kitt-
ridge, Berkeley.
Architect...None.
Contractor...E. E. Rollins, 957 Athol
Ave., Berkeley. COST, \$2000

FRAME FLATS

(1883) PTN LOT 52 BLK "C" Map Ptn
Berkeley Property, Berkeley. All
work for two-story 12-room frame
flats.
Owner.....Margaret J. Dickinson.
Architect...None.
Contractor...Riddell Bldg. Service Cor-
poration, 2247 Telegraph
Ave., Berkeley.
Filed Sept. 15, '15. Dated Sept. 14, '15.
Frame up..... 1/4

Brown coated ¼
 Completed and accepted..... ¼
 Usual 35 days..... ¼
TOTAL COST, \$6617
 Bond, none. Limit, 90 days. Forfeit,
 none. Plans and specifications filed.

FRAME DWELLINGS

(1904) N HOPKINS 192½ and 155 E
 The Alameda being ptn Lots 11, 12
 and 13 Blk "G" Northbrae Terrace,
 Berkeley. All work for two one-
 story frame dwellings.

Owner....H. F. Hiller, 2309 Bowditch,
 Berkeley.
 Architect...None.
 Contractor..Leonard Asuma & Jalmar
 Millen, 760 60th, Okd.

Filed Sept. 16, '15. Dated Aug. 26, '15.
 Frames up ¼
 Brown coated ¼
 Completed and accepted..... ¼
 Usual 35 days..... ¼
TOTAL COST, \$4689

Bond, none. Limit, 70 days. Forfeit,
 \$1. Plans and specifications filed.

GARAGE

(1910) NO. 1837 ARCH, Berkeley.
 Garage.

Owner....Albert Burch, Premises.
 Architect...None.
 Contractor..Wm. Boldt, 2610 Grove,
 Berkeley.
COST, \$1420

DWELLING

(1911) S WARD 200 E Sacramento,
 Berkeley. Two-story 7-room dwlg.
 Owner....Marie Jensen, 1445 Ward,
 Berkeley.

Architect...None.
 Contractor..C. Texdahl, 3035 Harper,
 Berkeley.
COST, \$2500

Building Contracts Awarded

Alameda.

1884 West End Bldg....Owner	1400
1885 Same .....Same	1600
1886 James .....Young	700
1887 Osgood .....Prosser	500
1888 Bick .....Delaney	400
1889 Reynier .....Moulhat	1913
1890 Parich .....Noble	1800
1891 Brown .....Brown	400
1892 Lundholm .....Owner	1975
1893 Horst .....Faust	1000
1894 Ratzwell .....Roth	400

DWELLING

(1864) NO. 511 TAYLOR AVE., Ala-
 meda. One-story 4-room dwelling.
 Owner....West End Bldg., Ass'n.,
 1600 Webster, Alameda.

Architect...None.
 Day's work. **COST, \$1400**

DWELLING

(1885) NO. 519 TAYLOR AVE., Ala-
 meda. One-story 4-room dwelling.
 Owner....West End Bldg., Ass'n.,
 1600 Webster, Alameda.

Architect...None.
 Day's work. **COST, \$1600**

ALTERATIONS

(1886) NO. 1005 NORTON, Alameda.
 Alterations.

Owner....Louis James, Premises.
 Architect...Cunningham & Politte, 1st
 National Bank Bldg., S. F.
 Contractor..E. Young, 2415 West Ave.,
 Alameda.
COST, \$700

ALTERATIONS

(1887) NO. 1212 LINCOLN AVE., Ala-
 meda. Alterations.

Owner....H. Osgood, 7th & Broad-
 way, Oakland.
 Architect...None.

Contractor..E. G. Prosser, 1716 15th
 Ave., Oakland.
COST, \$500

ALTERATIONS

(1888) NO. 2220 LINCOLN AVE., Ala-
 meda. Alterations.

Owner....C. L. Bick, Premises.
 Architect...None.

Contractor..Delaney & Randlett, 2303
 Central Ave., Alameda.
COST, \$100

DWELLING

(1889) S PACIFIC AVE 100 E Oak,
 Alameda. One-story 5-room dwelling

Owner....Andre Reynier, 2121 Ala-
 meda Ave., Alameda.

Architect...None.
 Contractor..P. Morilhat, 1233 E-18th,
 Oakland.
COST, \$1913.50

DWELLING

(1890) NO. 1509 PEARL, Alameda.
 One-story 5-room dwelling.

Owner....Edna F. Parich, 2309 San
 Jose Ave., Alameda.

Architect...None.
 Contractor..G. H. Noble, 2220 Central
 Ave., Alameda.
COST, \$1800

ALTERATIONS

(1891) NO. 1239 PEASE AVE., Ala-
 meda. Alterations.

Owner....C. A. Brown, Premises.
 Architect...None.

Day's work. **COST, \$100**

DWELLING

(1892) NO. 2525 SANTA CLARA AVE.,
 Alameda. One-story 5-room dwlg.

Owner....J. M. Lundholm, 1717 Wood
 Alameda.

Architect...None.
 Day's work. **COST, \$1975**

STORE

(1893) NO. 900 SANTA CLARA AVE.,
 Alameda. One-story store.

Owner....Wm. Horst, Premises.
 Architect...None.

Contractor..A. H. Faust, 3884 Brigh-
 ton Ave., Oakland.
COST, \$1000

ALTERATIONS

(1894) NO. 2311 EAGLE AVE., Ala-
 meda. Alterations.

Owner....C. Ratzwell, 2308 Clement
 Ave., Alameda.

Architect...None.

Contractor..C. Roth, 2117 Pacific Ave.,
 Alameda.
COST, \$100

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED AMOUNT
 Sept. 8, 1915—LOT 71, Map Crocker
 Highlands; also Lot 70, Crocker
 Highlands, except that ptn lies E

line drawn parallel to E line Lo
 and distant at r a e 5 W.,
 Piedmont Land Co, Okd. B G 1
 son to C A Anderson.....Sept. 7
 Sept. 11, 1915—NOS. 1755-57 TACC
 Ave W about 200 N Laurel L
 Bkly. Cornelia Taber to Fran
 Ernsberger.....Sept. 10
 Sept. 11, 1915—E COLLEGE AV 1
 intrn ln Derby with E line Coll
 Ave 110, Bkly. Lina Dabney to
 Wold & Co.....Sept. 10
 Sept. 11, 1915—E COLLEGE AVE
 S intrn S line Derby with E
 College Ave E 110xN 52, Bkly. I
 Dabny to C L Wold & Co.....Sept
 Sept. 13, 1915—NE 38.34 and
 170.73 Lot 14 Ardsley Heights, C
 (as recorded). C J Plunkett to
 R Oakley.....Sept. 13
 Sept. 13, 1915—N MARIN AVE 5
 Modoc, Oakland Tp. J S Kil
 to M P Brasch.....Sept. 11
 Sept. 14, 1915—N FORTIETH 90
 Broadway E 35xN 50, Okd.
 M E Streiff to Leo L Nichols.....
 Sept. 14, 1915—S DAVIS 325 W I
 alta Ave W 50xS 123, Okd. H
 Blumann to Jos Flittner.....Sept.
 Sept. 15, 1915—SE GROVE & ASB
 Ave 36x86, Bkly. Mabel H Chan
 to Frank A Ernsberger.....Sept. 13
 Sept. 15, 1915—LOT 44 BLK "F" N
 Northbrae Terrace, Bkly. A I
 Minnie Potter to Frank Button.
Sept. 14
 Sept. 16, 1915—N CHANNING W
 500 W Ellsworth W 105xN 50, B
 Maud E Kimball to E L Malsbar
Sept. 15
 Sept. 16, 1915—NO. 3730 PATTERS
 Ave, Oakland. Laura Pedersen
 Howard Nelhken.....Sept. 15
 Sept. 17, 1915—SE TAFT AVE 7
 SW Broadway SW 40 SE 70 N
 28.65 N to pt intersected by l
 drawn SE from pt begin at at
 to Taft Ave NW to pt beg. O
 E D Woodward to Anthony
 Heyer.....Aug. 25
 Sept. 17, 1915—PROPERTY CALL
 "The Hacienda" near Pleasant
 Mrs P A Hearst to Chas A Bruc
Sept. 10

LIENS FILED

ALAMEDA COUNTY.

Sept. 11, 1915—LOT 47 Map Piedm
 Manor (except S 23.19 feet), Pi
 mont. R W Kinney Co vs Walter
 Creighton\$
 Sept. 11, 1915—LOT 47, except S 23
 feet thereof Map Piedmont Mar
 Piedmont. R W Kinney Co vs
 H Creighton\$
 Sept. 11, 1915—LOT 7 Map Piedm
 Manor, Piedmont. John P Maxw
 vs Walter H Creighton and John
 Kirk\$
 Sept. 13, 1915—LOT 47 except S 23
 Map Piedmont Manor, Piedmont
 Bruce Lumber & Mill Co vs Wal
 H Creighton\$
 Sept. 14, 1915—LOT 11 BLK 2 Col
 Ave Ext, being E Colusa Ave 40
 Joseph, Bkly. C E Sinclair vs.
 Hanson\$
 Sept. 14, 1915—PTN LOT 47 Map Pi
 mont Manor, Piedmont. Oakle
 Paving Co vs Walter H Creigh
\$

RELEASE OF LIENS

ALAMEDA COUNTY.

RECORDED AMOUNT
 Sept. 14, 1915—W EL CERRITO AV
 140.15 S Magnolia Ave S 35xW 90,
 Piedmont. California Door Co to
 O M Bullock.....\$125.20
 Sept. 7, 1915—E ALICE S 430 S Dur-
 ant S Alice 50, Okd. White Bros
 to J Meyer and Security Investors
 Realty Co.....\$2,186.43
 Sept. 11, 1915—LOT 95 Map Nova
 Piedmont, Piedmont. B A Stewart
 to Alfara Cords, Inc et al.....\$330.34

SAN JOSE AND THE SANTA CLARA VALLEY

STREET PAVEMENT—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, City Engineer Maggini. San Jose. Owners, City of San Jose. Work in paving all streets about Washington Square will be started shortly. City Engineer Maggini has been instructed to prepare plans and specifications for the work, and bids will be opened by the City Council on September 27th. Further information relative to this work may be had from the City Engineer.

ROAD CONSTRUCTION AND IMPROVEMENT—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications have been adopted by the County Supervisors and bids will be received up to 11 a. m. September 27th for the repair and construction of 4.65 miles of the Stevens Creek road and Saratoga avenue in Road District No. 4 of Santa Clara County. Further information may be had from the County Surveyor at San Jose.

STREET PAVING—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer, Town Engineer, South San Francisco. Owners, South San Francisco. At the last meeting of the City Trustees bids for paving Grand avenue between Chestnut avenue and Mission road were opened. They were as follows: F. R. Ritchie & Co., Chronicle Bldg., S. F., \$3,687.50; Eaton & Smith, 407 11th street, S. F., \$4,213; Blanchard-Brown Co., 660 Market street, S. F., \$4,229. The awarding of the contract was laid over until the next meeting.

PAVING, SIDEWALKS AND CURBS—Cost not stated. Burlingame, San Mateo Co., Cal. Engineer, Town Engineer, Burlingame. Owners, Town of Burlingame. Bids will be received for a few days only for cement sidewalks, curbing and laying of concrete base for paving. Specifications obtainable from W. J. Farey, Superintendent, Burlingame Subdivision P. O., Box 5, Emston, Cal., or phone Burlingame 90.

CULVERTS—3, reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the County Supervisors the County Surveyor was instructed to prepare plans for the following work. One concrete culvert on Scott Lane; two concrete culverts on Kifer road; two concrete culverts on Coffin road; and four concrete culverts on Mt. View and Alviso road.

Further information may be had from the County Surveyor.

BRIDGE—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications were presented at the last meeting of the Supervisors by the County Surveyor for a reinforced concrete bridge on Payne avenue over San Tomas Aquinas Creek in Santa Clara County. Bids will be opened on October 4th, 11 a. m. Plans and full information may be had from the County Surveyor at San Jose.

BRIDGE—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The County Engineer has been directed to prepare plans and specifications for a reinforced concrete bridge over Campbell Creek on the Prospect road. On completion and adoption of plans bids will be called.

RESIDENCE—2 story and base. Class A construction, \$150,000. Burlingame, San Mateo Co., Cal. Architect, Willis Polk, Hobart Bldg., S. F. Owner, W. B. Bourne. Location near Crystal Springs Lake. Will contain in the neighborhood of twenty rooms, several baths, sleeping porches and numerous out buildings. Reinforced concrete and steel construction, design classic. Interior finish, pine, hardwood and white enamel. Hardwood floors, tile bath rooms. Steam heat, oil burning equipment, vacuum cleaning, elevator service. Tile and marble in bath rooms. Exterior faced with pressed brick and terra cotta. Plans for excavating and concrete work being figured.

STREET IMPROVEMENT—Cost not stated. Salinas, Monterey Co., Cal. Engineer, City Engineer, Salinas. Owners, City of Salinas. The City Council has ordered bids received for the parking and improvement of North Main street. Plans and specifications may be had from the City Engineer.

EARTH APPROACH—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Bids have been ordered received by the County Supervisors for the construction of earth approaches for the Espinosa bridge on the Salinas-Castroville road. Bids close September 24th. Further information may be had from the County Surveyor at Salinas.

RESIDENCE—1 story and base, frame, \$2,000. San Jose, Santa Clara Co., Cal. Architect, none. Owner, J. F. Ralston, 725 Miller street, San Jose. Location, Miller street. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place. Automatic water heater. Tile mantel. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SCHOOL ADDITION—1 story and base, frame, \$20,000. San Jose, Santa Clara Co., Cal. Architect, Charles S. McKenzie, Bank of San Jose Bldg., San Jose. Owners, City of San Jose. Bids will be opened on October 5th for the construction of a frame and plaster addition to the present High School Building. Plans can be secured from the architect.

Contracts Awarded.

BY-PASS CONSTRUCTION—\$10,230. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, M. E. Kilcourse, 58 West Santa Clara avenue, San Jose. Contract price, \$10,230. Note: The by-pass will be known as the Canoas By-Pass.

BRIDGE—Reinforced concrete, \$1,912. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, S. Selarrino, San Jose. Contract price, \$1,912. Bridge over Penitencia Creek at Noble avenue.

BRIDGE—Reinforced concrete, \$6,840. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, M. E. Kilcourse, 58 West Santa Clara avenue, San Jose. Contract price, \$6,840. Bridge over Guadalupe Creek.

BUILDING CONTRACTS

SANTA CLARA COUNTY.

ADDITION

No. 87 N-SAN PEDRO ST., San Jose.

One-story brick addition.

Owner.....J. Nicora, 1362 Vine St.,

San Jose.

Architect.....None.

Contractor.....Gaelano Grassia, S. F.

COST, \$3500

COTTAGE

No. 725 MILLER ST., San Jose. Five-room cottage.

Owner.....J. F. Ralston, Premises.

Architect.....None.

Day's work.....

COST, \$1800

ALTERATIONS

No. 72 GEORGE ST., San Jose. Alter.

Owner.....H. S. Kelly, Premises.

Architect.....None.

Day's work.....

COST, \$1000

ALTERATIONS

NE FIRST AND SAN SALVADOR STS.,

San Jose. Repairs and alterations.

Owner.....F. Fleming.

Architect.....C. S. McKenzie, San Jose

Bank Bldg., San Jose.

Contractor.....J. E. Perkins, E-Santa

Clara Cor. 34th, San Jose.

COST, \$500

ADDITION

No. 212 CLAYTON ST., San Jose. Ad-

dition.

Owner.....Gus Artnouse, Premises.

Architect.....None.

Contractor.....J. E. McCombs, 214 Hob-

son St., San Jose.

COST, \$300

APARTMENT HOUSE, ETC.

NW WEBSTER & UNIVERSITY AVE.,
 Palo Alto. All work for apartment
 house and garage.

Owner.....C. E. Cumherson, Palo Alto.

Architect.....Owner.

Contractor.....G. W. Boston & Son,

Filed Sept. 8, '15. Dated Sept. 7, '15.

Hearst Bldg., S. F.

Floor joists in place.....\$1323

Frame up.....1323

Rough plastered.....1323

Standing finish up.....1323

When completed.....1323

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E. R. Hoerchner

Attorney-at-Law

Phone Garfield 2856

Phelan Bldg. San Francisco

Usual 35 days..... 1323
TOTAL COST, \$8824
Bond, \$4112. Surety, New Amsterdam
none. Plans and specifications filed.

Casualty Co. Limit, 90 days. Forfeit,
REPAIRS, ETC.
SW LINCOLN AND BENTON, Santa
Clara. All work for house moving
and repairs.

Owner.....Francis J. Sullivan, 544
Market, San Francisco.
Architect...J. J. Foley, 46 Kearny,
San Francisco.
Contractor...Kelly Bros, 1033 McLellan
Ave., San Jose.

Filed Aug. 24, '15. Dated Aug. 18, '15.
Work completed\$640
Usual 35 days..... 214

TOTAL COST, \$854

Bond, none. Limit, 35 days. Forfeit,
none. Plans and specifications filed.

FRAME DWELLING

McLAUGHLIN AVE., Lot 11 Pueblo
Lands, San Jose. All work for frame
dwelling.

Owner.....Kate C. Post, San Jose.
Architect...O. M. Voorman, 58 S-1st
St., San Jose.
Contractor...H. L. Waltz, San Jose.

Frame up\$775
1st coat plaster on..... 775
When completed 775
Usual 35 days..... 775

TOTAL COST, \$3100

Bond, \$1550. Surety, Hartford Accident
& Indemnity Co. Limit, 90 days. For-
feit, none. Plans and specifications
filed.

FRAME DWELLING

LOT 18 BLK 16, Hanchett Park, San
Jose. All work for frame dwelling.

Owner.....M. F. Cabral, San Jose.
Architect...C. S. McKenzie, Bank of
San Jose Bldg., San Jose.
Contractor...A. A. Church, San Jose.

Filed Sept. 3, '15. Dated Aug. 25, '15.
Frame up\$737.50
1st plaster on..... 737.50
When completed 737.50
Usual 35 days..... 737.50

TOTAL COST, \$2950.00

Bond, \$1550. Sureties, A. Williams and
Jas. Pierce. Limit, 80 days. Forfeit,
none. Plans and specifications filed.

COMPLETION NOTICES

SANTA CLARA COUNTY.

RECORDED

Aug. 30, 1915—PTN LOT 102, Morgan
Hill Ranch Map No. 3. G W Lane
to F E Allen.....Aug. 21, 1915
Sept. 3, 1915—NO. 1445 TASSO ST.,
Palo Alto. B D Foster to G W
Mosher.....Aug. 26, 1915
Sept. 4, 1915—LOTS 2, 3, 4, 5 BLK
"A" Snow & Pettit Addn., Town of
Mountain View. Wm Dewar to Wm
Dewar.....Aug. 31, 1915
Sept. 7, 1915—S SIDE STEVENS
Creek Road and W by lands of
Santa Clara College, N by Stevens
Creek, E by McCelland Road
(Selinger Ranch). J V De Laveaga
to F A Wilkie.....Sept. 3, 1915

ACCEPTED

MARIN, CONTRA COSTA AND SONOMA COUNTIES

SEWER CONSTRUCTION—Cost not
stated. San Anselmo, Marin Co., Cal.
Engineer, Town Engineer, San Anselmo.
Owners, Town of San Anselmo.
At the last meeting of the Town Trustees,
Trustee Schrader offered a resolution
adopting the plans and specifications
for the construction of a storm
sewer on Willow avenue, and on its
adoption of Resolution of Intention No.
13, ordering the work done, was passed.
Bids on the work will soon be taken.

STREET IMPROVEMENT—Cost not
stated. San Anselmo, Marin Co., Cal.
Engineer, Town Engineer, San Anselmo.
Owners, Town of San Anselmo.
At the last meeting of the Town Trustees,
Trustee Crisp introduced a resolution
establishing the elevation of the
curb grade of Medway road and Forest
avenue, which was read and adopted
by the board. Mr. Crisp also offered
a resolution adopting the plans and
specifications for the improvement of
Forest avenue, and after its adoption
offered Resolution of Intention No. 14
to order the work done, which was also
adopted.

FURNISHING CRUSHED ROCK—
Cost not stated. San Anselmo, Marin
Co., Cal. Engineer, Town Engineer
San Anselmo. Owners, Town of San
Anselmo. The Town Engineer has been
instructed by the town officials to se-
cure bids for furnishing 25 or 30 cars
of crushed rock to be used on the roads
this winter.

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approved. Bids on this work will soon be called for.

CULVERT—Reinforced concrete, \$900. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor, Martinez, Owners, Contra Costa County. All bids received by the Trustees for the concrete culverts on the Bay Point-Pittsburg road were rejected, as all were considered too high. The bids received were: Uppshrom, Dalin & Barnwell, \$1,255; Macrae & Layaz, \$1,114. The culvert has a span of about 12 feet, and it is believed can be built for under \$900. New bids will probably be called.

VIADUCT—Steel and concrete. Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor Ralph R. Arnold, Martinez, Owners, Contra Costa County. Plans and specifications for the overhead crossing of the Southern Pacific tracks at Peyton on the line of the Martinez-Bay Point road have been completed by County Surveyor Ralph R. Arnold. A call for bids for building the street crossing is to be issued soon. The bridge is to be built jointly by the railroad and the county, each paying half of the cost in conformance with the orders of the Railroad Commission issued some time ago.

FURNISHING AND PLACING PILES—Cost as follows. Petaluma, Sonoma Co., Cal. Engineer, City Engineer, Petaluma, Owners, City of Petaluma. The City Council has ordered plans and specifications prepared for the placing of piles on the east bank of the Petaluma River. The cost is estimated at approximately \$7 a front foot for 240 feet. Further information relative to the work may be had from the City Engineer.

BRIDGE CONSTRUCTION—\$30,500. Dixon, Solano Co., Cal. Engineer, County Surveyors, Fairfield and Woodland, Owners, Solano and Yolo Counties, Contractor, Clinton Fireproofing Co., Monadnock Bldg., S. F. Contract price, \$30,500. At a joint session of the Supervisors of Yolo and Solano Counties it was decided to proceed with the construction of a bridge across the creek on the line where the west side of the State Highway passes from Yolo into Solano County. Some months ago the two Boards of Supervisors entered into a joint contract with the Clinton Fireproofing Co. for the construction of the bridge, but the Yolo Board rescinded its part of the contract when the State Highway Commission failed to relieve Yolo County of the interest on the bonds of the Yolo Causeway

between Davis and Sacramento. Recently the Yolo Board decided to build. The structure will cost \$30,500 and will unite the two units of the State Highway system in Yolo and Solano Counties.

STREET LIGHTING SYSTEM—Cost not stated. Colusa, Colusa Co., Cal. Engineer, County Surveyor, Colusa, Owners, Colusa County. No bids were received by the Supervisors for the installation, etc., of a lighting system for the Artuckle Lighting District, and the Clerk was instructed to advertise again for bids to be opened on October 5th, 4 p. m. Further information may be had from the Clerk of the Supervisors at Colusa.

STREET IMPROVEMENTS—Cost as follows. Sonoma, Sonoma Co., Cal. Engineer, City Engineer, Sonoma, Owners, City of Sonoma. At the last meeting of the City Trustees the following appropriations were set aside for improvements to be made in Sonoma: \$1,200 for a concrete bridge on France street, \$1,500 for the Plaza improvements, and \$1,500 for street work.

STREET IMPROVEMENT—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond, Owners, City of Richmond. Bids will be opened on September 27th for work to be done under the following resolution. That 31st street, from Cutting Boulevard to the City of Pullman Tract, be graded and paved with Richmond Standard Macadam, consisting of rock and asphaltum having a penetration of from 125 degrees to 110 degrees, District of Columbia Standard, and guttered and curbed and side-walked with cement concrete, and that an open drain of cement concrete be constructed across the existing alley. Also that Anita avenue, from the south line of the City of Pullman Tract to the north line of Potrero avenue, be graded, paved with Richmond Standard Macadam.

SEWER CONSTRUCTION—Cost not stated. San Rafael, Marin Co., Cal. Engineer, County Surveyor, San Rafael, Owners, Marin County. Bids will be opened on September 23rd for the construction of a wooden box storm sewer in Pastori road from from the San Rafael and Olama county road to the Arroyo San Anselmo; also for the construction of an iron stone pipe storm sewer in lieu of said wooden box.

FILTERING PLANT FOR BATHS—Cost not stated. San Rafael, Marin Co., Cal. Engineer, County Surveyor, San Rafael, Owners, City of San Rafael. At the last meeting of the City Coun-

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STREET IMPROVEMENTS—Cost not stated. Pittsburg, Contra Costa Co., Cal. Engineer, Town Engineer, Pittsburg, Owners, Town of Pittsburg. Plans and specifications for the construction of a sewer in East Third street from the city limits to the east end of Los Medanos street have been

SEWER CONSTRUCTION—Cost not stated. Pittsburg, Contra Costa Co., Cal. Engineer, Town Engineer, Pittsburg, Owners, Town of Pittsburg. Plans and specifications for the construction of a sewer in East Third street from the city limits to the east end of Los Medanos street have been

cil the matter of installing a new filtering plant for the baths was considered. Bids have been ordered advertised for the work, which will cost in the neighborhood of \$5,000.

AUXILIARY PUMPING PLANT—\$10,000. Pittsburg, Contra Costa Co., Cal. Engineer's name not given. Owners, Contra Costa Gas Co., Pittsburg. The Contra Costa Gas Company is installing an auxiliary pumping system in Pittsburg. The new pumps will have a capacity of 15,000 cubic feet of gas and will supply the towns of Pittsburg, Antioch, Concord and Martinez.

School—1 story and base, frame, \$30,000. Suisun, Solano Co., Cal. Architects, W. H. Crim, Jr., and Edward J. Symmes, Pacific Bldg., S. F. Owners, Suisun School District. Working drawings are being completed and bids will be called for within a week or ten days for this building. There will be six class rooms. Exterior covered with cement plaster.

OFFICES—2 story and base, reinforced concrete, \$15,000. Pittsburg, Contra Costa Co., Cal. Architect, none. Owners, Grabstein Bros., Pittsburg. Location, Railroad avenue and East 3rd street. Ground floor will contain stores and upper floor has been arranged for offices. Interior finish pine. Central heating system, patent store fronts and oil burning equipment. Exterior faced with cement plaster. Plans complete and figures, being taken by the owners.

Contracts Awarded.

OFFICE—1 story and base, reinforced concrete, \$3,421. Martinez, Contra Costa Co., Cal. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owners, Pacific Gas and Electric Co. Contractors, Ludden & Lambiey, Martinez. Contract price, \$3,421.

STREET IMPROVEMENT—Cost not stated. San Anselmo, Marin Co., Cal. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Contractor, Sunset Construction Co., 62 Post street, S. F. Contract price not stated. The contract covers the improvement of Pine and Cedar streets and San Anselmo avenue.

BRIDGE REPAIRS—Cost not stated. San Anselmo, Marin Co., Cal. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Contractor, E. Harrington, San Anselmo. Contract price not stated.

BUILDING CONTRACTS.

MARIN COUNTY.

HOTEL

ARBORDALE HOTEL, Sausalito. Gas fitting, plumbing, sewerage and fixtures for two-story frame modern hotel and store building.

Owner.....Henry Krause.
Architect...O'Brien Bros., Clunie Bldg.
San Francisco.

Contractor...W. C. Drechsler.

Filed Sept. 11, '15. Dated Sept. 7, '15.
Building roughed in.....\$519.75
Sewer connected, 50% fixtures
in place 519.75
Finished and accepted..... 519.75
Usual 35 days..... 519.75

TOTAL COST, \$2079.00

Bond, none. Limit, 40 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

LOT 15 ROSS AVENUE, San Anselmo.

All work for one-story 6-room, bath and porch frame dwelling.

Owner.....Gabriel Franchini.

Architect...None.

Contractor...Perkins & Sherwood.

Filed Sept. 13, '15. Dated Sept. 10, '15.

As work progresses..... 80%

TOTAL COST, \$2700

Bond, none. Limit, 44 days. Forfeit, none. Plans and specifications filed.

RANCHO SAUALITO, known as "Gloili Ranch." All work for dairy barn, milk house and remodeling horse barn. Owner.....A. Borel & Company.

Architect...None.

Contractor...Frank J. Silva.

Filed Sept. 15, '15. Dated Sept. 14, '15.

Grading completed\$ 300

Concrete completed 500

Frame up 500

Roofs on 500

Dairy barn completed..... 300

Milk house completed..... 300

All work completed & accepted. 792

Usual 35 days..... 1064

TOTAL COST, \$4256

Bond, \$2150. Sureties, John Bem and Fred Perry. Limit, forfeit, none. Plans and specifications filed.

GARAGE

LOT 11, FERN HILL PARK, Ross. All

work for one-story garage.

Owner.....Caroline D. Moore.

Architect...W. Garden Mitchell and Chas Ed. Hodes, Bankers' Invst. Bldg., S. F.

Contractor...Wallace & Lanpher.

Filed Sept. 10, '15. Dated Sept. 7, '15.

Frame up, walls & roof boarded.....\$259

Completed and accepted..... 259

Usual 35 days..... 175

TOTAL COST, \$693

Bond, none. Limit, 30 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

CONTRA COSTA COUNTY.

RECORDED

Sept. 11, 1915—NE COR KEARNY, (Fairmont School Site), Richmond. Richmond School District to W H Ecker.....Aug. 28, 1915

Sept. 11, 1915—LOTS 14 TO 22 incl Blk 2 of Fifth Add'n to Richmond and Lots 20 to 30 incl Blk 36 of Nicholl McDonald Ave, Richmond. Richmond School District to M C Overaa.....Aug. 28, 1915

Sept. 13, 1915—PTN LOTS 7, 8 AND 9 Blk 63 as laid out in Official Map of City of Pittsburg. C A Hooper & Co to D H MacQuiddy.....Sept. 11, 1915

Sept. 8, 1915—LOTS 7, 8, AND 9 BLK 63 as laid out in Official Map of City of Pittsburg. C A Hooper & Co to Nickell & Old.....Sept. 7, 1915

ACCEPTED

RELEASE OF LIENS

MARIN COUNTY.

RECORDED

Sept. 10, 1915—LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 Sausalito Pearl Tract,

AMOUNT

Map Sausalito Land & Ferry Co.
Louis Lambretti to A L Pearl and
Annie L Pearl.....\$525

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

STREET PAVING—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, City Engineer, Modesto. Owners, City of Modesto. The City Council has directed City Clerk O. W. Thompson to advertise for bids for the paving of street from Seventh to Ninth. Further information may be had from the City Clerk or Engineer at Modesto.

ROAD PAVEMENT—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids will be opened on October 1th by the Board of Supervisors for grading and construction of concrete pavement on Division 5, Section 1, Bakersfield-McKittrick road, being that portion lying between the westerly end of the Kern River bridge and Rosedale; length approximately 6 miles. Plans can be secured from the County Surveyor's office.

ROAD CONSTRUCTION—\$18,850. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. The Tulare County Supervisors have taken all bids received for the construction of the Three Rivers road to connect the valley with a trunk line to the hills, under advisement until September 15th, at which time the contract will be awarded. The bid of J. E. Hines to build the road for the sum of \$18,850 was the lowest received. This bid was so much below the estimate cost that the Supervisors desired to look into the matter thoroughly before entering into the contract.

ROAD CONSTRUCTION—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids will be opened on October 7th by the Board of Supervisors for grading and construction of Concrete pavement on Division 10, Section 5, being that portion known as the Weed Patch Loop, beginning at the State Highway at the northwest corner of Section 17, Tp. 31 S., R. 28 E., and extending in an easterly direction 5 miles to the northeast corner of Sec. 13, T. 31 S., R. 28 E. Plans can be secured from the County Surveyor.

PILE BRIDGES, CULVERTS AND HEAD WALLS—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids will be opened by the Board of Supervisors on October 7th for construction of pile bridges, culverts and reinforced concrete head walls on Division 5, Section 4, Bakersfield-McKittrick road, being that portion lying between the end of Section 3 and LoKern; length approximately 8 miles.

BRIDGE—Reinforced concrete. Cost not stated. Merced, Merced Co., Cal. Engineer, County Surveyor, Merced. Owners, Merced County. The County Surveyor has been directed to prepare plans and specifications for the construction of a concrete bridge to be erected over the Santa Rita Slough on the road from Dos Palos to Los Banos. Bids will soon be called.

ENCE — 2 story and base, cost not stated. Fresno, Fresno. Architects. Bowen & Kenzie Bldg., Fresno. Own- Chapazian. Location N street. Main seven rooms, bath, sleep- and garage. Interior finish wood and white enamel. Floors. Open fire places and brick mantels. Bath room fin- tile Automatic water heater. covered with cement plaster. Bath. Plans being prepared. ADDITION—Frame. Cost \$1,000. Modesto, Stanislaus Co. Architect, none. Owners, City of Bids will be opened on Sep- 15th or a one-story addition to school building. Plans can be had from the Secretary of the Education.

—1 story and base, brick, cost not stated. Dinuba, Tulare Co. Architects. Glass & Buttner, Re- Bldg., Fresno. Owners, Town- The building will contain 10 rooms. Interior finish pine. Floors. Modern plumbing central heating system. Exterior pressed brick. Plans being

Contracts Awarded
SHING ASPHALTUM—Cost as follows. Hanford, Kings Co., Cal. En- County Surveyor. Owners, County. Contractors, Standard Contract price, 4,800 tons at barrel f. o. b. cars at Seguro. RES—3, reinforced concrete, \$14,325. Modesto, Stanislaus Co. Engineer, County Surveyor. Owners, Stanislaus County. Contractors, Barrett & Hilt, Sharon F. Contract price, \$14,325.

FRESNO COUNTY.

E 1, 15, 16 BLK 66, Fresno. All for garage. Thompson Bros., 1511 11 St., Fresno. R. F. Flechlin. R. F. Flechlin, 616 Rowell Bldg., Fresno.

COST, \$10,000

COMPLETION NOTICES

FRESNO COUNTY.

DEDED ACCEPTED
1915—LOTS 9 AND 10 BLK
resmont Add'n, Fresno. D A
y to whom it may concern...
Aug. 15, 1915

LIENS FILED

FRESNO COUNTY.

DEDED AMOUNT
1, 1915—LOT 33 BLK 12, Alta
a Tract, Fresno. Valley Lum-
Co, 441; C J Betteridge, \$223;
Foln & Son, \$9; Paul Bourzac,
E A Sands, \$23 vs Walter I
ght
14, 1915—LOT 33 BLK 13, Alta
a Tract, Fresno. B A Good-
ough and C B Phillips, \$42; Wm
n, \$65 vs W I Enright and C
Smith
11, 1915—LOT 33 BLK 21, Alta
n Tract, Fresno. Fassett Lum-
Co, \$730, Madarys Planing Mill,

\$376 vs C V Smith, W I Enright
and Mut B and L A of Fresno.
Humphreys-Schultz Co vs Same
and G E Lyons Same.....\$54
Sept. 11, 1915—LOTS 51 AND 52 BLK
15 North Park Terrace, Fresno.
Fresno Lumber Co vs Squire Cooper
and G N Lindquist et al.....\$441
**SACRAMENTO, STOCKTON AND
NORTHERN CALIFORNIA.**

WATER SYSTEM—Cost not stated. Durham, Butte Co., Cal. Engineer's name not given. Owner, Frank Barnard, Durham. Application has been made to the Butte County Supervisors by Frank Barnard, of Butte County, for a franchise to lay water pipes and conduits in certain streets and roads in Butte County, as follows: In all of the streets, alleys and public highways in the Town of Durham, and also all other roads, streets, alleys and public highways situate within the boundaries of Section 30, Township 21. Also to replace, repair, enlarge and extend the same along such roads, streets, alleys and other public highways. All for the purpose of furnishing, selling and supplying water to the inhabitants of the Town of Durham and vicinity.

BRIDGES—Reinforced concrete. Cost not stated. Chico, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. Two bridges have been ordered built under the "Emergency Act" on the Biggs-Prince-ton road. One bridge is to be built on Lone Pine avenue over Chico Creek, near Chico, and will cost \$3,000. The other bridge is to be built over Camp-bell's Creek on the Shasta road, near the Tehama County line north of Chico.

BRIDGES — 4, reinforced concrete. Cost not stated. Willows, Glenn Co., Cal. Engineer, County Surveyor Bay-ard Knock, Willows. Owners, Glenn County. The County Supervisors have instructed County Surveyor Bayard Knock to prepare plans and specifications for four bridges, one at New-ville, 190 feet long, of concrete; one at Butte City, some 40 feet in length, also of concrete, and two small concrete structures on the State Highway.

STREET PAVING, ETC.—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Bids will be opened on September 24th or work provided under the following resolution: That Scott's avenue from Lincoln street to Monroe; Van Buren street from Taylor avenue to Hazelton avenue; Monroe street from Scott's avenue to Hazelton, etc., be graded, curbed and guttered, having the curb portion thereof 13 inches deep and 6 inches wide and the gutter portion thereof 24 inches wide and 6 inches thick after rolling, bound with liquid asphaltum applied hot, using 1 1/4 gallons to the square yard of pavement.

STREET IMPROVEMENT—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Bids will be opened on September 24th for work provided under the following resolution: That Della street from Fair Oaks avenue to the Jensen addition, and Lafayette street from East street to Locust street, be graded, curbed and guttered with combined concrete curb

and gutter, having the curb portion thereof 12 inches deep and 6 inches wide and the gutter portion thereof 24 inches wide and 6 inches thick; the roadways paved with macadam 6 inches thick after rolling, bound with liquid asphaltum applied hot, using one and three-quarters gallons to the square yard of pavement. That concrete sidewalks 5 feet wide and 4 inches thick be constructed on both sides of Della and Lafayette streets, as above described, except where already laid.

SEWER CONSTRUCTION—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. A resolution of intention providing for laying sanitary sewers in South Stockton from South to Ninth street, inclusive, and from McKinley avenue to the Southern Pacific tracks was passed at the last meeting of the City Council. Bids will soon be called for.

RAILROAD CONSTRUCTION — Cost not stated. Stockton, San Joaquin Co., Cal. Engineer's name not given. Owners, Tidewater Southern Railroad Co., Stockton. Application has been filed with the City Council by the Tidewater Southern Railroad Company for a franchise along Sutter street for a single track along the center line of that thoroughfare from Hazelton avenue to Main street. The construction of freight sheds is also included in the proposed work. Byron A. Bearce is president of the company.

Contracts Awarded.

BRIDGES—Reinforced concrete. Cost as follows. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. Contractors, Chico Construction Co., Chico. Eight bridges between Nelson and Butte Creek. Contract price \$12,927. Chico Construction Co., Chico, Durham Slough bridge. Contract price, \$1,190, and O. A. Peter, Oroville, North Chan-nel of Butte Creek bridge. Contract price, \$2,713.

BRIDGE—\$2,323. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractors, Mercer-Praser Co., Eureka. Contract price, \$2,323.

STREET IMPROVEMENT—\$1,509.88. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractor, E. Bishop, Stockton. Contract price, \$1,509.88.

STREET IMPROVEMENT—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, Mc-Gillivray Construction Co., 1007 7th street, Sacramento. Contract includes improvement of Front street from Q to S and from N to Q street. Contract price not stated.

LOS ANGELES AND SOUTHERN CALIFORNIA.

BRIDGE—Reinforced concrete and steel, \$15,000. Ventura, Ventura Co., Cal. Engineer, County Surveyor Petit, Ventura. Owners, Ventura County. The County Supervisors have accepted the plans and specifications prepared by County Surveyor Petit for the construction of the La Crosse bridge. The

plans call for a structure with a 150-foot span, 19 feet above the creek, and four openings on the north side, each 24 feet. Bids will be called for this week.

STREET IMPROVEMENT—Cost not stated. Riverside, Riverside Co., Cal. Engineer, City Engineer, Riverside. Owners, City of Riverside. The City Engineer has been directed to prepare plans and specifications for the improvement of Jurupa avenue, from New Magnolia to Brockton. Bids will be called on the approval of the plans.

RESIDENCE—2 story and base, hollow tile. Cost not stated. Los Angeles, Cal. Architect, E. B. Rust, Title Insurance Bldg., L. A. Owner, Frank A. Keith, Location, Kingsley Drive and 11th street. Will contain twelve rooms, three baths and sleeping porch. Separate garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Bath rooms finished in tile. Central heating system, open fire places and tile mantels. Hot water circulating system. Vacuum cleaning. Exterior covered with cement plaster. Plans being prepared.

HOSPITAL COTTAGES—\$34,999. Patton, San Bernardino Co., Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Contractors, W. E. Kier Construction Co., San Diego. Contract price, \$34,999. A complete list of the bids will be found under the heading of Los Angeles and Southern California.

LIBRARY—1 story and base, brick and concrete, \$35,000. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, City of Los Angeles. Location, First and Soto streets. Revised plans have been completed and new figures are being taken for the building. Bids will close on September 24th.

Bids For Cottages At Patton Hospital.

W. E. Kier Construction Co. Present
Low Bid For Cottages N and O at
Southern State Hospital.

(By Special Wire.)

SACRAMENTO, CAL., Sept. 14, 1915.—Fifteen sets of figures were opened by the State Department of Engineering today for the construction of Cottages N and O at the Southern State Hospital at Patton, San Bernardino County. W. E. Kier Constr. Co., San Diego, presented the low bid at \$34,999 and will probably be awarded the contract. Following is a list of the bids received:

Cottages N and O at Patton.

W. E. Kier Constr. Co.	\$34,999
Robert Jordan	38,190
The Kling Co.	38,472
John Harnish Co.	38,700
James P. Dawson	38,890
L. G. Bergren & Son	39,172
F. O. Engstrom Co.	39,979
John Simpson Co.	40,500
E. A. Daniels	42,590
Cresler Mfg. Co.	42,854
Fred Peter	44,200
Jacobs Constr. Co.	44,773
Daubenspeck & Dryden	47,950
Wingett Constr. Co.	48,265
Willard-Prent Co.	49,432

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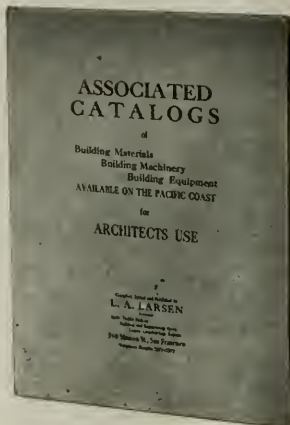


Here is where the Architect usually files the circulars, catalogues, announcements, etc., that come to his office. He can't take care of them. There are too many of them.

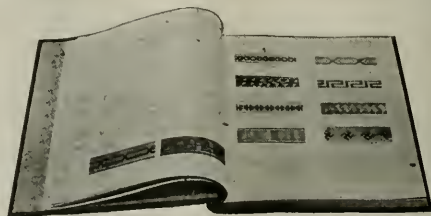


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San Francisco Cal., September 29, 1915

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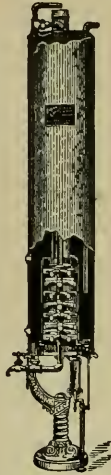
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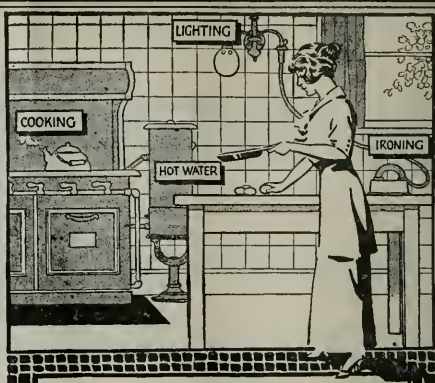
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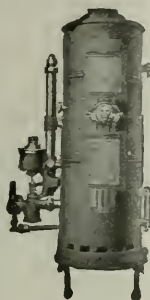
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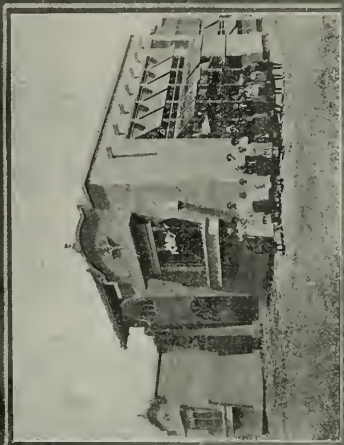
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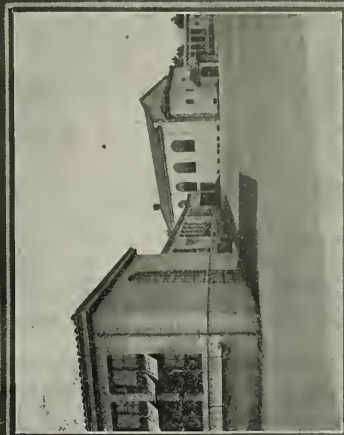
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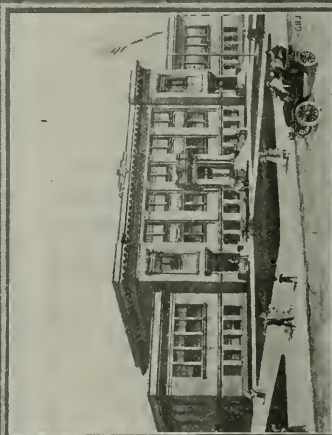
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Fifteenth Year, No 39

In seeking to provide a market for electricity from the municipal power plants and to simultaneously provide a market for the surplus water supply from the aqueduct, the city of Los Angeles is encountering a problem that, in the opinion of the advocates of both propositions, will bring a series of legal complications and delay the accomplishment of one or both of these propositions.

The most serious question, according to the men who are living freely of their time and energy to the movement or annexing desirable contiguous territory is, "Shall the plan for condemning the Southern California Edison Company system for a municipal distributing system be permitted to stop the annexation program?"

The other side, presented by the advocates of a municipal power plant which shall sell direct to the consumer, is, "Shall the annexation program be permitted to spoil our plans for condemning and acquiring immediately the Southern California Edison Company's system."

Litigation whereby the city has started to have the Edison plant condemned at an appraisal to be made by the State Railroad Commission, has already been complicated by the annexation of the San Fernando, the Palms, and Bairdstown districts in the last few months. In an effort to keep pace with this annexation the Council has, on recommendation of the Public Service Commission, passed a resolution amending its appeal to the Railroad Commission by including that part of the Southern California Edison Company's lines within the limits of the newly-annexed territory. This action upsets the work already done by the Railroad Commission engineers in placing a valuation on the Southern California Edison Company's plant. Instead of simply requiring a new start and leaving the city open for completing the condemnation proceedings, the worst is yet to come." For instance, property owners in the immense district extending from The Palms on to the ocean, through Sawtelle and to the north of Santa Monica, have appealed to the annexation Commission for assistance in their plan to join the city and citizens of Eagle Rock are also considering consolidation, with sentiment in that district favoring the move.

If the city is to continue its most excellent annexation program, we must at least postpone our attempt to condemn the Southern California Edison Company property. The question of providing a market for the aqueduct water through annexation is the most important matter before the city right now in connection with our water and power system. The production and marketing of electricity is, though also important, incidental to the operation of the water system. If, as seems apparent now, the city must choose between the annexation program and the condemnation proceedings for a power distributing system, it seems that there is only one choice and that is to get a market for the water first.

Engineers who have gone over the Southern California Edison system have pointed out that the value of the property is not all tangible and any lines that the city seeks to acquire must be considered as a part of an immense and well-organized system. Thus the problem of valuation is changed throughout when more territory is included in the proposed part of the system to be condemned.

Change in routing, operation of trams and terminal facilities for the Pacific Electric system which are designed to relieve congestion in Main and Hill streets were dis-

cussed recently at a meeting of the Public Utilities Board with Paul Shoup, president of the Pacific Electric. Mr. Shoup presented plans for remodeling and rearranging the Hill street station at a cost of approximately \$20,000, and said the Pacific Electric is ready to go ahead with this work at once. In general, these plans were approved by the Public Utilities Board, and details will be worked out in the near future.

Regarding changes in main street there was no complete agreement between the Public Utilities Board and Mr. Shoup.

Mr. Shoup presented to the board complete schedules showing the operation of trains in Main and Hill streets showed that there are 967 trains a day on the sixteen lines operating in Main street. Of these there are 770 single cars, 172 trains of two cars each and 25 trains of three cars each. The total number of cars is 1,187 a day, and of these 262 pass by the Sixth street station and 927 pass in and out of the station.

The schedules in Hill street show that a total of 759 trains a day are operated on ten Pacific Electric lines. Of these, 667 are single cars, fifty are two-car trains, while there are three trains of four cars each, making a total of 896 cars a day. Of these, 799 pass in and out of the Hill street station and ninety-seven pass by.

At a time when "conservation" was rampant much land was withdrawn from entry and placed in the "so called" forest reserves, the only excuse for this being that "nobody" knew what the land was good for.

Some of this land is now being thrown open and the land office is already doing a "land office" business in inquiries.

Much valuable land in the Santa Barbara national forest will be contested for when 85,000 acres will be thrown open to entry. The land was withdrawn from entry in 1906 and restored this year. It was opened for settlement August 11, and for filing August 19.

The land is mountainous, near Saugus and Castaic. On one piece there already have been twenty-seven settlers. Water was struck on this land within seven feet of the surface. This prize, said to be worth \$20,000, will go to the man who can show the first claim, upon payment by him of \$22 filing fee.

By a proclamation of President Wilson, 750,000 acres of the Cleveland National forest reserve will be thrown open to entry early in November, according to information received by Recorder Mitchell of the Federal land office.

Most of the reserve lies in San Diego County and a portion in Riverside County. Because of prior patents, however, it is estimated by the local Federal officials that less than 230,000 acres will actually be opened to new settlers.

A great portion of the land, according to Receiver Mitchell, is rock covered and unfit for farming. Since rumors of the opening have been in circulation the local land office has been besieged with inquiries. The information is not in the hands of the local office, but when it arrives notice will be given to the public.

That the land is somewhat mountainous in character does not mean that it is unfit for use. The building of good roads of easy grade into the mountain districts of California has just started and will soon prove a paying investment, as our mountain riches have barely been scratched.

LESSONS FROM THE FAIR.

Collected by George Nelson, C. E.

WHITE LEAD MANUFACTURE.

The exhibit of W. P. Fuller & Co., showing the manufacture of White Lead, is very instructive and should be studied by our readers, as it is typical of one of the coming big industries of this State.

White lead is first mentioned in history by Theophrastus about 300 B. C., and again by the Roman historian, Pliny, 79 A. D., in his description of Roman arts and manufactures. In the fifteenth century the Dutch discovered that when pig lead, in the presence of vinegar, was subjected to the action of moisture and carbon dioxide from fermenting tan bark or manure, a basic lead carbonate was formed, the White Lead of commerce.

Since then no change has occurred in the basic principles underlying the corrosion of White Lead, which is still manufactured by the old Dutch process. Despite the fact that many quick processes to shorten the time of corrosion have been patented, none is able to produce the same dense, opaque pigment that is obtained by the Dutch or stack method.

White Lead has stood out preeminently above all other pigments and is the only white pigment that has been used successfully by itself. The reasons for this are many: White Lead wears longer, works easier, dries and covers better, and leaves the best surface for repainting. When combined with colored pigments, it retains these same superior qualities and, for this reason, is the basis or foundation of the paint industry.

The ultimate test of a paint pigment is durability, which reaches its maximum in White Lead. Moisture, that forerunner of decay, is the most destructive agent of steel and wood. White Lead not only resists but also repels moisture, and to this fact is attributed its remarkable preserving qualities.

Because of the importance of White Lead as a paint pigment and by reason of the many interesting processes involved in its manufacture, we give below a description of its manufacture as it is practiced at the Pioneer White Lead Works at South San Francisco.

To insure perfect corrosion and a pure white product, the pig lead used in the manufacture is doubly refined and all impurities, especially bismuth and silver, removed. This pure softened lead is known as corrodor's lead and commands a higher price than ordinary pig lead.

The pigs of lead, weighing 100 pounds each, are piled in the vicinity of the lead-melting kettle, a large iron pot heated by fuel oil, and, one by one, are fed into this kettle where they are melted and kept in an even temperature of 750 degrees F.; this temperature is accurately registered by a self-recording electric pyrometer.

From the kettle the molten lead flows on to a revolving endless double belt of iron molds, where it is cast into perforated discs, known as buckles, about eight inches in diameter and one-quarter inch thick. The term "buckle" is derived from the fanciful resemblance of these discs to the metallic buckles worn upon shoes in earlier times. As they travel the full top length of this endless belt, the buckles solidify and are then discharged, at the rate of 100 per minute, into a belt conveyor, which, in turn, drops them into large piles.

Great care must be taken to prepare the buckles so that they will corrode properly. Rolling would harden the lead and destroy the crystalline structure, and for this reason it is necessary to cast the discs. The temperature at which the lead is run into the molds, the length and speed of the mold chain, all are carefully and uniformly regulated. From the huge piles the buckles are loaded into wheelbarrows, weighed, and removed to the corroding stacks to be converted into White Lead.

In the yard surrounding the buckle machine and corroding stacks are great steaming piles of spent tan bark. New tan bark from the tanneries is mixed with used bark from

the stacks, then properly wetted, worked over and over, and allowed to age. When fermentation has commenced, it is ready for removal to the corroding stacks. The same care must be taken in the tempering of the tan bark as in the casting of the lead buckles and for almost similar reasons.

When empty, the corroded stacks are a series of large bins or stalls about 20 by 50 feet, constructed of heavy timbers tightly boarded on both ends and the back. About eighteen inches of prepared tan bark is first spread evenly on the bottom of the stacks. Then on top of the bark comes a layer of strong, peculiarly shaped, earthenware pots with the inside bottom portion glazed. Into this glazed well is poured a pint of a weak solution of vinegar or acetic acid.

The projecting collar of each pot supports about ten lead buckles, laid flat one upon the other. This layer of filled pots extends to within eighteen inches of each wall. The intervening space is filled with tan bark and the front section of the stack held in place by boards tightly fitted as the stack progresses in height.

Each layer of pots is covered with a double layer of boards, another layer of tan bark placed upon them, and then more pots, until ten layers of pots, buckles, boards and tan bark have been built in the stack, which now contains about 100 tons of lead buckles.

During the erection of each successive layer of pots and buckles, large wooden vent pipes or flues are installed, which lead up through the remaining layers into the atmosphere and thus afford the only means of controlling the temperature during corrosion.

To permit the chemical agents to complete the action of corrosion, the filled stack is allowed to stand 100 days. Following wonderful chemical laws, these agents work silently in the darkness, changing gray metallic lead, atom by atom, into the white pigment known as the basic carbonate of lead or—White Lead.

For the first few days after the stack is erected no apparent action exists. Small microscopic organism, the bacteria of fermentation, have been at work, however, and in six or seven days the tan bark commences to ferment, liberating heat, moisture and carbon dioxide.

At the expiration of three or four weeks, the temperature in the stack has reached 165 to 170 degrees Fahrenheit, where it is maintained uniformly by opening or closing the vent pipes described above. The heat vaporizes the vinegar or acetic acid in the well of the pot, and the vapors, in turn, react with the lead buckles to form lead acetate. The reason for the peculiar shape of the buckles may now be understood. The perforations allow a free circulation of the vapors and gases and at the same time present a larger surface of the buckle to their attack.

Next, moisture and carbon dioxide, from the tan bark, attack the lead acetate, change it into basic lead carbonate, and release the acetic acid, which again reacts with the metallic lead.

The transition of pig lead to lead acetate and then to the basic carbonate continues for over three months until practically all of the lead buckles have been converted to a hard, white, porcelain-like substance—the White Lead of Commerce.

The stack is now taken down layer by layer, with the operation of building it just reversed. When the top layer of tan bark with its covering layer of boards has been removed, a wonderful change from the bright metallic buckles to the snow-white mass of swollen shapes is observed. Upon close inspection, it will be noticed that in most instances the metallic buckle is completely changed in some there are strips of uncorroded lead; and in rare cases a buckle is entirely unaffected. All uncorroded and discolored buckles are carefully removed from each layer, and the perfect buckles are then dumped through dust col-

ectors into wheelbarrows, weighed, and taken to the crushing rolls.

From the time the buckles are cast from pig lead until removed from the corroding stacks in the form of White Lead, the process has much in common with the old Dutch methods. Modern conveying and grinding machinery, however, have revolutionized the processes to which the Lead is now subjected. With almost human intelligence these machines produce a cheaper, better and more uniform White Lead than that obtained by the obsolete hand methods of a century ago.

As many of the lead buckles do not completely corrode in the stack, they are run through large, grooved crushing rolls where the corroded portion is crushed and separated from the uncorroded lead core by a revolving screen. That portion passing through the screen, which still contains considerable metallic lead, is then run through the flattening rolls, where all remaining particles of metallic lead are flattened out into chips and retained on a fine mesh screen, through which the White Lead passes. The White Lead, comparatively free from metallic lead, is then conveyed to a series of jig screens where all impurities, such as tan bark, pieces of pots, and any remaining metallic lead are separated out by means of a patented vacuum cleaning device.

The removal of the tan bark before the White Lead comes in contact with water is highly essential, as water extracts certain tannin dyes which would stain the White Lead a reddish yellow.

The purified dry White Lead is now run into water and carried to huge burrstone grinding mills over five feet in diameter. From the mills the Lead is pumped to large drag tanks, where the coarser particles settle to the bottom and are drawn off by an endless chain conveyor. The finer particles float over an agitating tub and are washed free from any vinegar and lead acetate. At the same time any coarser particles which may have come from the drag tank are settled out.

That Lead which is sufficiently fine to float over the agitating tub passes to a gyratory screen covered with silk bolting cloth, which has 40,000 meshes to the square inch. The coarser particles which have settled in the drag box, agitating tub, or have passed over the silk screen, are all returned to the water mills for regrinding. The ground

White Lead which has passed through the silk bolting cloth is pumped into a series of settling tanks, and here the lead settles from suspension in the water to the bottom of the tanks. After standing overnight, the water is drawn off, and the pasty mass of finely ground White Lead known as Pulp Lead, which has settled to the bottom of the tanks, is pumped into the Pulp Stock Tanks.

Beneath the Pulp Stock Tanks is a large weighing box into which is run 2,800 pounds of Pulp Lead, the equivalent of one ton of dry White Lead. Directly under this weighing box is a long, narrow, cylindrical mixing tank, equipped with an agitator. The Pulp Lead is discharged from the weighing box into the mixing tank, where another interesting phenomenon occurs. Into this tank, the contents of which are in motion, raw linseed oil is poured from a gauged container. Every particle of Lead is seized by the oil and together they go to the bottom, while the clear water, separated from the Lead, comes to the top. This process of mixing Pulp Lead and raw linseed oil, with the ultimate separation of the Lead and oil, is continuous. The White Lead paste is carried off the bottom by a screw conveyor, while the clear water is pumped off the top.

The strong affinity of White Lead for linseed oil is a property possessed by no other pigment. This fact may be demonstrated by mixing raw linseed oil and water with any pigment other than White Lead. When agitated, the pigment will settle to the bottom and the oil will float on top of the water; no union of the oil and pigment will occur.

Because of this property White Lead is highly desirable as a protective coating for wood and metal; it not only resists moisture but actually repels it.

To remove any remaining moisture, the White Lead paste from the pulp mixer passes through a "pony" mixer and then into the oil mills.

Two large water-jacketed French burrstone mills grasp the Lead paste, grinding the oil and pigment into a still closer union than ever, discharging it from the second mill into a water-jacketed cooler. Here it is packed into wooden or steel kegs and casks or run into large cars for subsequent use in liquid paints. And whether as lead in oil in kegs and casks or as ready mixed paints in cans and barrels, Pioneer White Lead eventually reaches the consumer of the Pacific Coast, South and Central America, Alaska, Hawaii, the Orient and Australasia.

Items Of Interest.

Collected by

George Nelson, C. E.

New Cement Plant.

The deposits of the Southwest Portland Cement Company of El Paso, Tex., which is starting construction on a \$1,000,000 cement plant at Victorville in San Bernardino County, were recently examined by three of the most eminent practical experts in this line in the West and pronounced by them ideal in situation and practically inexhaustible in quantity.

This great enterprise is to be conducted under the personal direction of Carl Leonardt, for many years a leading contractor of Los Angeles, who has made a close study of the latest German methods of cement production.

These advanced methods, and the unusual value of the deposits, have inspired attempts on the part of rivals to thwart construction of the new plant, according to the statements of the parties interested therein.

An injunction suit was brought by minority stockholders of the Southwest company in the Federal Circuit Court at El Paso, but failed for lack of a damage bond of \$20,000. It was claimed at the hearing that the suit was really instigated by a rival cement company, which recognized the drop in prices certain to follow the installation of the new plant and processes. The complainants sought to limit operations to El Paso. Some of these, who have since seen

the Victorville prospects, have become enthusiastic converts.

Obstructions to right of way purchases for a branch line from the Santa Fe railroad to the deposit were also encountered and have been attributed to the same rivalry. These counter efforts were fruitless, however, and the railroad line has been graded between the plant site and the Mojave River, and is in process of construction between river and main line.

Rails and ties have been bought, and machinery is to be laid down on the factory site as soon as the line is completed from Victorville.

Actual operation of the complete plant is expected to begin in nine or ten months, with immediate reduction in the cost of high quality cements.

The company has a proposition here which can be described as ideal from every standpoint. As to the size of the deposit, it is practically inexhaustible, and is pure and free from refuse, from the grass roots down. It can be run by gravity down to the plant, the location of which cannot be beaten for accessibility and convenience.

The plans for the plant represent the last word in cement factory construction at the present date. The combination cannot be surpassed by any plant on the American continent.

The New Oil Field Protection Law.

The new law which went into effect the 9th inst., was drafted by the State Mining Bureau in response to appeals from numerous operators who stated that if speedy action was not taken, the oil fields of the State were in danger of becoming flooded with water, causing a partial paralysis of the industry.

In Texas and in the oil fields of other States damage beyond estimate has resulted from owners of wells neglecting to properly shut off abandoned wells and to prevent water from wells in operation, from seeping into the oil-bearing sand of the district.

Supervisor McLaughlin has made it clear that while the law provides drastic measures in meeting the question it is the aim of the officials to work hand in hand with the producer and eliminate "red tape" and officialdom. A reasonable compliance with the new law will be required, but the main object is to secure protection for the oil fields and not to impose numerous useless conditions and restrictions where none are needed.

To handle the subject, the department of petroleum and gas has been created under the supervision of the State Mining Bureau. At the head of the new department is the supervisor, appointed for four years at a salary of \$4,500 per year. Not less than four deputies are provided for.

The oil operators will be required to furnish the department with detailed records monthly of operation of wells, including the number operated and the amount and gravity of oil produced. A minimum penalty of \$100 fine is provided for failure to comply with the provision. The reports are to be confidential and may not be used or produced as evidence in court except in certain prescribed cases.

The new law provides that all wells shall have metal casing, which shall effectually prevent water from entering the field. The provision applies to all wells in operation and all wells which may be drilled in the future.

Before starting to drill or redrill a well, written notice must be furnished the department giving details of the proposed work. During the drilling a record of the work shall be kept and information given the department from time to time as requested. Five days' notice must be furnished before shutting off the water in any such well and the deputies are charged with being present at the test for shut-off.

Provision is made in the statute that assessments be levied on all oil property, both productive and non-productive, and the fund so levied be used in carrying on the work of the department and for providing an emergency fund of from \$5,000 to \$25,000 in each of the territories under the direction of a deputy. The latter fund to be used in making necessary repairs, where the owner re-

fuses to do the work. The cost of the work done then becomes a lien on the property.

Gas wells, in a district where there are no petroleum wells, are not to be assessed, and non-productive but oil-bearing land may not be assessed for more than 10 per cent of the total assessment levied for the support of the department. The rate of assessment is to be determined by the State Board of Control. A tax per barrel on all oil products will also be levied and paid into the State treasury. The brunt of the expense of the department will be met by the latter tax.

Mr. McLaughlin is a practical oil man, having been in the employ of the Associated Oil Company for several years as an expert and has been in the employ of the State Mining Bureau for the past three years.

Four deputies have been appointed. These deputies will be stationed in the various oil fields and their duties will consist largely in becoming thoroughly informed of all the physical conditions of those fields and advising the operators as to the most effective method of controlling underground water. They will also furnish the supervisor with information necessary for the enforcement of the new law dealing with the subject of water in the oil wells.

The appointments are as follows:

H. J. Kirwin will attend to the work in Fresno and Kings Counties and a portion of Kern County. He will be stationed at Coalinga. Mr. Kirwin is a civil engineer and has, for some years, filled the position of Oil Well Commissioner for Fresno County. For a number of years before entering public service he was employed by the engineering department of the Associated Oil Company.

Mr. E. B. Latham will have charge of work in the following counties: Kern, Santa Barbara and Ventura, his headquarters being at Santa Maria. Mr. Latham is a geologist, and for several years has been in charge of the work carried on by the Kern County Oil Protective Association in the Midway field. This association was a voluntary affair, but accomplished a great deal of very valuable work.

R. E. Moran will look after the work in Orange, Los Angeles and Ventura Counties, being stationed in this city. Mr. Moran is an engineer and geologist of great experience. He is at present actively interested in several oil-producing concerns and has at various times been in the employ of nearly all of the large oil companies of California.

Chester Naramore will be in charge of work in Kern and Ventura Counties. His headquarters will be at Taft. Mr. Naramore is a mining engineer with wide experience in managing producing oil properties, having had under his supervision parties in several California fields, and more recently having been in charge of operations for Canadian companies located near Calgary.

Potash From Feldspar.

A young Yale graduate chemist has submitted to Dr. Thomas K. Norton, the Department of Commerce commercial chemical agent, a new process for extracting potash from feldspar. Dr. Norton is in New York to help solve the problems of a war shortage in dyestuffs and other substances and potash is one of them. He was so much impressed with the young inventor's feldspar process that he said:

"I have examined the chemical factors of this process and am convinced that it is reliable and of value. Tests have been successfully made with several hundred tons of feldspar.

"In the first place, it promises an economical way of liberating aluminum and silica from feldspar. Aluminum, silica and potash are closely united in the feldspar of the Allegheny Mountains and acids do not liberate them. We have to use an alkaline process before we can split with acids. Now the release of this aluminum quickly and cheaply is of great importance to the aluminum industry

in the United States, which uses 400 tons of pure aluminum daily.

"Secondly, the new process of getting potash from feldspar is more direct than extracting it from kelp. This young man's method will give us potassium carbonate almost directly from the rock and potassium carbonate is the great desideratum.

"Having this, we can immediately get any kind of potash salts, including nitrate. To get potassium carbonate from the kelp we have to use rather a roundabout method.

"So, I think the new feldspar process will be an important as a competitor with kelp in the potash industry that we should have and must have in this country. Germany has the one great natural monopoly of potash. We have been taking half her output. Now we cannot get it and we need it badly. Besides, the American farmer has never learned to use enough potash as a fertilizer. The Germans get thirty-eight bushels of wheat per acre to our fifteen—just by being liberal with potash. And we are letting kelp containing 150,000,000 worth of fertilizer go to waste on the Pacific Coast each year."

MIDWAY GAS.

Under a supplemental order issued recently by the State Railroad Commission at the solicitation of the Midway Gas Company, some radical changes are made in the order of June 25, 1915, in which the company was authorized to issue \$2,172,000 of first and refunding mortgage 6 per cent bonds, \$88,395 of five-year 6 per cent notes and \$737,350 par value of preferred stock.

In its supplemental order the commission states that data submitted by the Midway Gas Company emphasizes the necessity of changes, and the company is directed to issue bonds as follows: \$660,000 face value at 90 per cent to buy the compressor plant and gathering lines of the Southern California Gas Company in the Midway oil fields in Kern County, and for other purposes.

These other purposes are the taking over of the rights and obligations of the Southern California Gas Company in the contracts between the Honolulu Consolidated Oil Company, Midway Gas Company, Southern Pacific Land Company, Kern County Trading and Oil Company, and Associated Oil Company.

The company is also authorized to issue 3,600 shares of preferred stock at \$100 a share to buy the property of the northern Exploration Company, consisting of gas well improvements and other items, and to obtain the release of claims of this concern against the Southern California Gas Company and the Midway Gas Company for compensation for natural gas. Bonds of a face value of \$23,000 are also to be issued to pay claims against the Southern California Gas Company, aggregating \$20,834.

The commission also authorized the Midway Gas Company to mortgage its property under certain conditions and to execute a trust agreement with the Mercantile Trust Company of San Francisco to secure an issue of \$98,305 five-year, 6 per cent gold notes.

as the tank has never been a great success. Only those repairs that are absolutely necessary will be made at the present time, probably costing from \$3,000 to \$5,000.

City Engineer Orbison and Deputy Dewey concur in terming the affair an inexcusable blunder. Mr. Dewey says it is well known to everyone who has worked on the City Farm that the Cameron type tanks are always full of dangerous gases and expressed surprise that any City Farm employee could have thought of starting a fire near the tank.

The tank was completed in December, 1910, and was built by Andrew Holloway. It was regarded as a fine piece of reinforced concrete work.

BUTTONLATH FACTORY.

The Buttonlath Manufacturing Company is constructing a plant at the corner of Vernon and Boyle avenues in Vernon for the purpose of manufacturing its product known as buttonlath. It is described as a "rust-proof, sound-proof and fireproof substitute for metal or wooden lath." It has been approved by the building commission for use in all classes of buildings in Los Angeles. The buildings cover two and a half acres. This is a Los Angeles invention patented by James P. Saxon of this city. It started a year ago in small quarters, and now has installed a machine with a capacity of 18,000 hoards per day, equal to 96,000 square feet. The material used is gypsum plaster, which abounds in the section, on paper board, also a local product from two companies operating in the vicinity.

CEMENT PIPE VS. CLAY PIPE.

Now that the main sewerage system is well under way, under the \$300,000 contract given by the city to Bent Bros., war between the concrete sewer pipe men and the manufacturers of vitrified clay pipe over \$400,000 worth of lateral and extension contracts has reached the trench stage with the soldier agents of each throwing verbal hand grenades at each other.

For the purpose of deciding which pipe to use in their laterals connecting with the main sewer, the residents have formed groups of districts. They have held meetings, gotten up petitions and counter-petitions, hired lawyers and agitated the merits of the two brands of pipes before the City Commissioners, always egged on by the pipe agents. As the taxpayers do their own lateral building, the kind of pipe they use "is their funeral."

Half-page advertisements in the local newspapers set forth the alleged defects of one pipe or the other. Charges and counter-charges have been hurled by the various men at each other. The two pipe materials have been placed under the microscope, pulverized, squinted at, chewed, and even swallowed by the zealots of the armed camps in their endeavor to prove one or the other pipe is the best or the worst.

EXPLOSION AT PASADENA SEPTIC TANK.

Burning grass ignited gases in a septic sewer tank at the City Farm at the City of Pasadena and 6,000 square feet of heavily reinforced concrete cover was blown skyward. It is estimated by City Engineer Orbison that 80,000 cubic feet of gas—sufficient to illuminate the whole city—exploded and damaged the tank to the extent of thousands of dollars.

That nobody was injured is due to the fact that the lone watchman, who stands guard on top of the tank had left his post to go down to the orchard only a moment or so before the explosion occurred.

The fire which caused the explosion was started by a workman who was burning weeds in the orchard. On the west bank where dirt had been thrown up against the tank, weeds had gathered, and the laborer, not realizing there was danger, set them on fire. Several minutes afterwards the gas in the tank exploded, wrenching and tearing the concrete slab top into thousands of pieces.

In its thinnest place the top is three and a half inches thick, and is reinforced with great twisted iron rods imbedded in the concrete. Commissioner Sallsbury states that he is quite confident the cover will never be replaced,

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$10,000. Architect, none. Owner, Thomas Hamill, 268 25th avenue, S. F. Location, southeast corner Geary and 20th avenue. Will contain six suites of two and three rooms besides two stores. Interior will be finished in pine with some elm panels. Hardwood floors. Patent store fronts. Private baths and wall beds. Hot water system. Bath rooms finished in tile. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment houses 2, 2 story and base, frame, \$10,500 each. Architect, none. Owner, F. W. Lurmann, 1246 Sacramento street. Location, north Washington street east of Leavenworth. Will contain a number of two and three room suites with wall beds and private baths. Interiors finished in pine and hardwood veneer. Hardwood floors. Steam heat, hot water system. Bath rooms finished in tile. Exteriors covered with shiplap and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

MARTINEZ, CONTRA COSTA CO., CAL.—Apartment house and stores, 2 story and base, brick and concrete, \$10,000. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, Frank Prosser. The following bids were received for the construction of this building. No award has been made. Carl Naelson, \$10,143; C. D. Mohr, \$10,190; C. A. Jeffers, \$10,400; Guttlein Bros., \$10,575; J. J. Widmer, \$10,584; J. S. Hannah, \$10,993; D. H. McQuiddy, \$10,997; M. Morton, \$10,597; Fletcher & Winlund, \$10,927.

SAN FRANCISCO—Apartment house, 6 story and base, brick and steel, \$150,000. Architect, J. C. Hladik, Monadnock Bldg., S. F. Owner's name withheld. Location, northeast corner Van Ness and McAllister. Will contain a total of 200 rooms, arranged in two and three room suites. First floor arranged for nine stores and lobby. Interior finish pine, hardwood and ornamental plaster. Hardwood floors, tile bath rooms and wall beds. Patent store fronts. Steam heat, oil burning system, hot water supply and vacuum cleaning. Exterior faced with white glazed brick. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$35,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner's name withheld. Location, Jordan Park. Will contain twelve suites of four and five rooms. Interior finished in pine, red gum and hardwood. Hardwood floors. Wall beds, steam heat, oil burning furnace, hot water supply. Bath rooms finished in tile. Exterior, brick veneer and ce-

ment plaster. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$15,000. Architect, none. Owners, S. J. Sterner and C. M. Olson, 374 6th avenue, S. F. Location, northeast corner Pacific and Leavenworth, covering an area of 45 by 59½ feet. Will contain twelve suites. Interior finish, pine, hardwood and white enamel. Hardwood floors. Steam heat, wall beds and tile bath rooms. Lobby finished in tile and ornamental plaster. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$15,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. Location, Jones street north of Washington. Will contain six suites of four rooms each. Interiors will be finished in pine with some hardwood veneer and hardwood floors. There will be steam heat, oil burning system and hot water supply. Wall beds. Bath rooms finished in tile. Marble and tile wainscot. Exterior covered with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house 4 story and base, Class C construction. Cost not stated. Architects Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. Location, northwest corner of Geary and Hyde streets, covering an area of 37½ feet by 87 feet. Will contain 63 suites of two and three rooms. Interior finish pine and hardwood with hardwood floors. Steam heat, oil burning plant, automatic elevator, hot water system and vacuum cleaning. Wall beds. Bath rooms finished in tile. Marble and tile wainscot. Exterior faced with cement plaster. Plans complete and figures being taken.

Contracts Awarded.

SAN FRANCISCO—Apartment house 3 story and base, frame, \$14,000. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owner, James K. Fraser. Contractor, W. S. Fraser, 1205 11th avenue, S. F. Contract price, \$14,000.

BONDS.

MODOC, MODOC CO., CAL.—At a meeting of the Board of Supervisors it was decided to bid for \$200,000 of state highway bonds at par and accrued interest to date of delivery. It was further ordered that the money be expended for road work in Modoc County on the Pit River route and for no other purpose.

HOUQUAM, WASH.—The proposition to vote bonds of \$115,000 for the paving of arterial streets across the city and the construction of two bridges failed to carry.

GLENDORA, LOS ANGELES CO., CAL.—The Board of Trustees is con-

templating the calling of an election to vote bonds of \$60,000 to defray one-half of the expense of street improvements.

NEVADA CITY, NEVADA CO., CAL.—A petition has been circulated here asking Congressman John E. Raker to use his services in securing an appropriation to put in a big dam on Bear River in order that the hydraulic properties on Dutch Flat, You Bet, Lowell Hill, Quaker Hill, Liberty Hill and that entire section may be worked. The petition prays for an endeavor to secure \$150,000 for works on the Bear River.

TUCSON, ARIZ.—A special election will be held in Pima County on October 26th for the purpose of voting \$400,000 in bonds for the improvement of county highways.

MODESTO, STANISLAUS CO., CAL.—The Board of Supervisors has provided a fund in the budget for the construction of an \$85,000 concrete bridge over the Tuolumne River at Modesto.

GLOBE, ARIZ.—The Board of School Trustees contemplates calling a special election for the purpose of voting bonds of \$30,000 for the construction of additions to the grammar school buildings.

SANTA CLARA, SANTA CLARA CO., CAL.—The proposition to call an election to vote bonds for the paving of the principal streets in this city is meeting with the approval of the voters, and from present indications the election will carry by a large majority.

SELBY, CONTRA COSTA CO., CAL.—The bonds of the Selby School District have been sold to Mrs. M. M. Wells of Concord for \$11,317. An architect will be selected immediately to prepare plans for the building for which the bonds were voted.

GOODING, IDA.—The following sums have been appropriated for expenditure this fall: Bliss Highway District, \$50,000; Hagerman Highway District, \$18,000, and the Appleton District, \$25,000.

DEMING, N. MEX.—Bonds of \$100,000 have been voted by Luna County for the improvement of the main county highways.

BAKERSFIELD, KERN CO., CAL.—Petitions will be circulated here to ask the Board of Supervisors to call a special election for the purpose of voting bonds in the sum of \$200,000 for the construction of a scenic road from Bakersfield to the Kern River at Weldon. This will be the first link of the contemplated road to Mt. Whitney.

MADERA, MADERA CO., CAL.—Bonds of \$12,000 have been voted for the construction of a concrete wall at the foot of D street.

RIVERDALE, PRESNO CO., CAL.—Bonds of \$25,000 have been voted for the erection of a school building.

EAGLE ROCK, SCHOLOL DISTRICT, CAL.—Following a mass meeting of the citizens of Eagle Rock School District, the Board of Trustees has been instructed to call a special election for the purpose of voting bonds in the sum of \$65,000 for school purposes. It is proposed to erect a four-room and auditorium building at a central location at a cost of \$35,000 and two two-room buildings in the ends of the district at a cost of \$15,000 each.

RICHMOND, CONTRA COSTA CO., CAL.—A selection will be made on Oc-

tober 15th by the voters for a site for the new city hall building. On selection of the site plans for the structure will be ordered.

PORTLAND, ORE.—Dr. K. A. J. MacKenzie, dean of the medical department of the State University, is supervising the raising of the \$25,000 funds necessary to construct the proposed \$100,000 unit to the group of buildings.

The last legislature appropriated \$75,000 on condition that an additional sum of \$25,000 was raised.

PORTLAND, ORE.—O. Laugaard, Railway Exchange Building, Portland, is acting in the capacity of consulting engineer for several large irrigation projects.

An election will be held October 2 in the Suttle's Lake Irrigation District to vote on the question of issuing bonds in the sum of \$600,000 for the construction of an irrigation system for 12,000 acres.

Another large project, the cost of which has been given at \$1,250,000, is to be constructed near Brewster, Wash. The Brewster Irrigation District has already voted the bonds with which to build 50 miles of canal, 30 miles of flume and other improvements.

BRIDGES, DAMS AND HARBOR WORK.

OAKLAND, CAL.—Bridge repairs, \$1,350 and \$2,500. Engineer, County Surveyor, Oakland. Owners, Alameda County. Bids will shortly be advertised by the Supervisors for the construction of an asphaltic mastic or alternate surfacing on the Calaveras Creek and the Bay Farm Islands bridges.

UKIAH, MENDOCINO CO., CAL.—Bridge construction, reinforced concrete. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Plans and specifications for the construction of the Wages Creek and Westport grade bridges have been adopted by the County Supervisors and bids have been ordered called to be received up to 2 p. m. October 5th. Further information may be had from the County Surveyor at Ukiah.

OROVILLE, BUTTE CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. Bids will be opened on October 4th by the Board of Supervisors for the construction of bridges Nos. 5 and 7 on the Biggs and Princeton road. Plans can be secured from the architect.

NAPA, NAPA CO., CAL.—Bridges, steel and reinforced concrete. Cost not stated. Engineer, County Surveyor, Napa. Owners, Napa County. The County Supervisors of Napa County have ordered bids received for the following bridges. For the construction of a steel and concrete highway bridge across Nigger Creek on the county road leading from Napa to Berryessa Valley. For the construction of a steel and concrete highway bridge across Walnut Grove Creek on the county road leading from Napa to Berryessa. For the construction of a steel and concrete highway bridge across Steel Canyon Creek on the county road leading from Napa to Berryessa Valley. Bids will be received for the above work until Octo-

ber 13th, 10 a. m. Plans and specifications and full information may be had from the County Surveyor at Napa.

HANFORD, KINGS CO., CAL.—Canal construction. Cost not stated. Engineer, County Surveyor Ben Duffield, Hanford. Owners, Kings County. Plans and specifications prepared by County Surveyor Ben Duffield have been approved by the County Supervisors and State Highway Commission, and bids will be received until October 4th for the construction of a concrete bridge to span the Lakeside Canal, 4 miles east of this city. The structure will be about 20 feet in width and 60 feet in length across the canal. Further information may be had from the County Surveyor at Hanford.

VENTURA, VENTURA CO., CAL.—River protection work. Cost not stated. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids are now being received for the protection work on the Foothill Boulevard. Approximate quantities are: Timber piles 20 feet long, 54; ¼ inch galvanized wire cable, 2,000 feet; barb wire, 3,000 feet. Bids will be opened on October 8th at 3 p. m.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Jetty, pile construction. Cost not stated. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. The Board of Supervisors has ordered bids received until October 11th for the construction of a pile jetty on the north side of Santa Maria River. The proposed jetty will be built in a northwesterly direction and will extend out into the river for a distance of 3,500 feet. Plans and specifications may be had from the County Surveyor at San Luis Obispo.

MARYSVILLE, YUBA CO., CAL.—Bridges, 2, reinforced concrete. Cost not stated. Engineer, County Surveyor, L. B. Cook, Marysville. Owners, Yuba County. Plans of County Surveyor L. B. Cook for two bridges to be located on the road between this city and Smartsville have been adopted by the Supervisors. The plans call for a 19-foot bridge to span a creek near Smartsville and a 24-foot extension to the Timhucktoo bridge. Both bridges are in the Fourth District, of which J. J. Casey is representative. The County Clerk was authorized to advertise for bids for the bridge construction work.

Contracts Awarded.

SONORA, TUOLUMNE CO., CAL.—Bridge, reinforced concrete, \$4,060. Engineer, County Surveyor, Sonora. Owners, Tuolumne County. Contractor, W. A. Stratton, Richmond. Contract price, \$4,060.

UKIAH, MENDOCINO CO., CAL.—Bridges, timber and concrete, \$900 and \$1,280. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Contractor, Al. Carlson, Ukiah. Contract price, \$900 and \$1,280.

SAN ANDREAS, CALAVERAS CO., CAL.—Bridge, reinforced concrete, \$5,000. Engineer, County Surveyor, San Andreas. Owners, Calaveras County. Contractors, Bluxome & Co., Menadnock Bldg., S. F. Contract price, \$5,000.

SANTA ROSA, SONOMA CO., CAL.—Bridges and retaining wall, reinforced concrete, \$2,772 and \$1,304. Engineer, Sount Surveyor, Santa Rosa. Owners,

Sonoma County. Contractor, Walter L. Proctor, Santa Rosa. Contract price, \$2,772 and \$1,304.

FACTORIES AND WAREHOUSES

PORTLAND, ORE.—Factory and salesroom, 2 story and base, reinforced concrete, \$30,000. Architects, Jacobberger & Smith, Board of Trade Bldg., Portland. Owner, Gay Lombard. Location, southeast corner of Park and Davis streets. The main portion of the building will be occupied by salesrooms, which will be finished in pine and hardwood with a tile floor. The upper floor will contain shipping rooms and machine shop. Interior finish will be of pine. Exterior will be faced with cement plaster. Plans are complete and figures are being taken.

SAN FRANCISCO—Factory, 4 story and base, reinforced concrete, \$200,000. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owner, John Bollman. Location, 4th and Brannan streets, covering a large ground area. Construction fireproof. Interior finish pine, hardwood in offices. Steam heat, elevator service, special machinery, hot water system and conveyor machinery. Hollow tile interior partitions. Metal window sash and frames. Fireproof doors. Exterior faced with cement plaster. Plans nearly ready for figures.

WHITTIER, LOS ANGELES CO., CAL.—Packing house, 1 story and base, hollow tile. Cost not stated. Architect, Alfred W. Reed & Charles E. Garstang, Black Bldg., L. A. Owners, Murphy Oil Co. Will cover an area of 162 by 251 feet. Concrete floor. Special machinery. Exterior faced with cement plaster. Plans complete and figures being taken.

FIRE REPORT

LOS ANGELES, CAL.—Fire destroyed the Union Warehouse Company building at Alameda and North Main streets, last week, causing a loss of \$1,000,000. Preparations are now being made to have the structure rebuilt.

THE DALLES, ORE.—The Masonic Temple building was destroyed in a recent fire, causing a loss of \$55,000.

WEED, SISKIYOU CO., CAL.—The Southern Pacific roundhouse has been destroyed by fire at a loss of \$10,000. Machinery, buildings and several cars were destroyed.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—A blaze in the kitchen of the San Bernardino County Hospital threatened to destroy the entire building. The fire was extinguished only when damage to the amount of \$7,000 was done.

MONTREAL, CANADA.—The Princess Theatre, located on St. Catherine street, was destroyed by fire last week at a loss of \$100,000. The owners state that the structure will be rebuilt.

UPPER LAKE, LAKE CO., CAL.—Fire caused a loss of \$20,000 when three business buildings and one residence were totally destroyed. The owners of the destroyed structures are Frank Howe and George Scott.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, none. Owner, J. Harold Johnson, 745 9th avenue, S. F. Location, west 15th avenue south of Anza. Will contain two flats of five and six rooms. Interior finish, pine and hardwood veneer. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Bath rooms finished in tile. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architect, none. Owner, Mrs. Marie Sterner, 1621 Lake street, S. F. Location, east 6th avenue north of Geary, covering an area of 25 by 66 feet. Will contain two flats of six rooms each. Interiors finished in pine, hardwood veneer and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with shiplap and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$10,000. Architects, Fabre & Bearwald, Merchants' National Bank Bld., S. F. Owner's name withheld. Location, Bartlett near 26th street. Will contain four flats. Interior finish pine and elm panels. Some hardwood floors. Open fire places and tile mantels. Bath rooms finished in imitation tile. Automatic water heaters. Exterior covered with shiplap. Plans complete and figures being taken.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, none. Owner, A. M. Sylvia, 371 30th avenue, S. F. Location, east 20th avenue north of Anza, covering an area of 25 by 50 feet. Will contain two flats of five and six rooms. Interior finish pine and redwood. Hardwood floors. Open fire places and tile mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 3, 2 story and base, frame, \$5,000 each. Architects, Thomas & Oliver, Pantanges Theatre Bldg., Oakland. Owner, Henry Lehfeldt. Location, south Filbert west of Steiner, covering an area of 25 by 64 feet. Each building will contain two flats of five and six rooms. Interiors finished in pine, elm panels and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with shiplap and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAUSALITO, MARIN CO., CAL.—Flat alteration, frame construction, \$1,000. Architect, W. J. Cuthbertson, 325 Montgomery street, S. F. Owner, E. H. Ladd. Work will consist of altering first story of residence into flats. There will be new interior trim, hardwood floors, plastering, plumbing and painting. Work will be done by Day Labor.

SAN FRANCISCO—Flats, 2, 2 story and base, frame, \$5,000. Architect, none. Owner, L. B. Ham, 1643 Lake street, S. F. Location, south California

Will contain two flats each. Interiors finished in pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Tile wainscot in bath rooms. Automatic water heaters. Exteriors covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$3,500. Architect, none. Owner, George McGruer, 55 Cumberland street, S. F. Location, west Connecticut north of 18th. Will contain two flats of five and six rooms. Interior will be finished in pine. Some hardwood floors and open fire places. Mantels will be of tile. Automatic water heaters. Exterior covered with shiplap. Plans complete and work to be done by Day Labor.

GARAGES

SAN FRANCISCO—Garage, 1½ story and base. Class C, \$10,000. Architect, Henry C. Smith, Humboldt Bank Bldg., S. F. Owner, Richard Glazier. Location, west Valencia south of 18th street, covering an area of 75 by 100 feet. Will contain storage space, office and machine shop. Interior finish pine. Cement floor. A considerable amount of special machinery will be installed. Exterior will be faced with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Garage, 1 and 2 story and base, brick and steel, \$25,000. Architect, J. R. Miller, Lick Bldg., S. F. Owner represented by Buckbee-Thorne Realty Co. Location southwest corner of Bush and Pierce streets, covering an area of 100 by 100 feet. Designed for a commercial garage. Concrete floor. Interior finish pine. Steel gasoline storage tanks. Metal sash and frames. Exterior faced with stock brick. Plans complete.

PORTLAND, ORE.—Garage and salesroom, 2 story and base, brick, \$25,000. Architects, Sutton & Whitney, Lewis Bldg., Portland. Owners, Kissel Car Automobile Co. Location, corner of Broadway and Davis streets, covering an area of 100 by 100 feet. Interior finish pine and hardwood. Concrete floor. Metal window sash and frames. Exterior faced with pressed brick. Plans complete.

GOVERNMENT WORK & SUPPLIES

Puget Sound, Wash., Magazine Building.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for constructing steel frame shell house with plastered walls and two brick magazines, with steel roof trusses, at the naval magazine, Puget Sound, Wash.:

Item 1, price for work, complete; 2, price for work complete if hollow terra cotta tiles, plastered both sides, are used in place of the brick wall; 3, amount to be deducted from net price under item 2 if plaster be omitted from inside surfaces of tile walls; 4, amount to be deducted from net price under item 1 for each 20-foot bay of the shell house omitted; 5, amount to be deducted from net price under item

1 or item 2 if paint for interior exposed woodwork omitted; 6, amount to be added to net price if all galvanized steel ventilators, gutters, baskets, etc., be omitted and copper be used in place thereof.

A. W. Quist Co., 702 2nd avenue, Seattle, Wash., item 1, \$42,858.68; 2, \$43,760.58; 3, \$342; 4, \$361; 5, \$336; 6, \$1,841.

Booker, Kiehl & Whipple, 505 Central Building, Seattle, Wash., item 1, \$23,874; 2, \$33,874; 3, \$200; 4, \$917; 5, \$656; 6, \$1,200.

Harry H. Cotton Co., 134 Railroad avenue, Port Angeles, Wash., item 1, \$42,123; 2, \$41,523; 3, \$273; 4, \$900; 5, \$500; 6, \$1,500.

The Puget Sound Bridge & Dredging Co., 432 Central Building, Seattle, Wash., item 1, \$44,773; 2, \$44,232; 3, total, \$44,118; 4, \$1,200; 5, \$590; 6, \$2,640.

Penn Bridge Co., Bond Building, Washington, D. C., item 1, \$39,970; 2, \$39,470; 3, \$650; 5, \$570; 6, \$2,860.

Alexander Pearson, 753, New York Building, Seattle, Wash., item 1, \$45,624; 2, \$46,083; 3, \$450; 4, \$1,209; 5, \$778; 6, \$650.

Kiebertz & Smith, Railway Exchange Building, Seattle, Wash., item 1, \$41,242; 2, \$41,024.22; 3, \$450; 4, \$1,113.20; 5, \$818; 6, \$400.

Arvid Levergreen, 3826 Eastern avenue, Seattle, Wash., item 1, \$26,440; 2, \$37,500; 3, \$500; 4, \$1,175; 5, \$500; 6, \$1,325.

Bert Ward, 513 31st avenue, Seattle, Wash., item 1, \$59,076.02; 2, add \$848.50; 3, \$500; 4, \$900; 5, \$300; 6, \$1,300; if Johns-Manville roofing is used, add \$1,515 to item 1.

Erickson & Larson, 5011 Meridian avenue, Seattle, Wash., item 1, \$26,748.60; 2, \$37,464; 3, \$280; 4, \$1,000; 5, \$800; 6, \$775.

Eckman & Mowat, 616 Mutual Life Building, Seattle, Wash., item 1, \$34,913.13; 2, \$35,471; 3, \$450; 4, \$850; 5, \$786; 6, \$1,900.

Martin & Dugan, Northern Bank Building, Seattle, Wash., item 1, \$34,913.13; 2, \$35,471; 3, \$450; 4, \$850; 5, \$788; 6, \$1,900.

Charles H. Schaar, 721 21st avenue, Seattle, Wash., item 1, \$37,538; 2, \$37,590; 3, \$550; 4, \$980; 5, \$600; 6, \$1,150.

Hans Pederson, 4 Madison Building, Seattle, Wash., item 1, \$42,284; 2, deduct \$750; 3, \$380; 4, \$748; 5, \$500; 6, \$1,600.

J. H. Tolman, 210 Haight Building, Seattle, Wash., item 1, \$40,065; 2, \$39,910; 3, \$550; 4, \$990; 5, \$779; 6, \$1,841.

Charles Rapp & Co., 811 20th avenue South, Seattle, Wash., item 1, \$50,722; 2, \$50,362; 3, \$230; 4, \$1,533; 5, \$420; 6, \$628.

Grand Junction, Colo., Post Office.

The contract for the construction, complete, of the U. S. post office at Grand Junction, Colo., using limestone for all stonework, except where granite is required, has been awarded to Dieter & Wenzel Construction Co., Wichita, Kan., at \$106,821; time to complete 18 months.

Reclamation Service, Cylinder Shafts.

The contract for furnishing shafts for cylinder gates, under bids opened by the U. S. Reclamation Service, Den-

ver, Colo., specification 2-D, has been awarded to the Walker Mfg. Co., at \$1,377.50.

Portland Cement.

Under authority from the Secretary of the Interior the Reclamation Service has executed contract with the Ogden Portland Cement Co., of Ogden, Utah, for furnishing 21,000 barrels of Portland cement for use on the Strawberry Valley project and the projects of the Idaho division. The contract price is \$1.10 net per barrel f. o. b. cars at the company's plant, Baker, Utah.

Alameda, Cal., Post Office.

The contract for painting and plastering in the U. S. post office at Alameda, Cal., has been awarded to Jarvis & Co., St. Louis, Mo., at \$384.

Olympia, Wash., Skylight.

The contract for a new skylight in the U. S. post office at Olympia, Wash., has been awarded to White & Wright, Olympia, Wash., at \$600; time 30 days.

Medford, Ore., Elevator.

The contract for installing an electric passenger elevator in the U. S. post office and court house at Medford, Ore., has been awarded to Kaestner & Hecht Co., Chicago, Ill., at \$3,394; time to complete May 11, 1916.

Bids for Submarines.

The time for the opening of bids for construction by contract 16 submarine boats, Nos. 62 to 77, has been postponed from 12 o'clock noon September 29 to 10 o'clock a. m. September 30.

Lighthouse Service, Mineral Oil.

The following bids were received by the lighthouse inspector, 19th district, Honolulu, H. T., for 8,000 gallons mineral oil for light stations for the fiscal year ending June 30, 1916:

Associated Oil Co., \$1,280; does not comply with government specifications.

H. Hackfeld & Co., Honolulu, H. T., \$1,356; accepted.

Standard Oil Co., \$1,400.

Greely, Colo., Shelving.

The contract for installing metal vault shelving in the U. S. post office at Greely, Colo., has been awarded to the General Fireproofing Co., Washington, D. C., at \$136.50; time 90 days.

HALLS AND SOCIETY BUILDINGS

SAN FRANCISCO—Lodge hall alterations, \$4,000. Architect, W. H. Crim, Jr., 425 Kearny street, S. F. Owners, Independent Order of Foresters. Location, 1144 Market street. Work will consist of changing stairs, interior partitions and plastering. Plans being prepared.

VISALIA, TULARE CO., CAL.—Auditorium, 2 story and base, brick, \$35,000. Architects, Coates & Traver, Howell Bldg., Fresno. Owners, City of Visalia. Will contain large auditorium, display rooms and offices. Interior finish pine with maple floor in auditorium. Steam heat, oil burning plant and vacuum cleaning. Exterior faced with pressed brick. Plans being prepared.

TULARE, TULARE CO., CAL.—Lodge hall and stores, 2 story and base, brick. Cost not stated. Architect, Ernest J.

Kump, Rowell Bldg., Fresno. Owner, E. J. Ryan. Will contain stores on the first floor and lodge rooms above. Interior finish pine with maple floor. Central heating system and patent store fronts. Exterior faced with pressed brick. Plans being prepared.

HOSPITALS.

EUREKA, HUMBOLDT CO., CAL.—Hospital, 1 and 2 story and base, frame and plaster, \$20,000. Architect, E. J. Burke, Eureka. Owners, Humboldt County. Will contain three wards and several private rooms. Interior finish pine and white enamel. Hardwood and tile floors. Central heating system. Hot water system and vacuum cleaning. Special hospital plumbing. Exterior covered with cement plaster on metal lath. Plans being prepared.

VENTURA, VENTURA CO., CAL.—Hospital cottages, etc., 1 and 2 story frame and concrete. Cost not stated. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be received until October 18th for the construction of two cottages and a detention building at the California State Home for Girls near Ventura. Plans and specifications can be secured from the architect. An official proposal appears in another column of this issue.

SAN FRANCISCO—Removing buildings, \$4,995. Architect, City Department of Architecture. Temporary City Hall, S. F. Owners, City and County of San Francisco. Fred C. Jones presented the lowest bid at \$4,995 for removing the frame buildings on the old Tuberculosis Hospital site. He will be awarded the contract. A complete list of the figures received appears under the heading of San Francisco in this issue.

Contracts Awarded.

OLYMPIA, WASH.—State hospital buildings, reinforced concrete and steel, \$227,000. Architect's name not given. Owners, State of Washington. Contractors, Boyajohn-Arnold Co., Panama Bldg., Portland. Contract price, \$227,000.

HOTELS.

Contracts Awarded.

ELSINORE, RIVERSIDE CO., CAL.—Hotel, 1 and 2 story and base, frame, \$44,000. Architect, Sam Neighbors. Owner, Mrs. Orpha Eastman, Elsinore. Contractors, G. W. Gilbreth & Co., Hollingsworth Bldg., L. A. Contract price, \$44,000.

IRRIGATION PROJECTS

PORTERVILLE, TULARE CO., CAL.—Irrigation project. Cost not stated. Engineer's name not given. Owners, Strathmore-Lindsay Irrigation District. Members of the Board of Supervisors approved the plans for the proposed Strathmore-Lindsay Irrigation District, to be organized under the terms of the Wright law. By impounding the flood waters it is proposed to irrigate upward of 20,000 acres of the foothill orange land. It is estimated that the eventual cost of the work, including diversion canals and laterals, will total nearly \$2,000,000. Boundary

lines of the proposed district are still at issue before the Supervisors.

LIBRARIES.

OAKLAND, CAL.—Library, 2 story story and base, brick and steel, \$35,000. Architect, W. H. Weeks, 75 Post street, S. F. Owners, City of Oakland. Will contain two reading rooms, assembly hall and stack room. Interior finish, pine and hardwood with maple floors. Steam heat, oil burning furnace and vacuum cleaning. Metal book stacks. Exterior faced with pressed brick. Plans complete and figures being taken. Bids close on October 5th.

GRASS VALLEY, NEVADA CO., CAL.—Library, 1 story and base, brick, \$15,000. Architect, William Mosser, Nevada Bank Bldg., S. F. Owners, Town of Grass Valley. Will contain reading room, stack rooms and office for the librarian. Interior finish pine and hardwood with maple floors. Furnace heat. Metal book stacks. Exterior faced with pressed brick. Plans complete and figures to be called for shortly.

RAILROAD CONSTRUCTION AND EQUIPMENT.

SAN DIEGO, CAL.—Railroad construction. Cost as follows. Engineer's name not given. Owners, Atchison, Topeka and Santa Fe. The State Railroad Commission has ordered the Atchison, Topeka and Santa Fe Railroad to construct a line connecting Ocean-side in San Diego County with Temecula, 25 miles northeast. The order makes it optional to route the line by way of Fallbrook, 12 miles from Temecula, or to run it through the Rainbow Valley. The cost of the Rainbow Valley route is placed at \$822,000, and the Fallbrook and Temecula, \$627,000.

RESIDENCES.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$1,500 each. Architect, D. C. Coleman, Merchants' National Bank Bldg., S. F. Owner, M. Fisher, 683 Mission street, S. F. Location, Claremont Court. Each house will contain seven rooms, two baths and sleeping porch. Interior finish, pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Tile floors and wainscot in bath rooms. Automatic water heaters. Exterior covered with brick veneer and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architect, none. Owners, William Bahrs and J. B. Spaeth, 2645 McAllister street, S. F. Location, east 17th avenue north of Balboa. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood veneer. Hardwood floors. Open fire place and tile mantel. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, J. S. McClelland, 530 12th avenue, S. F. Location, east 12th avenue south of Balboa. Will contain six rooms, bath and sleeping

porch. Interior finish pine and hardwood veneer. Hardwood floors, open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,900. Architect, none. Owner, A. T. Morris, 501 11th avenue, S. F. Location, west 11th avenue north of Balboa. Will contain six rooms, bath and basement garage. Interior finish pine with some white enamel and hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,000. Architect, none. Owner, Oscar W. Thunberg, 678 9th avenue, S. F. Location, east 10th avenue north of Anza. Will contain seven rooms, baths, sleeping porch and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$6,000 each. Architects, Falch & Knoll, Hearst Bldg., S. F. Owners, Eisenbach Co., Flatiron Bldg., S. F. Location, east Cherry north of Sacramento. Will contain eight rooms each, two baths, sleeping porches and basement garages. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster on metal lath. Plans complete and figures being taken.

SAN FRANCISCO—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Carl Jorgensen, 767 Corbett avenue, S. F. Location, east Corbett avenue south of Moren. Will contain five rooms and bath. Interior finished in pine and redwood. Some hardwood floors. Open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, G. E. Gottschalk, Phelan Bldg., S. F. Owner, A. McBarnes. Location, east 47th avenue north of Cabrillo. Will contain five rooms, bath and sleeping porch. Interior finish pine with some elm panels. Hardwood floors. Open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 3, 2 story and base, frame, \$3,000 each. Architect, August G. Headman, New Call Bldg., S. F. Owner, Benj. Schloss. Location, 27th avenue and California street. Will contain seven rooms, bath and sleeping porch. Interiors finished

in pine, hardwood veneer and white enamel. Hardwood floors and open fire places. Mantels tile and brick. Furnace heat. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster on metal lath. Plans being prepared.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, Z. M. Steves, 1827 Marin avenue. Location, southeast corner of Posen and Carlotta avenues. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile wainscot and floor in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence alterations and additions, frame, \$8,500. Architect, F. Holberg Reimers, 2145 Shattuck avenue, Berkeley. Owner, W. W. Mackie. Location, Shasta street. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire place and tile or brick mantel. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, C. J. Pfirang, 5487 Claremont avenue, Oakland. Location, south 58th street well of Call. Will contain five rooms and bath. Interior finish pine, hardwood veneer and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owners, Collins Bros., 825 57th street, Oakland. Location, west 14th avenue south of Hempel. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, W. D. McKoy, 3025 E street, Sacramento. Location, 3145 E street. Will contain five rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in imitation tile. Automatic water heater. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, E. L. Higgins, 5250 Mile avenue, Oakland. Location, west Thomas street. Will contain five rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile. Imitation tile in bath. Automatic water heater. Exterior cov-

ered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, John A. Biscoff, 6045 Harwood avenue, Oakland. Location, east 16th street east of Colby. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SCHOOLS.

BERKELEY, ALAMEDA CO., CAL.—University buildings. Class A construction. Cost as follows. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. The next work to be undertaken at the University of California will be that of the second unit of the Agricultural Hall, costing approximately \$350,000. This will be followed by the construction of the new portions of the Doe Library, which will double the present size of that structure and will cost about \$100,000. The new chemistry building will then be started. It is understood that these buildings will be placed under construction before the end of 1915. A second unit of the Agricultural Building group will be constructed north and west of Agricultural Hall. The exterior of the building will be of California granite, similar in type to Agricultural Hall. Historic chem pond will be the site of a new chemistry building, similar in type to the other buildings of the Hearst plan. Unusually large window space will be incorporated into the building plans, so that all the light possible will be utilized and laboratory conditions may be more ideal. The new building will not interfere with the existing buildings. The remaining \$400,000 will be used to complete the Doe Library. Two more stories and an attic are to be added. This will provide another reading room two-thirds the size of the present one, and addition similar and administration rooms. Space for additional book shelves to hold 700,000 volumes will also be provided.

ALAMEDA, ALAMEDA CO., CAL.—Schools, 1 and 2 story, brick and frame. Cost not given. Owners, City of Alameda. Architects as follow. The following architects have been selected by the Alameda Board of Education to prepare plans for additions and alterations to be made at several of the city's schools. Henry H. Meyers, Kohl Bldg., S. F., addition to the Washington School, frame and brick. Cost not stated. Cunningham & Politeo, First National Bank Bldg., S. F., 1 story and basement brick building for Lincoln School; addition to Everett School and rehabilitation of the Porter School. Carl Werner, Phelan Bldg., S. F., associated with Charles E. H. Rogers, Kohl Bldg., 1 and 2 story brick building for Porter School. Further mention will be made of the work when bids are called.

SAN FRANCISCO School, 1 story and base, brick and concrete, \$21,000.

Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Location, corner of Polson street and Tompkins avenue. Will contain six class rooms and an assembly hall. Interior finish, pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior faced with pressed brick. Plans being prepared.

BOONVILLE, MENDOCINO CO., CAL.—School, 1 story, frame. Cost not stated. Architect, none. Owners, Anderson Valley School District. Bids will be opened on October 2nd for a district school. Plans can be secured from the Superintendent of Schools at Ukiah.

FLORIN SCHOOL DISTRICT, SACRAMENTO CO., CAL.—School, 1 story, frame. Cost not stated. Architect, George C. Sellon, 1005 K street, Sacramento. Owners, Florin School District. Bids will be opened on October 8th for the construction of a four-class room building. Exterior covered with rustic. Plans can be secured from the architect.

SAN JOSE, SANTA CLARA CO., CAL.—School, 1 and 2 story addition, frame, \$20,000. Architect, State Architect, George B. McDougall, Sacramento. Owners, State of California. Bids will be taken next week for the construction of a 12-room addition to the State Normal School at San Jose. Interior finish, pine with maple floors. Exterior cement plaster. Plans can be had from the State Architect. Further mention will be made of this work.

TORMEY, CONTRA COSTA CO., CAL.—School, 1 story and base, frame, \$10,000. Architect, Norman R. Coulter, 46 Kearny street, S. F. Owners, Selby School District. Will contain four class rooms, library and teachers' room. Interior finish pine. Central heating system, oil burning furnace. Exterior covered with cement plaster on metal lath. Plans being prepared.

LOS ANGELES, CAL.—School buildings, 3, 1 and 2 story, Class C construction, \$20,000. Architect, Norman F. Marsh, Broadway Central Bldg., L. A. Owners, Jefferson School District. Construction, reinforced concrete to first floor line and brick above. Interior finish pine with maple floors. Steam heat, oil burning system, vacuum cleaning and program clocks. Exterior, pressed brick and cement plaster. Plans being prepared.

Contracts Awarded.

SAN PEDRO, LOS ANGELES CO., CAL.—School, 2 story and base, brick, \$34,517. Architect, Lyman Farwell, Lankershim Bldg., L. A. Owners, City of San Pedro. Contractor, A. S. O'Neil, Lankershim Bldg., L. A. Contract price, \$34,517.

SEWERS, STREET WORK & WATER SYSTEMS.

CALIFORNIA—State Highway construction. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be opened on October 18th by the Highway Commission for construction in the following counties: Placer County, Lincoln to northern boundary, 9 miles, paved with Portland cement; Sonoma County, Reclamation to Fairville, 4.2 miles, graded; Mariposa County, from westerly

boundary to Cathay White Rock road, 10 miles, to be graded. Plans can be secured from the State Highway Commission in Sacramento or its branch offices in San Francisco or Los Angeles. An official proposal appears in another column of this issue.

SAN SALITO, MARIN CO., CAL.—Sewer work and sidewalk repair. Cost not stated. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. At the last meeting of the Board of Town Trustees the Town Engineer was instructed to prepare plans and specifications for the repair of the sewer on Locust street. The Town Engineer was also instructed to fix grades for sidewalks and streets on Lower San Carlos avenue.

VACAVILLE, SOLANO CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer Steiger, Vacaville. Owners, Town of Vacaville. The plans and specifications prepared by Town Engineer Steiger for the improvement of certain streets in Vacaville were adopted at the last meeting of the Trustees and the Clerk was instructed to advertise for bids. The plans provide for oiled macadam on Main street from gutter to gutter, while the gutters will be relaid and grouted (that is, the interstices will be filled up with cement, thus affording a smooth passageway for the water). Dobbins street from Main to Merchant, and Merchant street from Dobbins to Main will be similarly improved. The other streets along which the State Highway will pass through town will have a 15-foot roadway of rock in the center, over which will be placed a surface of oiled macadam, which will extend over the shoulders on each side for a distance of 2½ feet. Bush street from McClellan street to the depot will be similarly improved.

ROSEVILLE, PLACER CO., CAL.—Grade crossing, reinforced concrete, \$100,000. Engineer's name not given. Owners, Town of Roseville and Southern Pacific Co. The City Trustees are considering the matter of a subway at the Southern Pacific Railroad crossing in this city. The crossing at the present time is exceedingly dangerous and a blockade to traffic. C. M. Kipp, a local merchant, who is interested in the proposed work, has plans complete for the project, and these the Trustees will consider at their next meeting. The plans call for a structure 210 feet long and 80 feet for each incline and 80 feet level under the tracks, the inclines to have a grade of 6 per cent, and the bottom of the subway to be ten feet below the present level of the sidewalk. The plan calls for the raising of the railroad tracks for a distance of 2,000 feet each side of the crossing, placing them eight feet above the present grade. This would necessitate the raising of the station and all trackage.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has adopted plans and specifications for the construction of the big sewer system to be installed as a result of the bond election held in this city some time ago. The work consists of the construction of sanitary sewers in the southern part of

the city. A resolution was passed at the last meeting calling for bids on the work to be received October 1st. This particular portion of the work on which bids are now being received will cost approximately \$18,693.35, according to the estimates of the city engineer, and will be on South street, from East to Edison street, then west on South avenue to West street, and on McKinley avenue from South to Eighth street. The South avenue mentioned is a continuation of South street, from Edison to West street.

HOLTVILLE, IMPERIAL CO., CAL.—Water system extension. Cost not stated. Engineer, City Engineer, Holtville. Owners, Town of Holtville. The City Trustees have approved a plan submitted by property owners in block 112 to connect their homes with the city sewer system at their own expense. The sewer line is to be built by the property owners under their own contract, but under the supervision of the City Engineer.

UKIAH, MENDOCINO CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. The petition for the completion of the Navarro River project was recognized by the Supervisors last week and the County surveyor was ordered to make final surveys of the road to prepare for its construction.

OROVILLE, BUTTE CO., CAL.—Street paving, \$15,842. Engineer, City Engineer S. J. Norris. Owners, City of Oroville. City Engineer S. J. Norris has completed estimates for the Montgomery street pavement from Lincoln street to Fourth avenue, the cost of the work being placed at \$15,842. The average cost per square foot was 14.33 cents as compared with 14.4 cents for Bird street. The cost per lineal front foot was \$3.04 with 48 cents additional for street intersections. Bids on this work will soon be called for.

VISALIA, TULARE CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Visalia. Owners, City of Visalia. Bids are now being taken by the City Trustees for the improvement of West Main street, which will be paved to meet the State Highway. Bids close October 13th. Further information may be had from the City Engineer.

BAKERSFIELD, KERN CO., CAL.—Street pavement. Cost not stated. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. The Bellevue road for a distance of three miles from Oak street to the river bridge west, and Brundage lane from H street to the State Highway east, a distance of one mile, are to be paved by the Board of Supervisors. The pavement in each instance will be 16 feet in width, the specifications calling for roads similar to those on South D and South Chester avenue. Bids are now being taken on the work and will close October 8th, 10:30 a. m. Plans and specifications together with full information may be had from the City Engineer.

DAILY CITY, SAN MATEO CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer Kneese, Daily City. Owners, Daily City. At the meeting of the City Trustees last week En-

gineer Kneese presented plans and specifications for the Vista Grande District improvement. The work includes the construction of a storm sewer system, manholes, concrete curbing, cement sidewalks, asphalt and concrete paving and on the steep grades leading from Mission road on Knowles, Theta and Vista avenues vitrified brick will be installed. The cost of the work according to Kneese will be much lower than at first estimated. A resolution was adopted approving the plans for the work. Bids will soon be called for.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. The City Council at their meeting last week adopted a resolution for the construction of the east side sewer, and bids will be ordered shortly.

SAUSALITO, MARIN CO., CAL.—Street improvement, \$1,465. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Three bids were received by the Sausalito Trustees for the street work on West and Valley streets, all being in excess of the engineer's estimates of \$1,465. The bid of W. H. Cowen was \$1,885; Leech & De Camp, \$1,841; Milbourn & Murray, \$1,573. No check accompanied the latter bid. Action was deferred on the bids.

NAPA, NAPA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Napa. Owners, City of Napa. At the last meeting of the Napa City Council the following action was taken in the matter of street improvements. Resolutions of intention for improvement of Ash avenue from Union street to Grant avenue, on Clay from Jefferson to Madison, and for certain work on Jackson street, were adopted. Specifications for doing sewer work on Caymus street, also for work on Vallejo and Nursery streets were adopted and the work ordered done.

SACRAMENTO, CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Bids will be opened on October 5th for the improvement of Schley avenue from east line of 31st street to a point 35 feet east of east line of Yardley avenue, be improved by removing and disposing of all surplus and refuse material, grading the roadway and constructing thereon an asphalt pavement, consisting of a hydraulic concrete foundation four inches in thickness, an asphaltic cement flush coat, and a sheet asphalt wearing surface 1½ inches in thickness.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has approved plans and specifications and will receive bids until October 5th for the third installment of storm water sewers to be done under the 1915 sewer bond fund. The specifications deal with the eastern end of the city and sewers will be laid on East, Eugenia, Della, Locust and Cedar streets, Hazel avenue, A, B, C, D, E, and F streets, East Weber avenue, East Main, East Market, Washington, East Washington, Sonora and East Sonora streets. The City Engineer's estimate for the work is \$17,678.30, and the

money is payable from the storm water sewer 1915 fund.

REDWOOD CITY, SAN MATEO CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The attention of the Supervisors was called at the last meeting for immediate action in making provisions for taking care of the new poor farm road. It was ordered that the County Engineer be instructed to put a two-inch Topeka, or other standard top, 16 feet wide from the Halfmoon Bay road past the county hospital to the Belmont road, the money to be paid out of the sum heretofore set aside for the Hillsborough to Crystal Springs Lake road.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, San Luis Obispo. Owners, San Luis Obispo. The City Engineer has been instructed by the City Council to prepare the necessary plans and specifications for the improvement of Monterey street between Chorro and Broad streets. On completion of plans bids will be called for.

Contracts Awarded.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Street pavement. Cost not stated. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractors, F. R. Richie Co., Santa Barbara. Contract price not stated.

ARBUCKLE, COLUSA CO., CAL.—Street paving, \$5,574. Engineer, City Engineer, Arbuckle. Owners, City of Arbuckle. Contractors, Clark & Henery, Ochener Bldg., Sacramento. Contract price, \$5,574.

MARYSVILLE, BUTTE CO., CAL.—Sewer construction, \$13,500. Engineer, City Engineer, Marysville. Owners, City of Marysville. Contractors, Stanley & Ostrander, Sausalito. Contract price, \$13,500. Hewitt & Felch, Marysville, fill work at 42c per cubic yard.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer, South San Francisco. Owners, Town of South San Francisco. Contractor, F. R. Richie, Chronicle Bldg., S. F. Contract price not stated.

EUREKA, HUMBOLDT CO., CAL.—Street improvement, \$5,069. Engineer, City Engineer, Eureka. Owners, City of Eureka. Contractors, Mercer-Fraser Co., Eureka. Contract price, \$5,069.

MODESTO, STANISLAUS CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Modesto. Owners, City of Modesto. Contractors, Worswick Paving Co., Modesto. Contract price not stated.

VISALIA, TULARE CO., CAL.—Highway construction, \$13,800. Engineer, County Surveyor, Visalia. Owners, Tulare County. Contractor, J. E. Hines, Tulare. Contract price, \$13,800.

STORES AND OFFICES.

OAKLAND, CAL.—Stores and offices, 10 story and base. Class A construction. Cost not stated. Architect, August G. Headman, New Call Bldg., S. F. Owner's name withheld. Will contain several stores and about 110 offices. Steel frame, brick exterior walls. Interior finish pine and hardwood. Hol-

row tile interior partitions. Marble wainscot. Elevator service, steam heat and hot water system. Patent store fronts. Exterior faced with terra cotta. Plans being prepared.

OAKLAND, CAL.—Stores, 1 story, frame, \$2,000. Architect, none. Owner, Richard M. Lamb, Bureau of Licenses and Permits, City Hall, Oakland. Location, southeast corner of 15th and Market streets. Will contain two stores. Interior finish pine. Cement floor. Patent store fronts. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

Contracts Awarded.
OAKLAND, CAL.—Stores, 1 story and base, brick and steel, \$12,000. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owners, Hawley Investment Co., Location, 15th and Franklin streets. Contractor, F. A. Muller, Syndicate Bldg., Oakland. Contract price, \$12,000.

SEALED PROPOSALS

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 971—Proposals for Transformers, Electric Motor, Electric Cable and Wire, Fuses, Cutout Boxes, Conduits and Covers, Conduit, Cable Taps, Clusters, Copper Connectors, Cutouts, Push buttons, Sockets, Reflectors, Shades, Lamps, Switches and Attachments, Thermometers, Cable End Bells, Brass Screws, Lacquer and Varnish, Vulcanized Fibre and Cement or Fuller Board Paper.—Sealed proposals will be received at the office of the general purchasing officer, Panama Canal, Washington, D. C., until 10:30 a. m., October 8, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 971) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. P. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 969—Proposals for Hose, Packing, Rubber Valves, Gaskets, Cotton Canvas, Sheeting, Magnesia, Pipe Covering, Dust, Paint and Varnish, Brushes, Shovels, tool Handles, Cable Clips and Thimbles, Gasoline and Locomotive Torches, Brass, Copper and Red Rubber Tubing, Steel Tapes, Soft Steel, Cotters, Turnbuckles, Auger Bits, Wire Nails, Copper Tacks, Hooks and Eyes, Iron Clamps, Station Lamps, Lanterns, Bed Knobs, Gongs, Horseshoes, Brass and Copper Wire, Hinges, Hasps, Screws, Bolts, Binding, Shackles, Boat Spikes, Cylinder and Rectangular Valves, Leather Belting, Belt Lacing, Boiler Lagging, Iron or Steel Water Buckets, Mop Heads, Ladders, Water Closet Flaps, Metal Polish and Redwood and White Oak Lumber.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m., October 8, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 969) may be obtained from this office or the office of the as-

sistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. P. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR BATTLESHIPS.

BATTLESHIPS—Proposals for constructing by contract of two battleships, Nos. 13 and 14, will be received at the Navy Department until 12 o'clock noon, November 17, 1915, when they will be publicly opened. A circular of requirements for said vessels is now ready and plans and specifications for their construction will be ready September 20 for distribution among prospective bidders. Forms of proposal and contract may be had on application to the department after September 30. JOSEPHUS DANIELS, secretary of the navy.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 970—Proposals for Engine Lathe, Forcing Press, Bench Filing Machines, Valve Reseating Outfits, Bolt Heading and Straightening Rolls, Double Angle Shear, Plate Planer, Flanging Clamp, Pipe Machine, Hand Lever Punch, Metal Cutting Saw, Drill Press, Journal Bearings, Machine Bolts, Grip Nuts, Sarven Steel Wheels, Copper Wire, Copper, Steel and Brass Turning, Groove Valves, Brass Cocks, Horseshoe Nails, Cant Hooks, night Latches, Soap Polish, Manila Tags, Memorandum and Record Books, Paper and Crossed Lumber and Piles.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m., October 6, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 970) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR FURNITURE.

FURNITURE—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be received here until October 1, 1915, for installing furniture in the U. S. public buildings at Chico, Cal. For further information address the supervising architect.

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock P. M. on October 18, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:
Placer County, from Lincoln to Northern boundary (III-Pla-3-11), about 9 miles in length, to be paved with Portland cement concrete.
Sonoma County, from Reclamation to Fairview (IV-Son-S-A), about 4.2 miles in length, to be graded.
Mariposa County, from westerly boundary to Cathay-White Rock Road (VI-Mpa-18-A), about 10 miles in length, to be graded.
Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the

office of the Division Engineer of the division in which the work is situated. The Division Engineers' offices are located at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHADLIS D. BLANEY,
NEWELL D. DARLINGTON,
California Highway Commission.
AUSTIN B. FLETCHER,
Highway Engineer.
WILSON R. ELLIS,
Secretary. (*)
Dated: September 21, 1915.

PROPOSAL FOR BIDS.

BIDS are requested for the exterior of Benjaminide Wheeler Hall, University of California, Berkeley, California. Bids will be received on two bases: First, for granite; second, for cement finish on concrete.

Sealed bids may be received at the office of the Comptroller of the University of California, Berkeley, Calif., at or before 9 A. M., October 25, 1915, for complete exterior in cement plaster on concrete, as per plans, and specifications on file and obtainable after 9 A. M., October 9, 1915, at the Cashier's window in said office.

A deposit of \$50.00 will be required for each set of plans and specifications taken out, which deposit will be refunded upon return of said plans and specifications, accompanied by a regular bid for the work. No bids will be received unless accompanied by a certified check on bond in favor of the undersigned, equal to 10% of the bid, to secure execution of the contract by the successful bidder.

The right is reserved to reject any or all bids.
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA. (*)

PROPOSALS FOR CEMENT.

CEMENT—U. S. Engineering Office, 2nd District, Portland, Ore.—Sealed proposals for cement will be received here until October 7, 1915, and then opened. Further information on application.

PROPOSALS FOR THE SALE, WRECKING AND REMOVAL OF THE ILLINOIS STATE BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED PROPOSALS for the sale, wrecking and complete removal of the Illinois State Building at the Panama-Pacific International Exposition, at San Francisco, Cal., are asked by the Illinois Commission to the Panama-Pacific International Exposition.

Two proposals are desired, one to be for the sale, wrecking and complete removal of the building and fixtures, and the other for the sale, wrecking and complete removal of the building without lighting fixtures. Radiators are not to be included in proposals.

All proposals shall be securely sealed accompanied by a certified check for ten per cent (10%) of the amount of the proposal, and mailed as follows: "To Adolph Karpen, Chairman, Illinois Commission to the Panama-Pacific International Exposition, Suite 1110, Karpen Building, Chicago, Illinois." Proposals will be received up to and including noon of Tuesday, October 19, 1915.

ILLINOIS COMMISSION TO THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.
John G. Oglesby, Secretary. (*)

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

RESIDENCES—2, 2 story and base, frame, \$4,500 each. San Francisco. Architect, D. C. Coleman, Merchants' National Bank Bldg., S. F. Owner, M. Fisher, 683 Mission street, S. F. Location, Claremont Court. Each house will contain seven rooms, two baths and sleeping porches. Interior finish, pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Tile floors and wainscot in bath rooms. Automatic water heaters. Exterior covered with brick veneer and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,000. San Francisco. Architect, none. Owners, William Bahrs and J. B. Spaeth, 2645 McAllister street, S. F. Location, east 17th avenue north of Balboa. Will contain seven rooms, bath and sleeping porch. Interior finish, pine and hardwood veneer. Hardwood floors. Open fire place and tile mantel. Tile wainscot in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, J. S. McClelland, 530 12th avenue, S. F. Location, east 12th avenue south of Balboa. Will contain six rooms, bath and sleeping porch. Interior finish pine and hardwood veneer. Hardwood floors, open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,900. San Francisco. Architect, none. Owner, A. T. Morris, 501 11th avenue, S. F. Location, west 11th avenue north of Balboa. Will contain six rooms, bath and basement garage. Interior finish pine with some white enamel and hardwood floors. Open fire place and tile mantel. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, Oscar W. Thunberg, 678 9th avenue, S. F. Location, east 10th avenue north of Anza. Will contain seven rooms, baths and sleeping porch and basement garage. Interior finish, pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$6,000 each. San Francisco. Ar-

chitects, Falch & Knoll, Hearst Bldg., S. F. Owners, Eisenbach Co., Flatiron Bldg., S. F. Location, east Cherry north Sacramento. Will contain eight rooms each, two baths, sleeping porches and basement garages. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Interiors covered with cement plaster on metal lath. Plans complete and figures being taken.

RESIDENCE—1 story and base, frame, \$2,000. San Francisco. Architect, none. Owner, Carl Jorgensen, 767 Corbett avenue, S. F. Location, east Corbett avenue south of Moren. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, G. E. Gottschalk, Phelan Bldg., S. F. Owner, A. McBarnes. Location, east 47th avenue north of Cabrillo. Will contain five rooms, bath and sleeping porch. Interior finish pine with some elm panels. Hardwood floors. Open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCES—3, 2 story and base, frame, \$3,000. San Francisco. Architect, August G. Headman, New Call Bldg., S. F. Owner, Benj. Schloss. Location, 27th avenue and California streets. Will contain seven rooms, bath and sleeping porch. Interiors finished in pine, hardwood veneer and white enamel. Hardwood floors and open fire places. Mantels, tile and brick. Furnace heat. Bath rooms finished in tile. Automatic water heaters. Interiors covered with cement plaster on metal lath. Plans being prepared.

APARTMENT HOUSE—3 story and base, frame, \$11,000. San Francisco. Architect, none. Owner, Thomas Hamill, 268 25th avenue, S. F. Location, southeast corner Geary and 20th avenue. Will contain six suites of two and three rooms besides two stores. Interior will be finished in pine with some elm panels. Hardwood floors. Patent store fronts. Private baths and wall beds. Hot water system. Bath rooms finished in tile. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

APARTMENT HOUSES—2, 2 story and base, frame, \$10,800 each. San Francisco. Architect, none. Owner, F. W. Lurmann, 1246 Sacramento street.

Location, north Washinton street east of Leavenworth. Will contain a number of two and three room suites with wall beds and private baths. Interiors finished in pine and hardwood veneer. Hardwood floors. Steam heat, hot water system. Bath rooms finished in tile. Interiors covered with shipplap and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SCHOOL—1 story and base, brick and concrete, \$21,000. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Location, corner of Folsom street and Tompkins avenue. Will contain six class rooms and assembly hall. Interior finish, pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior faced with pressed brick. Plans being prepared.

FACTORY—4 story and base, reinforced concrete, \$200,000. San Francisco. Architect, Charles Peter Weeks, Mutual Bank Bld., S. F. Owner, John Bollman. Location, 4th and Brannan streets, covering a large ground area. Construction fireproof. Interior finish pine, hardwood in offices. Steam heat, elevator service, special machinery, hot water system and conveyor machinery. Hollow tile interior partitions. Metal window sash and frames. Fireproof doors. Exterior faced with cement plaster. Plans nearly ready for figures.

GARAGE—1½ story and base, Class C, \$10,000. San Francisco. Architect, Henry C. Smith, Humboldt Bank Bldg., S. F. Owner, Richard Glazier. Location, west Valencia south of 18th street, covering an area of 75 by 100 feet. Will contain storage space, office and machine shop. Interior finish pine. Cement floor. A considerable amount of special machinery will be installed. Exterior will be faced with cement plaster. Plans complete and figures being taken.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, J. Harold Johnson, 745 9th avenue, S. F. Location, west 15th avenue south of Anza. Will contain two flats of five and six rooms. Interior finish, pine and hardwood veneer. Hardwood floors, open fire places and tile or brick mantels. Automatic water heaters. Bath rooms finished in tile. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$1,000. San Francisco. Architect, none. Owner, Mrs. Marie Sterner, 1621 Lake street, S. F. Location, east 6th avenue north of Geary, covering an area of 25 by 66 feet. Will contain two flats of six rooms each. Interior finish, pine, hardwood veneer and white enamel. Hardwood floors. Open fire places and

tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with shiplap and cement plaster. Plans complete and work to be done by Day Labor.

FLATS — 2 story and base, frame, \$10,000. San Francisco. Architects, Fabre & Bearwald, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location, Bartlett near 26th street. Will contain four flats. Interior finish pine and elm panels. Some hardwood floors. Open fire places and tile mantels. Bath rooms finished in imitation tile. Automatic water heaters. Exterior covered with shiplap. Plans complete and figures being taken.

FLATS — 2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, A. M. Sylvia, 371 30th avenue, S. F. Location, east 20th avenue north of Anza, covering an area of 25 by 50 feet. Will contain two flats of five and six rooms. Interior finish pine and redwood. Hardwood floors. Open fire places and tile mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FLATS—3, 2 story and base, frame, \$5,000 each. San Francisco. Architects, Thomas & Oliver, Pantages Theatre Bldg., Oakland. Owner, Henry Lehfeldt. Location, south Filbert west of Steiner, covering an area of 25 by 64 feet. Each building will contain two flats of five and six rooms. Interiors finished in pine, elm panels and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with shiplap and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

LODGE HALL ALTERATIONS — \$4,000. San Francisco. Architect, W. H. Crim, Jr., 425 Kearny street, S. F. Owners, Independent Order of Foresters. Location, 1144 Market street. Work will consist of changing stairs, interior partitions and plastering. Plans being prepared.

APARTMENT HOUSE—6 story and base, brick and steel, \$150,000. San Francisco. Architect, J. C. Hladik, Monadnock Bldg., S. F. Owner's name withheld. Location, northeast corner Van Ness and McAllister. Will contain a total of 200 rooms arranged in two and three room suites. First floor arranged for nine stores and lobby. Interior finish pine, hardwood and ornamental plaster. Hardwood floors, tile bath rooms and wall beds. Patent store fronts. Steam heat, oil burning system, hot water supply and vacuum cleaning. Exterior faced with white glazed brick. Plans complete and figures being taken.

APARTMENT HOUSE—3 story and base, frame, \$25,000. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner's name withheld. Location, Jordan Park. Will contain 12 suites of four and five rooms. Interior finished in pine, red gum and hardwood. Hardwood floors, Wall beds, steam heat, oil burning furnace, hot water supply. Bath rooms finished in tile. Exterior brick veneer and cement plaster. Plans complete and figures being taken.

APARTMENT HOUSE—3 story and base, frame, \$15,000. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. Location Jones street north of Washington. Will contain six suites of four rooms each. Interiors will be finished in pine with some hardwood veneer and hardwood floors. There will be steam heat, oil burning system and hot water supply. Wall beds. Bath rooms finished in tile. Marble and tile wainscot. Exterior covered with cement plaster. Plans complete and figures being taken.

APARTMENT HOUSE—4 story and base, Class C construction. Cost not stated. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. Location northwest corner of Geary and Hyde streets, covering an area of 57½ by 87 feet. Will contain 68 suites of two and three rooms. Interior finish pine and hardwood with hardwood floors. Steam heat, oil burning plant, automatic elevator, hot water system and vacuum cleaning. Wall beds. Bath rooms finished in tile. Marble and tile wainscot. Exterior faced with cement plaster. Plans complete and figures being taken.

APARTMENT HOUSE—3 story and base, \$15,000. San Francisco. Architect, none. Owners, S. J. Sterner and C. M. Olson, 374 6th avenue, S. F. Location, northeast corner Pacific and Leavenworth, covering an area of 45 by 59½ feet. Will contain twelve suites. Interior finish pine, hardwood and white enamel. Hardwood floors. Steam heat, wall beds and tile bath rooms. Lobby finished in tile and ornamental plaster. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2, 2 story and base, frame, \$5,000 each. San Francisco. Architect, none. Owner, L. B. Ham, 1643 Lake street, S. F. Location, south California. Will contain two flats each. Interiors finished in pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Tile wainscot in bath rooms. Automatic water heaters. Exteriors covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FLATS — 2 story and base, frame, \$3,500. San Francisco. Architect, none. Owner, James H. Conner, 578 10th avenue, S. F. Location, south Cabrillo west of 11th avenue. Will contain two flats of five and six rooms. Interiors finished in pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$3,500. San Francisco. Architect, none. Owner, George McGruer, 55 Cumberland street, S. F. Location, west Connecticut north of 18th. Will contain two flats of five and six rooms. Interior will be finished in pine. Some hardwood floors and open fire places. Mantels will be of tile. Automatic water heaters. Exterior covered with shiplap. Plans complete and work to be done by Day Labor.

GARAGE—1 and 2 story and base, brick and steel, \$25,000. San Francisco. Architect, J. R. Miller, Lick Bldg., S. F. Owner, represented by Buckbee-Thorne Realty Co. Location southwest corner of Bush and Pierce streets, covering an area of 100 by 100 feet. Designed for a commercial garage. Concrete floor. Interior finish, pine. Steel gasoline storage tanks. Metal sash and frames. Exterior faced with stock brick. Plans complete.

REMOVING BUILDINGS—\$4,995. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Fred C. Jones presented the lowest bid at \$4,995 for removing the frame buildings on the old Tuberculosis Hospital site. He will be awarded the contract. A complete list of the figures received appears under the heading of San Francisco in this issue.

Contracts Awarded.

APARTMENT HOUSE—3 story and base, frame, \$14,000. San Francisco. Architect, Charles J. Rousseau, 46 Kearny street, S. F. Owner, James K. Fraser. Contractor, W. S. Fraser, 1209 11th avenue, S. F. Contract price, \$14,000.

Pringle-Dunn & Co.
Low On Barracks.

Seventeen Figures Received for Big
Mare Island Job—Contract to Be
Awarded Within Ten Days.

(By Special Wire.)

WASHINGTON, D. C., Sept. 25, 1915. —Seventeen sets of figures were opened today by the Bureau of Yards and Docks for the construction of a three-story and basement reinforced concrete barracks building to be erected at Mare Island Navy Yard. Pringle-Dunn & Co. presented the low figure at \$137,543. No official award of contract has been made. Following is a complete list of the bids as opened:

Mare Island Barracks.

Foster-Vogt Co.	\$143,387
Clinton Fireproofing Co.	164,000
Collman & Collman	167,940
C. Christensen	168,000
Teichert & Ambrose	161,500
William A. Newsum	143,477
Weich Bros. & Hannaman.....	152,774
Macrae & Layaz	173,655
W. N. Concanon Co.	174,277
Pringle-Dunn Co.	137,543
Lange & Bergstrom	147,948
McLaren & Peterson	146,551
P. A. Palmer	149,400
Van Sant-Houghton Co.	142,000
John Monk	168,735
Hert T. Owsley	166,932
Dan Gutleben	164,355

ENLARGING POWDER PLANTS.

The Atlas Powder Company, which recently purchased the plant of the Giant Powder Company at Giant, Contra Costa County, will expend \$500,000 in remodeling the plant.

A ten-year lease has been taken on tideland at Point Isabel, near Stege, Cal., by the Dupont Powder Company for the establishment of a vigorite plant to supply eastern markets. This

has been found necessary, according to officials, owing to overcrowding of the main plant at Hercules.

City Bids Opened.

Board of Works Receives Bids for Moving Buildings at Tuberculosis Hospital at Friday's Meeting.

The following bids were received at the Friday morning meeting of the Board of Public Works for moving buildings located at the Tuberculosis Hospital. F. C. Jones presented the low bid at \$1,995. Following is a list of the bids received:

Moving Hospital Buildings.

Frasier & Frasier.....	\$ 8,471
F. C. Jones.....	4,995
O. Monson.....	7,940
C. L. Wold Co.....	7,581
Peterson & Persson.....	6,300
John Grace.....	9,003
D. L. Bruce.....	10,950
Bay City Bldg. Co.....	6,995

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Amt.
2699	Fife	Sturges	400
2700	Beck	Smith	775
2701	Lerer	Olson	500
2702	Monson	Monson	1850
2703	Pacific G & E Co.	Owner	950
2704	Klutiz	Magnussen	400
2705	Bjors	Bjors	1500
2706	Feiling	Sanborn	800
2707	M & M Cafe.....	Brumfield	400
2708	Sundholm	Sundholm	400
2709	Shumates	Guilfoy	400
2710	Martina	Carson	3000
2711	Cailleaud	Conrad	9500
2712	Farquharson	Collman	6753
2713	Myers	Britt	8400
2714	Halligan	McArthur	3350
2715	Sylvia	Sylvia	3000
2716	Sosin	Sosin	400
2717	Olmo	Olmo	400
2718	Hmstd	Grahn	800
2719	Stern	Stern	4000
2720	Canton Bank	Urfer	400
2721	Jonsson	Johnson	5000
2722	Hamill	Hamill	8000
2723	Lenhart	Witzelsberger	2409
2724	Crossett	Johnson	4750
2725	Debenedetti	Trevia	12140
2727	Iambila	Spargo	3380
2728	Jenkins	Pockman	7700
2729	Hoertkorn	Hoertkorn	800
2730	Fisher	Fisher	4300
2731	Same	Same	4300
2732	McLelland	McLelland	2500
2733	Schmidt	Schmidt	1000
2734	Crown Oil	Brode	500
2735	Livio	Livio	800
2736	Bahrs	Spacht	2900
2737	McDiarmid	McDiarmid	600
2738	Morris	Morris	2900
2739	Heyman	Heyman	1950
2740	Gordon	Johnson	800
2741	Oliva	Seghier	500
2742	Jorgensen	Jorgensen	2000
2743	Thunberg	Thunberg	5000
2744	Cain	Cain	2000
2745	Hamilton	Welfrey	3350
2746	Guadalupe Rity	Greene	4425
2747	West	Born	10180
2748	Dorff	Carlson	1550

ADDITION

(2699) NO. 1105 LARKIN. Add room on roof; tar and gravel roof.	
Owner.....Ellen A. Fife, 401 Lake, San Francisco.	
Architect...None.	
Contractor...Benj. Sturges, 3931 Geary, San Francisco.	
	COST, \$400

(2700) NO. 914 MARKET. Tile floor and add mezzanine floor, etc.	
Owner.....C. M. Beck, 1035 Market, San Francisco.	
Architect...None.	

Contractor...A. H. Smith, 1665 Market, San Francisco.

COST, \$775

REPAIRS

(2701) NO. 391 ELEVENTH. Repair fire damage.	
Owner.....Jos. Lerer, Premises.	
Architect...None.	
Contractor...A. Olson, 289 Fell, S. F.	
	COST, \$500

FRAME DWELLING

(2702) W HOMESTEAD 135 N 25th. One and one-half-story and basement frame dwelling.	
Owner.....F. Monsen, 354 Sussex, San Francisco.	
Architect...None.	
Day's work.	COST, \$1850

ALTERATIONS

(2703) NO. 25 HYDE. Remove mezzanine floor and repair plumbing, etc.	
Owner.....Pacific Gas & Electric Co., 445 Sutter, San Francisco.	
Architect...None.	
Day's work.	COST, \$950

FRAME DWELLING

(2704) NO.1379 SILVER AVE. One-story and basement frame dwelling.	
Owner.....Mrs. Lena Klutz, Premises.	
Architect...None.	
Contractor...Gustave Magnusen, San Bruno.	
	COST, \$400

FRAME DWELLING

(2705) N SEARS 335 S Sicksles. One and one-half-story and basement frame dwelling.	
Owner.....Victor Bjors, 660 Waller, San Francisco.	
Architect...None.	
Day's work.	COST, \$1500

ALTERATIONS

(2706) E SEVENTH AVE 125 N California. Alter exterior and interior of dwelling.	
Owner.....W. F. Feiling, 123 7th Ave., San Francisco.	
Architect...None.	
Contractor...L. Sanborn, 71 7th Ave., San Francisco.	
	COST, \$800

ELECTRIC SIGN

(2707) NO. 702 FORTY-NINTH AVE. Electric sign.	
Owner.....M. & M. Cafe, Premises.	
Architect...None.	
Contractor...Brumfield Elec. Sign Co., 18 7th, San Francisco.	
	COST, \$400

ALTERATIONS

(2708) NO. 936 VERMONT. Raise and underpin dwelling.	
Owner.....H. Sundholm.	
Architect...None.	
Day's work.	COST, \$400

ERECT MARQUISE

(2709) NO. 74 POST. Erect marquise.	
Owner.....Shumates Pharmacy, Prem.	
Architect...W. H. Crim Jr., 425 Kearny San Francisco.	
Contractor...Guilfoy Cornice Works, 229 8th, San Francisco.	
	COST, \$400

FRAME RESIDENCE

(2710) S HAYES 193-3 W Central Ave 25x137-6; No. 1749 Hayes. Alterations and remodeling frame residence.	
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Owner.....P. J. Martina, 825 Monadnock Bldg., San Francisco.
Architect...J. C. Hladik, Monadnock Bldg., San Francisco.
Contractor...Otto Carson, 1919 Hayes, San Francisco.

Filed Sept. 18, '15. Dated Sept. 17, '15.
Weekly payments of..... 75%
Usual 35 days..... 25%
TOTAL COST not to exceed, \$3000
Bond, none. Limit, 45 days. Forfeit, \$5. Plans and specifications filed.
NOTE:—Contractor to receive 10%.

FRAME RESIDENCE

(2711) N SACRAMENTO 119-2 W Taylor N 120xW 27-6. Carpenter and electric work for two-story and basement frame residence and garage.
Owner.....Henry Cailleaud Jr., 936 Jackson, San Francisco.
Architect...Arthur J. Laib, Russ Bldg., San Francisco.
Contractor...Henry Conrad, 2854 Pine, San Francisco.

Filed Sept. 18, '15. Dated Sept. 18, '15.
Frame up, rustic on and gravel roof on\$1781.25
Brown coated 1781.25
Standing finish on 1781.25
Completed and accepted..... 1781.25
Usual 35 days..... 2375.00
TOTAL COST, \$5000.00
Bond, \$4750. Surety, Pacific Coast Casualty Co. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(2712) NO. 637 VAN NESS AVE. All work except elevator and electric work for alterations and additions to one-story and basement Class "C" building.
Owner.....Chas. D. Farquharson, 801 Van Ness Ave., S. F.
Architect...Smith O'Brien, Humboldt Bank Bldg., S. F.
Contractor...Collman & Collman Co., Sharon Bldg., S. F.
Filed Sept. 20, '15. Dated Sept. 10, '15.
All steel work erected and riveted\$2500.00
Completed and accepted..... 2564.75
Usual 35 days..... 1688.25
TOTAL COST, \$6733.00
Bond, \$3410. Sureties, Allen J. Kittle and J. J. McLeod. Limit, Oct. 20, 1915. Forfeit, \$20. Plans and specifications filed.

BRICK STORE BUILDING

(2713) SW TURK AND VAN NESS. All work except electric fixtures for one-story brick store building.
Owner.....A. A. Meyers, 533 Market, San Francisco.

Architect...None.
Contractor...O. W. Britt, 330 Ivy Ave., San Francisco.
Filed Sept. 20, '15. Dated Sept. 14, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$8400
Bond, \$4200. Surety, National Surety Co. Limit, Nov. 15, 1915. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

(2714) W TENTH AVE 209.3 N Cabrillo. All work for two-story and basement frame residence.
Owner.....Patrick J. and Mary H. Halligan, 43 Parsons, S. F.
Architect...None.
Contractor...H. E. and T. W. MacArthur

1560 Fell, San Francisco.
Filed Sept. 20, '15. Dated Sept. 8, '15.
Frame up\$37.50
Brown coated 837.50
Completed and accepted..... 837.50
Usual 35 days..... 837.50
TOTAL OCAST, \$3350.00
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME FLATS
(715) E TWENTYETH AVE 235 N Anza. Two-story and basement frame (2) flats.
Owner.....A. M. Sylva, 371 30th Ave. San Francisco.
Architect...None.
Day's work..... COST, \$3000

FRAME STORE
(716) W DE HARO 75 S 22nd. One-story frame store.
Owner.....John Sosin, 1022 De Haro, San Francisco.
Architect...None.
Day's work..... COST, \$400

ALTERATIONS
(717) NO. 3433 MISSION. Remodel store front and cement floor.
Owner.....Frank Olmo, 3460 Mission, San Francisco.
Architect...None.
Day's work..... COST, \$400

FRAME DWELLING
(718) W SAN JOSE AVE 75 S De Long. One-story and basement frame dwelling.
Owner.....Homestead Realty Co., 202 Mutual Bank Bldg., S. F.
Architect...None.
Contractor..Wm. H. Grahn, 2840 Bryant, San Francisco.
COST, \$1500

FRAME FLATS
(719) E SIXTH AVE 125 N Geary. Two-story and basement frame (2) flats.
Owner.....Mrs. Marie Sterner, 1621 Lake, San Francisco.
Architect...None.
Day's work..... COST, \$4000

ALTERATIONS
(720) NW CLAY AND KEARNY. Erect balcony in bank.
Owner.....Canton Bank, Premises.
Architect...None.
Contractor..Chas. E. Urfer, 555 Pine, San Francisco.
COST, \$400

FRAME FLATS
(721) W FIFTEENTH AVE 25 S Anza. Two-story and basement frame (2) flats.
Owner.....J. Harold Johnson, 745 9th Ave., San Francisco
Architect...None.
Day's work..... COST, \$5000

FRAME APARTMENTS, ETC.
(722) SE GEARY AND TWENTIETH AVE. Three-story and basement frame (6) apartments and stores.
Owner.....Thos. Hamill, 268 25th Ave San Francisco.
Architect...None.
Day's work..... COST, \$8000

ALTERATIONS
(723) N EIGHTEENTH, bet. Hattie and (Hoyer 25x87-6; Nos. 4632-34 18th. All work except glass, plumbing,

wall beds, shades, fixtures, painting, and finish hardware for alterations and additions to two-story frame building into apartments.
Owner.....Oliver E. and Sadie Lenhart, 1177 Sanchez, S. F.
Architect...L. M. Welsmann & Philipp Schwerdt, 852 Phelan Bldg., San Francisco.
Contractor..J. Witzelsberger, 110 Jessie, San Francisco.

Filed Sept. 21, '15. Dated Sept. 16, '15.
Rough frame up.....\$600
Brown coated 600
Completed 600
Usual 35 days..... 609
TOTAL COST, \$2409
Bond, \$1250. Sureties, Geo. F. Munk and Geo. Wollenschlager, Limit, without delay. Forfeit, none. Plans and specifications filed.

FRAME FLATS
(724) S LOMBARD 106-3 E Buchanan 25x137-6. All work except shades, mantels and gas and electric fixtures for three-story and basement frame flats.
Owner.....Stefano Crosetti, 1847 Lombard, San Francisco.
Architect...None.
Contractor..Paul De Martini, 2869 Octavia, San Francisco.
Filed Sept. 21, '15. Dated Sept. 20, '15.
Frame up and roof on.....\$1185
Brown coated 1185
Completed and accepted..... 1185
Usual 35 days..... 1195
TOTAL COST, \$4750
Bond, \$2400. Sureties, G. B. Cordano and A. P. Giannini. Limit, 90 days. Forfeit, none. Plans and specifications filed.

CONCRETE GARAGE
(725) E POWELL S2-6 S Union S 55x E 137-6. All work for one-story and basement reinforced concrete garage.
Owner.....Regina A. Mary L. and Irene R. Cuneo and Rose E. Dehendetti.
Architect...Havens & Toepke, 46 Kearny, San Francisco.
Contractor..Trevis & Pasqualetti, 32 Harwood Place, S. F.
Filed Sept. 21, '15. Dated Sept. 11, '15.
Foundations in walls and columns up to basement girder line.....\$2500
1st story, slab poured and finished with cement topping..... 2000
1st story walls up and trusses set and anchored 2500
Completed and accepted..... 2500
Usual 35 days..... 3035
TOTAL COST, \$12,140
Bond, \$6070. Sureties, G. Garassini and D. Trevis. Limit, 70 days from filing. Forfeit, \$10. Plans and specifications filed.

CLASS "A" BUILDING
(726) S SUTTER 115-9 E Powell S 137-6x E 43. Metal furring, lath and plaster, ornamental plaster and exterior cementing for eight-story Class "A" building.
Owner.....Pacific Gas & Electric Co., 455 Sutter, San Francisco.
Architect...Edgar A. Matthews, 251 Post, San Francisco.
Contractor..George MacGruer, 55 Cumberland, San Francisco.
Filed Sept. 22, '15. Dated Sept. 21, '15.
Rough coat on 1st, 2nd and 3rd stories.....\$2885
Rough coat on 4th, 5th and 6th

stories 3085
Rough coating of entire building completed 2235
Completed and accepted..... 4250
Usual 35 days..... 4152
TOTAL COST, \$16,607
Bond, \$8500. Surety, Maryland Casualty Co. Limit, reasonable diligence. Forfeit, none. Plans and specifications filed.

CONCRETE STORE BUILDING
(727) S GEARY 36 W Buchanan W 30x8 90. Excavating, concrete, electric wiring, carpentry, plastering, roofing, cementing, etc., for one-story reinforced concrete store building.
Owner.....Jules Lamba, 3151 26th, San Francisco.

Architect...Albert L. Lapachet, 110 Sutter, San Francisco.
Contractor..John Spargo, 240 Montgomery, San Francisco.
Filed Sept. 22, '15. Dated Sept. 20, '15.
Pouring easterly half of building is complete or equivalent...\$663.75
Easterly half building completed or equivalent 633.75
Pouring westerly half of building complete or equivalent... 633.75
Completed and accepted..... 633.75
Usual 35 days..... 845.00
TOTAL COST, \$3380.00
Bond, \$1690. Surety, National Surety Co. Limit, 60 days. Forfeit, \$5. Plans and specifications filed.

FRAME RESIDENCE
(728) W FORTY-EIGHTH AVE 261 N Balboa N 70xW 120. All work for two-story and basement frame residence.
Owner.....Horace and Josephine Jenkins, 7555 Geary, S. F.
Architect...None.
Contractor..Pockman & Co., Geary & 30th Ave., San Francisco.

Filed Sept. 22, '15. Dated Sept. 22, '15.
Frame up\$1925
Brown coated 1925
Completed 1925
Usual 35 days..... 1925
TOTAL COST, \$7700
Bond, none. Limit, 100 days from recording. Forfeit, none. Plans and specifications filed.

ALTERATIONS
(729) NO. 479 LOMBARD. Raise, move and add to dwelling.
Owner.....E. W. Hoertkorn, Premises.
Architect...None.
Day's work..... COST, \$800

FRAME DWELLING
(730) LOT 3 BLK 2984 Claremont Court. Two-story and basement frame dwelling.
Owner.....M. Fisher, 683 Mission, S. F.
Architect...D. C. Coleman, Merchants National Bank Bldg., S. F.
Day's work..... COST, \$1300

FRAME DWELLING
(731) LOT 34 BLK 2953, Claremont Court. Two-story and basement frame dwelling.
Owner.....M. Fisher, 683 Mission, S. F.
Architect...D. C. Coleman, Merchants National Bank Bldg., S. F.
Day's work..... COST, \$1300

FRAME DWELLING
(732) E TWELFTH AVE 25 S Balboa. Two-story and basement frame dwlg.

Owner.....J. S. McLelland, 530 12th Ave., San Francisco.
 Architect...None.
 Day's work. COST, \$2500

FRAME DWELLING

(2733) N WESTA 300 W Williams.
 One-story and basement frame dwlg.
 Owner.....C. Schmidt, 2500 San Bruno, San Francisco.
 Architect...None.
 Contractor...Edw. J. O'Connor, 551 Goettingen, San Francisco.
 COST, \$1000

SUPPLY STATION

(2734) E VALENCIA 150 N 24th. One story steel supply station.
 Owner.....Crown Oil Co., 247 Golden Gate Ave., San Francisco.
 Architect...None.
 Contractor...Brode Iron Works, 37 Hawthorne, San Francisco.
 COST, \$500

ALTERATIONS

(2735) NO. 2616 THIRD. Move and add to frame building.
 Owner.....G. Livio et al, 2536 Third, San Francisco.
 Architect...None.
 Day's work. COST, \$500

FRAME DWELLING

(2736) E SEVENTEENTH AVE 75 N Balboa. Two-story and basement frame dwelling.
 Owner.....Wm. Bahrs, 635 17th Ave., and J. B. Spaeth, 2645 McAllister, San Francisco.
 Architect...None.
 Day's work. COST, \$2900

FRAME DWELLING

(2737) W RUTLEDGE 105 E Alabama. One-story and basement frame dwlg.
 Owner.....W. G. McDiarmid, 394 Fair Oaks, San Francisco.
 Architect...None.
 Day's work. COST, \$600

FRAME DWELLING

(2738) W ELEVENTH AVE 350 N Balboa. Two-story and basement frame dwelling.
 Owner.....A. T. Morris, 501 11th Ave., San Francisco.
 Architect...None.
 Day's work. COST, \$2900

FRAME DWELLING

(2739) E THIRTY-FOURTH AVE 250 S Cabrillo. One-story and basement frame dwelling.
 Owner.....Oscar Heyman & Bro., 742 Market, San Francisco.
 Architect...None.
 Day's work. COST, \$1950

ALTERATIONS

(2740) S TWENTY-NINTH 80 W Castro. Alter and add to dwelling.
 Owner.....Frank Gordon, 2304 Castro, San Francisco.
 Architect...None.
 Contractor...A. T. Jannsen, 606 29th, San Francisco.
 COST, \$500

ALTERATIONS

(2741) N FILBERT 160 W Hyde. Alter garage.
 Owner.....G. V. Oliva, 2142 Larkin, San Francisco.

Architect...J. A. Porporato, 619 Washington, San Francisco.
 Contractor...A. Segherli & Bro., 35 Cook, San Francisco.
 COST, \$500

FRAME DWELLING

(2742) E CORBETT AVE 52-7 S Morgan Alley. One-story and basement frame dwelling.
 Owner.....Carl Jorgensen, 767 Corbett Ave., San Francisco.
 Architect...None.
 Day's work. COST, \$2000

FRAME DWELLING

(2743) E TENTH AVE 100 N Anza. One-story and basement frame dwlg.
 Owner.....Oscar W. Thunberg, 678 9th Ave., San Francisco.
 Architect...None.
 Day's work. COST, \$5000

FRAME FLATS

(2744) W TWENTY-FIRST AVE 75 N Irving. Two-story and basement frame (2) flats.
 Owner.....Michael Cain, 1277 21st Ave., San Francisco.
 Architect...None.
 Day's work. COST, \$2000

COTTAGE

(2745) E BRYANT 87-3 1/2 N Army N 25x100. Carpenter, plastering, painting, plumbing, electric work, etc., for one-story and basement cottage.
 Owner.....C. W. Hamilton.
 Architect...None.
 Contractor...John B. Woolfrey, 3168 21st, San Francisco.

Filed Sept. 23, '15. Dated Aug. 24, '15. Deed to Lot 729 of Gift Map No. 3 with improvements thereon, conveying an equity unencumbered at \$1300 subject to an agreement of sale dated June 23, 1914, conveying to Patrick Henry Quinlan.
 Previously acknowledged by contractor\$ 50
 On execution of agreement..... 400
 \$1600 in four equal payments as follows:

Frame up and roof on..... 400
 Brown coated 400
 Completed and accepted..... 400
 Usual 35 days..... 400
 TOTAL COST, \$3350

Bond, none. Limit, 50 days from Sept. 1, 1915. Forfeit, none. Plans and specifications filed.

FRAME FLATS

(2746) N GREEN 132-6 W Pierce W 32xN 52. All work except heating and painting for two-story and basement frame flats.
 Owner.....Guadalupe Realty Co.
 Architect...Wm. Mosser, Nevada Bk. Bldg., San Francisco.
 Contractor...W. E. Greene, 610 McAllister, San Francisco.

Filed Sept. 23, '15. Dated Sept. 17, '15. On 1st and 15th of each month 75%
 Usual 35 days..... 25%

TOTAL COST, \$4435
 Bond, \$2250. Sureties, J. H. McCallum and E. O. Benner. Limit, 65 days after notification. Forfeit, \$5. Plans and specifications filed.

DWELLING, ETC.

(2747) NE ANZA AND THIRTEENTH AVE N 50x E 120 O L 272. All work

for one-story basement and attic dwelling and 1-story office attached.
 Owner.....E. F. West.
 Architect...Edw. G. Bolles, 660 Market, San Francisco.

Contractor...S. A. Born Bldg., Co., 660 Market, San Francisco.

Filed Sept. 24, '15. Dated Sept. 22, '15. Foundation walls in.....\$1527
 Roof rafters on..... 1527
 Brown coated 1527
 Standing finish on..... 1515
 Completed and accepted..... 1527
 Usual 35 days..... 2545
 TOTAL COST, \$10,180

Bond, \$5100. Sureties, W. S. Oliver and Victor W. Winfrey. Limit, 95 days. Forfeit, none. Plans and specifications filed.

FRAME COTTAGE

(2748) W GRANADA 175 S Holloway. bein Lot 38 Blk 11, Lakeview. All work for one-story frame cottage.
 Owner.....Maria S. Dorff, 173 Granada, San Francisco.

Architect...None.
 Contractor...Gust Carlson, 66 Park, San Francisco.

Filed Sept. 24, '15. Dated Sept. 21, '15. Frame up\$337 50
 Brown coated 387 50
 Completed and accepted..... 387 50
 Usual 35 days..... 387 50
 TOTAL COST, \$1550 00

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

LEASE.

Sept. 20, 1915—NE TWENTY-SIXTH and Castro. Nicholas Tweitmann Jr to Henry Harde. Oct. 31, 1915. \$30 per month.
 Sept. 23, 1915—NO. 1446 POLK. Peter Tautphaus to Walter H Tautphaus and E J Haskins. 4 years 3 months. \$3060.
 Sept. 21, 1915—NE THIRD & TEHAMA SE 105 SE 80 SW 25 NW 50 SW 80 NW 30. Chas S Howard to B Tarrou. 36 months. \$7488.

NOTICE OF NON-RESPONSIBILITY.

Sept. 20, 1915—LOT 6 BLK "M" Additions to Castro Street Addition and Glen Park Terrace. Crocker Estate Co as to improvements on leased property..
 Sept. 21, 1915—E VALENCIA 150 N 24th N 50x E 50. Lillie H Coit as to improvements on leased property..

RELEASE OF BUILDING CONTRACT

Sept. 21, 1915—W FORTY-EIGHTH AVE 261 N Balboa N 70x W 120. Horace H Jenkins and Josephine or J Pearl Alford Jenkins with Pockman & Co. Released Sept. 21, 1915.

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED

Sept. 15, 1915—E STOCKTON 31-8 S Clay S 67-2x E 88-9. Louis Gassner to J B Ayers, Sibley Teaming Co, A Rasmussen, McGowan & Butler, Schrader Iron Works, Golden Gate Iron Works, Pope & Talbot, J P Lorden Mill Co, A H Leaf, H J Hughes, Vermont Marble Co, Geo

II Preston, Eureka Iron & Wire Works, II J Perazzi, Malott & Peterson, Joost Bros, Pioneer Plate & Window Glass Co, D Zellinsky & Son, American Elec Con Co, The Berger Mfg Co, Simplex Window Co, Santa Cruz Portland Cement Co, W & J Sloane and Ickelheimer Bros.Sept. 15, 1915
 pt. 15, 1915—W ELEVENTH AVE 75 S Balboa. G A Hall to whom it may concern.Sept. 13, 1915
 pt. 20, 1915—E KEARNY 89-4 S Green 31-4½x51. Biaggio Raglierio to F C Amoroso.Sept. 18, 1915
 pt. 20, 1915—S GEARY 65 E 20th Ave E 25xS 50. Thomas Hamill to whom it may concern.Sept. 16, 1915
 pt. 20, 1915—W TWENTY-SIXTH Ave 275 S Taraval (T) S 25xW 120. Lionel E Peyser to whom it may concern.Sept. 16, 1915
 pt. 20, 1915—E VERMONT 150 S Mariposa 25x100. Frank Kamblich to whom it may concern.Sept. 14, 1915
 pt. 20, 1915—NE CHURCH AND Army N 51-6xE 96. John G and Elizabeth Trapp to John Cerda.Sept. 20, 1915
 pt. 21, 1915—W NINETEENTH AV 275 N Fulton. William Corcoran to J Gillogley & Sons.Sept. 18, 1915
 pt. 21, 1915—N GOLDEN GATE Ave 192-6 W Polk. D Breslauer Est Co to whom it may concern.Sept. 20, 1915
 pt. 21, 1915—W TENTH AVE 634-9 N Balboa (B) N 23-3xW 95. James Welsh to whom it may concern.Sept. 18, 1915
 pt. 21, 1915—W EIGHTEENTH Ave 200 S Anza (A) S 25xW 120. James Welsh to whom it may concern.Sept. 18, 1915
 pt. 22, 1915—E FORTY-SIXTH AVE 225 N Judah N 50xE 120. Lazar Aydkovich to whom it may concern.Sept. 20, 1915
 pt. 22, 1915—E EIGHTEENTH AVE 75 S Geary. Nelson Bros to whom it may concern.Sept. 22, 1915
 pt. 22, 1915—E THIRTY-SIXTH Ave 125 S Anza S 25xE 120. George F and Lucy L Cleese to whom it may concern.Sept. 20, 1915
 pt. 22, 1915—NE UNION & MASON 25 on Mason by 57-6. P Valconesi and Grasso to Chlappe & Valconesi.Sept. 22, 1915
 pt. 22, 1915—N OAK 157-6 W Van Ness Ave W 89-9 N 120 E 68-9 S 40 E 21 S 80. The Young Men's Institute Hall Ass'n to Martin H Carrick.Sept. 15, 1915
 pt. 23, 1915—S MARKET 75 W 7th W 75xS 100. The Odd Fellows Hall Ass'n to R Dewar & Son.Sept. 20, 1915
 pt. 23, 1915—NW STOCKTON AND O'Farrell W 137-6xN 137-6. Hyman Bros Co to Thomas Elam & Son.Sept. 15, 1915
 pt. 23, 1915—SE SACRAMENTO & Maple S 102-8½xE 34-6. James Ryan to William Little.Sept. 23, 1915
 pt. 23, 1915—N WASHINGTON 137-6 W Octavia W 137-6x255-4½. Mary Louis Phelan to Foster-Vogt Co.Sept. 18, 1915
 pt. 23, 1915—E STOCKTON 85 N Greenwich N 25xE 97-6. Edward Gulot to F De Martini and L Seagle.Aug. 31, 1915

Sept. 24, 1915—SW PALOU AVE (16th Ave South) 25 SE Newhall (N 80) SE 25xSW 100. Benjamin H Miller to P H Madden.Sept. 23, 1915
 Sept. 24, 1915—E SCOTT bet. Green and Union 50x135. Maude James Graves to Vermont Marble Co.Sept. 18, 1915
 Sept. 24, 1915—VERMONT & 15TH in P N Biks 101, 131 and 132. Frank G Drum and Warren Olney Jr, receivers Western Pacific Railway Co to Manuel I Fires.Sept. 16, 1915
 Sept. 24, 1915—N SOTELLO AVE being SW Cor. Lot 21 BIK 251S, Forest Hill Court E 31.66 N 100 W 35 S 100 E 3.34 m or l; ptn Lots 20 and 21 BIK 251S, Forest Hill Court. The Newell-Murdoch Realty Co to Higginson Co.Sept. 24, 1915
 Sept. 24, 1915—S GEARY 104 E 40th Ave E 25xS 100. Jos Thos Hilzinger Sr to Fairfield & Mason.Sept. 23, 1915
 Sept. 24, 1915—W TWENTY-THIRD Ave 50 N Anza 25x80. D J Clancy to whom it may concern.Sept. —, 1915
 Sept. 24, 1915—N BALBOA 82-6 W 11th Ave W 25xN 100. Allie H Johnston to whom it may concern.Sept. 16, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

Sept. 16, 1915—SW CALIFORNIA & Powell S 275xW 206-3. Thomas Day Co, \$11,241.98; John Finn Metal Works, Cpn, \$927.77 vs L H Sly.\$130
 Sept. 22, 1915—W HARTFORD 201 S 19th S 25xW 125. L S Pierano (as Bishop & Peirano) vsUgo Arrigoni.\$400
 Sept. 23, 1915—S TURK 57-6 E Polk E 30xS 85. Rousseau & Rousseau, Inc vs John M Boscus.\$500
 Sept. 23, 1915—NE CHURCH AND Army N 51-6xE 96. G Palma and B Ghiotto (as Palma & Ghiotto) vs John G and Elizabeth Trapp and John Cerda.\$40.37

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

Sept. 8, 1915—SW CALIFORNIA AND Powell S 275xW 206-3. Holbrook, Merrill & Stetson, \$777.08; Pacific Hardware & Steel Co, \$7073.02; W P Fuller & Co, \$13,351.32; Wilson Bros & Co, \$6365.17; John A Roebling Sons Co, \$4258.24; Standard Portland Cement Cpn, \$9985.66 vs L H Sly.\$114.34
 Sept. 8, 1915—S McALLISTER 106-3 W Lyon W 25xS 137-6. W P Fuller & Co vs L Helbing and California Co-operative Real Est Co.\$76.72
 Sept. 10, 1915—E THIRTY-FIRST Ave 127 N Clement E 170xN 23; E 31st Ave 100 N Clement. The New Era Marble & Concrete Co vs Mrs J Wilcox and Mrs E M Adair and T Roy Murray.\$114.34
 Sept. 10, 1915—SW CALIFORNIA & Powell S 275xW 206-3. R V Kinney Co vs L H Sly.\$19,395.91
 Sept. 15, 1915—W TWENTY-FIRST Ave 124 N Irving N 25xW 120. Konkel & Anderson to Michael Cain and J H Sempel.\$114.34
 Sept. 17, 1915—SW CALIFORNIA & Powell S 275xW 206-3. Pacific

Mfg Co, \$11,489.62. Pacific Bldg Sept. 24, 1915—E TREAT AVE bet. 21st and 22nd; Nos. 803½, 805, 805½ and 807 Treat Ave. E E Sherman vs F Edward and Ford Motor Car Co.\$112.85
 Sept. 20, 1915—SW POWELL AND California W 206-3xS 275. Pacific Portland Cement Co Consolidated vs L H Sly.\$753.69
 Sept. 20, 1915—LOT 2 BLK 2340 Forest Hill Court. E D Bennett vs E M Reagh and J H Wade.\$23.50

OAKLAND AND ALAMEDA COUNTY.

RESIDENCE — 1 story and base, frame, \$1,500. Berkeley, Alameda Co., Cal. Architect, none. Owner, Z. M. Steves, 1827 Marin avenue. Location, southeast corner of Posen and Carlotta avenues. Will contain six rooms, bath and sleeping porch. Interior finish, pine and white enamel. Hardwood floors, open fire places and tile or brick mantels. Tile wainscot and floor in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE ALTERATIONS AND ADDITIONS—Frame, \$8,500. Berkeley, Alameda Co., Cal. Architect, F. Holberg Keimners, 2145 Shattuck avenue, Berkeley. Owner, W. W. Mackie. Location, Shasta street. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, Furnace heat, open fire place and tile or brick mantel. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, C. J. Pfrang, 5487 Claremont avenue, Oakland. Location, south 35th street west of Call. Will contain five rooms and bath. Interior finish pine, hardwood veneer and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owners, Collins Bros., 825 57th street, Oakland. Location, west 14th avenue south of Hampel. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

UNIVERSITY BUILDINGS—Class A construction. Cost as follows. Berkeley, Alameda Co., Cal. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. The next work to be undertaken at the University of California will be that of the second unit of the Agricultural Hall, costing approximately \$350,000. This will be followed by the construction of the new portions of the Doe Library, which will double the present size of that

structure and will cost about \$400,000. The new chemistry building will then be started. It is understood that these buildings will be placed under construction before the end of 1915. A second unit of the Agricultural Building group will be constructed north and west of Agricultural Hall. The exterior of the building will be of California granite, similar in type to Agriculture Hall. Historic chem pond will be the site of a new chemistry building, similar in type to the other buildings of the Hearst plan. Unusually large window space will be incorporated into the building plans, so that all the light possible will be utilized and laboratory conditions may be more ideal. The new building will not interfere with the existing buildings. The remaining \$400,000 will be used to complete the Doe Library. Two more stories and an attic are to be added. This will provide another reading room two-thirds the size of the present one, and addition similar and administration rooms. Space for additional book shelves to hold 700,000 volumes will also be provided.

SCHOOLS—1 and 2 story, brick and frame. Cost not given. Alameda, Alameda Co., Cal. Owners, City of Alameda. Architects as follows. The following architects have been selected by the Alameda Board of Education to prepare plans for additions and alterations to be made at several of the city's schools. Henry H. Meyers, Kohl Bldg., S. F., addition to the Washington School, frame and brick. Cost not stated. Cunningham & Politeo, First National Bank Bldg., S. F., 1 story and basement brick building for Lincoln School; addition to Everett School, and rehabilitation of the Porter School. Carl Werner, Phelan Bldg., S. F., associated with Charles E. H. Rogers, Kohl Bldg., S. F., 1 and 2 story brick building for Porter School. Further mention will be made of the work when bids are called.

BRIDGE REPAIRS—\$1,350 and \$2,500. Oakland, Cal. Engineer, County Surveyor, Oakland. Owners, Alameda County. Bids will shortly be advertised by the Supervisors for the construction of an asphaltic mastic or alternate surfacing on the Calaveras Creek and the Bay Farm Island bridges.

LIBRARY—2 story and base, brick and steel, \$35,000. Oakland, Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, City of Oakland. Will contain two reading rooms, assembly hall and stack room. Interior finish pine and hardwood with maple floors. Steam heat, oil burning furnace and vacuum cleaning. Metal book stacks. Exterior faced with pressed brick. Plans complete and figures being taken. Bids close on October 5th.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, E. L. Higgins, 5250 Miles avenue, Oakland. Location west Thomas street. Will contain five rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile. Imitation tile in bath. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, John A. Bischoff, 6015 Harwood avenue, Oakland. Location, east 16th street east of Colby. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

STORES AND OFFICES—10 story and base. Class A construction. Cost not stated. Oakland, Cal. Architect, August G. Headman, New Call Bldg., S. F. Owner's name withheld. Will contain several stores and about 110 offices. Steel frame, brick exterior walls. Interior finish pine and hardwood. Hollow tile interior partitions. Marble wainscot. Elevator service, steam heat and hot water system. Patent store fronts. Exterior faced with terra cotta. Plans being prepared.

STORES—1 story, frame, \$2,000. Oakland, Cal. Architect, none. Owner, Richard M. Lamb, Bureau of Licenses and Permits, City Hall, Oakland. Location, southeast corner of 35th and Market streets. Will contain two stores. Interior finish pine. Cement floor. Patent store fronts. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

Contracts Awarded.

STORES—1 story and base, brick and steel, \$12,000. Oakland, Cal. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owners, Hawley Investment Co. Location, 15th and Franklin streets. Contractor, F. A. Muller, Syndicate Bldg., Oakland. Contract price, \$12,000.

Building Contracts Awarded Oakland

No.	Owner.	Contractor	Amt.
1914	McCausland	Owner	1500
1915	Eva Estate	Henri	515
1916	Hannan	Whalin	1000
1917	Hoyt	Fake	500
1918	Patton	Patton	3500
1924	Bishop	Bishop	1500
1925	Marsh	Marsh	15000
1927	Helmere	Harris	1100
1928	Old Invest	Tuttle	1500
1930	Cal Steel	Landgren	800
1931	Pfrang	Pfrang	2500
1932	Collins	Collins	2500
1933	Taylor	Taylor	1500
1934	St. George Hall	Imperial	500
1935	Sunol	Sampson	500
1936	Kerr	Kerr	400
1937	Shields	Wieben	1750
1938	Fulchers	Granger	2500
1941	Shotwell	Shotwell	400
1945	Moffitt	Wm Iron	41000
1949	Davis	Davis	400
1950	Fannolia	Davis	400
1951	Turner	Turner	400
1952	Ellis	Graff	3000
1953	Moore	Moore	1500
1954	Lemon	Lehman	2875
1955	Hyman	Boehrer	5000
1957	Waters	Allan	1360
1963	Sommarstrom	Owner	500
1965	Ellis	Graff	3000
1966	Lennon	Lehman	2875
1967	Somps	Woodard	3500
1968	McCausland	Owner	1500
1969	Jones	Smith	2000
1970	Mayer	Nelson	600
1971	Higgins	Higgins	2000
1972	Bischoff	Bischoff	2000
1973	Tutt	Dingwell	1360
1974	Hitchens	Andersen	1550

DWELLING

(1914) N SANTA RITA AVE 225 E

38th Ave., Oakland. One-story 5-room dwelling.

Owner.....Martha McCausland, 3936 Santa Rita Ave., Okd.

Architect....None.

Day's work. COST, \$1500

REPAIRS

(1915) NO. 1007 BROADWAY, Oakland
Roof repairs.

Owner.....Jas. Eva Estate.

Architect....None.

Contractor...L. Henri, 2168 Mission, San Francisco.

COST, \$515

DWELLING

(1916) N E-TWENTY-SEVENTH 30 W
Vallejo, Oakland. One-story three-room dwelling.

Owner.....Mary E. Hannan, 1398 E-27th, Oakland.

Architect....None.

Contractor...W.E. Whalin, 565 16th, Oakland.

COST, \$1000

ALTERATIONS

(1917) S BOULEVARD 40 E 98th Ave., Oakland. Alterations.

Owner.....Geo. Hoyt, 807 San Mateo Ave., Berkeley.

Architect....None.

Contractor...W. H. Fake, 1640 25th Ave. Oakland.

COST, \$500

DWELLING

(1918) E HEARN 220 S 59th, Oakland.
Two-story 7-room dwelling.

Owner.....H. P. Patton, 2906 Telegraph Ave., Oakland.

Architect....None.

Day's work. COST, \$3500

DWELLING

(1924) E ADAMS 100 S Washington, Albany. One-story 5-room dwelling.

Owner.....James P. Bishop.

Architect....None.

Day's work. COST, \$1500

DWELLING

(1925) W ORDWAY 350 N Polden, Albany. One-story 5-room dwelling.

Owner.....C. L. Marsh.

Architect....None.

Day's work. COST, \$1500

DWELLING

(1927) E THIRTY-EIGHTH AVE 250 N Kansas, Oakland. One and one-half story 5-room dwelling.

Owner.....Mrs. Mary Helmere, 3720 38th Ave., Oakland.

Architect....None.

Contractor...F. L. Harris, 4220 Kanning, Oakland.

COST, \$1000

DWELLING

(1928) N HOPKINS 76 W 39th Ave., Oakland. One-story 4-room dwelling

Owner.....Oakland Investment Co., Bacon Bldg., Oakland.

Architect....None.

Contractor...P. M. Tuttle, 1369 57th Ave. Oakland.

COST, \$1500

BRICK OFFICE

(1930) SW SECOND AND HARRISON, Oakland. One-story brick office.

Owner.....California Steel Co., Prem

Architect....None.

Contractor..Lindgren Co., Monadnock Bldg., San Francisco.
COST, \$300

DWELLING

931) S FIFTY-EIGHTH 70 W McCall Oakland. One-story 5-room dwelling.
Owner.....C. J. Pfarr, 5437 Claremont Ave., Oakland.

Architect...None.
Day's work. COST, \$2500

DWELLING

932) W FOURTEENTH AVE 300 S Hampel, Oakland. One-story 6-room dwelling.

Owner.....Collins Bros., 825 57th, Oakland.

Architect...None.
Day's work. COST, \$2500

DWELLING

933) E VALLEY 160 S Channing Way, Berkeley. One-story 5-room dwelling.

Owner.....W. N. Taylor, Centralia, Washington.

Architect...None.
Contractor, J. G. Taylor, 1512 Curtis, Berkeley. COST, \$1500

CEMENT FLOOR

934) SE TWENTY-FIFTH AND Grove, Oakland. Cement floor.

Owner.....St. George Hall Association Premises.

Architect...None.
Contractor..Imperial Co., 183 Stevenson, San Francisco. COST, \$500

SHOP

935) W SEVENTEENTH AVE 100 N E-15th, Oakland. One-story shop.

Owner.....A. Sunol, 1639 E-15th, Okd.

Architect...None.
Contractor..S. P. Sampson, 1627 E-16th, Oakland. COST, \$500

DWELLING

936) S AILEEN 186 W Adeline, Oakland. One-story 2-room dwelling.

Owner.....John J. Kerr, 919 Aileen, Oakland.

Architect...None.
Day's work. COST, \$400

DWELLING

937) N LOGAN 500 W Fruitvale Ave., Oakland. One-story 5-room dwelling.

Owner.....Alexander Shields, 2622 34th Ave., Oakland.

Architect...None.
Contractor..Alex C. Wieben, 2010 38th Ave., Oakland. COST, \$1750

DWELLING

938) SE DESMOND & HEMPEL Court, Oakland. One-story 7-room dwelling.

Owner.....Roy Fulcher, 5011 Webster, Oakland.

Architect...None.
Contractor..I. L. Granger, 1219 Monterey Ave., Berkeley. COST, \$2500

ALTERATIONS

941) W WILSON AVE 175 S Montana Oakland. Fire repairs and alter.

Owner.....S. Shotwell, 2640 Harold, Oakland.

Architect...None.
Day's work. COST, \$400

CLASS "A" THEATRE

(1945) S ELEVENTH 125 E Broadway E 175xS 100, Oakland. Cast iron and steel work for Class "A" theatre.

Owner.....James Moffitt Est Co., 1st National Bank Bldg., Okd.

Architect...Cunningham & Politeo, 1st National Bank Bldg., S. F.

Contractor..Western Iron Works, 141 Beale, San Francisco.

Filed Sept. 21, '15. Dated Sept. 17, '15. 1st and 15th of each month..... 75%

Usual 35 days..... 25%

TOTAL COST, \$41,000
Bond, \$20,500. Surety, New Amsterdam Casualty Co. Limit, 110 days. Forfeit, \$100. Plans and specifications filed.

ALTERATIONS

(1949) NO. 461 E-TWENTY-EIGHTH, Oakland. Alterations.

Owner.....Wm. Davis, Premises.

Architect...None.
Day's work. COST, \$400

ALTERATIONS

(1950) NO. 1090 TENTH, Oakland. Alterations.

Owner.....Mrs. M. F. Annola, Prem.

Architect...None.
Contractor..A. L. Davis, Oakland. COST, \$400

GARAGE

(1951) NO. 255 TERRACE, Oakland. Garage.

Owner.....F. C. Turner, Premises.

Architect...None.
Day's work. COST, \$400

DWELLING

(1952) E GLENDORA 800 W Greenwood Ave., Oakland. One and one-half-story 6-room dwelling.

Owner.....G. Ellis, Top Floor Syndicate Bldg., Oakland.

Architect...None.
Contractor..Edwin C. Graff, 306 Syndicate Bldg., Oakland. COST, \$3000

DWELLING

(1953) E SIXTIETH AVE 130 N Football Blvd., Oakland. One-story five-room dwelling.

Owner.....Moore & Thomas, 2495 62d Ave., Oakland.

Architect...E. Chick, 73-75 Sutter, San Francisco.

Day's work. COST, \$1500

FLATS

(1954) E WEBSTER 40 N 44th, Oakland. Two-story 10-room flats.

Owner.....Mark and Gertrude M. Lemon, 1109 Oak, Oakland.

Architect...None.
Contractor..J. Lehman, 959 Apgar, Oakland. COST, \$2875

FRAME APARTMENTS

(1955) E LINDEN 139 1/2 N Tenth N 60x125, Oakland. All work for two-story frame apartments.

Owner.....Joe A. Hyman, 1239 Chestnut, Oakland.

Architect...J. Henry Bohrer, Delger Bldg., Oakland.

Contractor..J. Henry Bohrer and Alfred Legault, Delger

Filed Sept. 22, '15. Dated Sept. 22, '15.

Itastic on 1/4
Bldg., Oakland.

Brown coated 1/4

Completed 1/4

Usual 35 days..... 1/4

TOTAL COST, \$5000
Bond, \$2500. Surety, Southwestern Surety Insurance Co. Limit, none.

Forfeit, \$2. Plans and specifications filed.

FRAME STORES

(1957) SE THIRTY-EIGHTH AVE & NE Penniman Ave SE 30xNE 100.24, Oakland. All work for one-story frame (2) stores.

Owner.....Lawrence & Lena Waters, 4029 Allendale Ave., Okd.

Architect...Hutchinson & McLean, 470 13th, Oakland.

Contractor..Martin Allan and E. J. Coleman, 3027 Magnolia, Oakland.

Filed Sept. 22, '15. Dated Sept. 21, '15.

Roof on 1/4

Brown coated 1/4

Completed 1/4

Usual 35 days..... 1/4

TOTAL COST, \$1360
Bond, \$650. Surety, Wm. R. Daingerfield. Limit, 35 days. Forfeit, none.

Plans and specifications filed.

REPAIRS

(1963) S E-SEVENTH, foot Fourth Ave., Oakland. Fire repairs.

Owner.....Sommarstrom Bros., 202 E-12th, Oakland.

Architect...None.
Day's work. COST, \$500

DWELLING

(1915) N GLENDORA 800 W Greenwood Ave., being Lot 17 Blk 8 4th Ave Heights Tract, Oakland. All work for one-story dwelling.

Owner.....George and Ruth Smith Ellis, Top Floor Syndicate Bldg., Oakland.

Architect...None.

Contractor..Edwin C. Graff, 306 Syndicate Bldg., Oakland.

Filed Sept. 23, '15. Dated Sept. 20, '15.

Frame up \$650

Brown coated 650

Completed 650

Usual 35 days..... 750

TOTAL COST, \$3000
Bond, none. Limit, 90 days after Sept. 1. Forfeit, none. Plans and specifications filed.

NOTE:—1st report Sept. 23, No. 1952.

FLATS

(1960) E WEBSTER 36 N 44th N 36x E 100, Oakland. All work for two-story 10-room flats.

Owner.....Mark and Gertrude M. Lennon, 1109 Oak, Oakland.

Architect...None.

Contractor..John Lehman, 959 Apgar, Oakland.

Filed Sept. 23, '15. Dated Sept. 20, '15.

Frame up \$718

Plastered 718

Completed 718

Usual 35 days..... 721

TOTAL COST, \$2875
Bond, none. Limit, 90 days after Sept. 23. Forfeit, none. Plans and specifications filed.

DWELLING

(1967) E LAKE SHORE AVE 70 N Rosal, Oakland. Two-story 7-room dwelling.

Owner.....M. Soms, Oakland.
 Architect...None.
 Contractor..E. W. Woodard, 4031
 Brighton Ave., Oakland.
 COST, \$3500

DWELLING

(1968) N SANTA RITA 180 E 35th
 Ave., Oakland. One-story 5-room
 dwelling.

Owner.....Martha McCausland, 3930
 Santa Rita Ave., Oakland.

Architect...None.
 Day's work. COST, \$1500

DWELLING

(1969) N BROOKDALE 100 E Lilac,
 Oakland. One-story 6-room dwlg.
 Owner.....W. C. Jones, Oakland.

Architect...None.
 Contractor..O. G. Smith, 4402 Brook-
 dale Ave., Oakland.
 COST, \$2000

ALTERATIONS

(1970) NO. 2522 NINETEENTH AVE.,
 Oakland. Alterations.

Owner.....J. J. Mayer, Premises.
 Architect...None.
 Contractor..Christ Nelsen, 3452 Cham-
 pion, Oakland.
 COST, \$600

DWELLING

(1971) W THOMAS 300 S Prospect,
 Oakland. One-story 6-room dwlg.
 Owner.....E. L. Higgins, 3250 Miles
 Ave., Oakland.

Architect...None.
 Day's work. COST, \$2000

DWELLING

(1972) S SIXTY-FIRST 300 E Colby,
 Oakland. One-story 6-room dwlg.
 Owner.....John A. Bischoff, 6045
 Harwood Ave., Oakland.

Architect...None.
 Day's work. COST, \$2000

FRAME GARAGE

(1973) NO. 288 PARK VIEW AVE.,
 Oakland. One and one-half-story
 frame garage.

Owner.....E. R. Tutt, Premises.
 Architect...None.
 Contractor..J. H. Dingwell, 2006 West,
 Oakland.
 COST, \$1800

(1974) E MARKET near 42nd, Oak-
 land. All work for two-story 7-room
 dwelling.

Owner.....Mr. and Mrs. R. Hitchens,
 Linden and 41st, Oakland.

Architect...None.
 Contractor..J. W. & A. Andersen, 821
 16th, Oakland.

Filed Sept. 23, '15. Dated Aug. 25, '15.
 Frame up 1/4
 Plastered 1/4
 Completed 1/4
 Usual 35 days..... 1/4

TOTAL COST, \$1880

Bond, none. Limit, 60 days. Forfeit,
 none. Plans and specifications filed.

Building Contracts Awarded

Berkeley.

No.	Owner	Contractor	Amt.
1919	Brewer	Woolfrey	2000
1920	Lehfeldt	Lehfeldt	1500
1921	Same	Same	1500
1922	Same	Same	1500
1923	Sinclair	Sinclair	2500
1926	Smith	Smith	1000

1929	Nichols	Patton	1451
1939	Anderson	Patrich	4500
1940	Madden	Tupper	3000
1942	Holsclan	Winchester	400
1943	Noble	Tupper	400
1944	Stevens	Patton	2500
1956	Alcatraz Imp	Kidder	400
1958	Rueble	Anderson	500
1959	Anderson	Anderson	1500
1961	Berg	Donaldson	600
1962	Hall	Hall	1700
1964	Andrew	Baker	665

DWELLING

(1919) SW MILVIA AND DELAWARE,
 Berkeley. One-story 5-room dwlg.
 Owner.....Freda Brewer, 542 San
 Bruno Ave., S. F.

Architect...None.
 Contractor..John B. Woolfrey, 10 Bart-
 lett, San Francisco.
 COST, \$2000

FRAME DWELLING

(1920) W SACRAMENTO 65 S Francisco
 Berkeley. One-story 5-room frame
 dwelling.

Owner.....Henry A. Lehfeldt, 622
 Mills Bldg., San Francisco.

Architect...None.
 Day's work. COST, \$1500

FRAME DWELLING

(1921) SW SACRAMENTO & FRAN-
 cisco, Berkeley. One-story 5-room
 frame dwelling.

Owner.....Henry A. Lehfeldt, 622
 Mills Bldg., San Francisco.

Architect...None.
 Day's work. COST, \$1500

DWELLING

(1922) W SACRAMENTO 30 S Francisco
 Berkeley. One-story 5-room dwlg.
 Owner.....Henry A. Lehfeldt, 622
 Mills Bldg., S. F.

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

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 Day's work. COST, \$1500

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 Day's work. COST, \$1500

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 Day's work. COST, \$1500

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 Day's work. COST, \$1500

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 Day's work. COST, \$1500

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 Day's work. COST, \$1500

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 Day's work. COST, \$1500

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 Day's work. COST, \$1500

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 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

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 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

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 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Architect...None.
 Day's work. COST, \$1500

Berkeley. Alter two-story dwelling
 into 4 4-room apartments.
 Owner.....Margaret Madden, Prem.
 Architect...L. F. Hyde, Oakland.
 Contractor..Thad M. Tupper, 2310 Ru-
 sell, Berkeley.
 COST, \$300

ADDITION

(1942) NO. 2300 DURANT, Berkeley
 Addition.

Owner.....Mrs. J. S. Holsclan, Prem.
 Architect...None.

Contractor..C. A. Winchester, 29
 Shattuck Ave., Berkeley.
 COST, \$4

ADDITION

(1943) NO. 2224 PIEDMONT AVENUE,
 Berkeley. Addition.

Owner.....Chas. H. Noble, Premises.
 Architect...None.

Contractor..Thad M. Tupper, 2310 Ru-
 sell, Berkeley.
 COST, \$4

DWELLING

(1944) SE POSEN AVE & CARLOTTA
 Berkeley. One-story 6-room dwlg.
 Owner.....Z. M. Stevens, 1827 Mar-
 Ave., Berkeley.

Architect...None.
 Day's work. COST, \$25

ALTERATIONS

(1956) SE ALCATRAZ AVE AND
 Adeline, Berkeley. Alterations at
 additions three-story brick stor-
 and rooms.

Owner.....Alcatraz Improvement Co.
 Architect...None.

Contractor..George W. Patton, 212
 Emerson, Berkeley.

Filed Sept. 22, '15. Dated Sept. 21, '15.
 Temporary partition in place and
 2nd floor raised 9 inches..... \$362

Concrete work completed..... 362

Completed 362

Usual 35 days..... 362

TOTAL COST, \$1451

Bond, \$125.50. Surety, American Sur-
 Co. Limit, 40 days. Forfeit, \$10. Plans
 and specifications filed.

ALTERATIONS

(1958) NO. 2205 MCKINLEY, Berkeley.
 Alterations.

Owner.....George Rueble, Berkeley.
 Architect...None.

Contractor..Kidder & McCullough, 2
 Addison, Berkeley.
 COST, \$

SHOP

(1959) N CHANNING 150 E San Pa-
 Ave., Berkeley. One-story shop.

Owner.....Emil Anderson, 1126 Du-
 ware, Berkeley.

Architect...None.
 Day's work. COST, \$

DWELLING

(1960) N CHANNING WAY 150 E
 Pablo Ave., Berkeley. One and one-
 half-story 5-room dwelling.

Owner.....Emil Anderson, 1126 Du-
 ware, Berkeley.

Architect...None.
 Day's work. COST, \$

STORE

(1961) N RUSSELL 80 W Grant, Berke-
 ley. One-story 1-room store.

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED AMOUNT

Sept. 11, 1915—NOS. 1755-57 TACOMA Ave W about 200 N Laurel Lane, Bkly. Cornelia Taber to Frank A Ernsberger.....Sept. 10, 1915
Sept. 11, 1915—E COLLEGE AV 102-5 intrn ln Derby with E line College Ave 110, Bkly. Lina Dabney to C L Wold & Co.....Sept. 10, 1915
Sept. 11, 1915—E COLLEGE AVE 52 S intrn S line Derby with E line College Ave E 110xN 52, Bkly. Lina Dabny to C L Wold & Co.....Sept. 10, 1915
Sept. 13, 1915—NE 38.34 and NE 170.73 Lot 14 Ardsley Heights, Okd. (as recorded). C J Plunkett to W R Oakley.....Sept. 13, 1915
Sept. 13, 1915—N MARIN AVE 55 N Modoc, Oakland Tp. J S Killam to M P Brach.....Sept. 11, 1915
Sept. 14, 1915—N FORTIETH 90 E Broadway E 35xN 50, Okd. Mrs M E Streiff to Leo L Nichols.....Sept. 14, 1915
Sept. 14, 1915—S DAVIS 325 W Peralta Ave W 50xS 123, Okd. Hilda Blumann to Jos Flittner.....Sept. 14, 1915
Sept. 15, 1915—SE GROVE & ASHBY Ave 26x86, Bkly. Mabel H Chandler to Frank A Ernsberger.....Sept. 13, 1915
Sept. 15, 1915—LOT 44 BLK "F" Map Northbrae Terrace, Bkly. A I and Minnie Potter to Frank Button.....Sept. 14, 1915
Sept. 16, 1915—N CHANNING WAY 500 W Ellsworth W 105xN 50, Bkly. Maud E Kimball to E L Malsbary.....Sept. 15, 1915
Sept. 16, 1915—NO. 3730 PATTERSON Ave, Oakland. Laura Pedersen to Howard Neihken.....Sept. 15, 1915
Sept. 17, 1915—SE TAFT AVE 79.44 SW Broadway SW 40 SE 70 NE 28.65 N to pt intersected by line drawn SE from pt begin at at r a to Taft Ave NW to pt beg, Okd. E D Woodward to Anthony & Heyer.....Aug. 25, 1915
Sept. 17, 1915—PROPERTY CALLED "The Hacienda" near Pleasanton. Mrs P A Hearst to Chas A Bruce.....Sept. 10, 1915
Sept. 18, 1915—N CALIFORNIA, bet. Maple and Laurel, being SE 30 Lot 34 and NW 15 Lot 35 Map Key Route Acres, Okd. Loike Zwaal to L Zwaal.....Sept. 1, 1915
Sept. 18, 1915—LOT 12 Map Tract B Berkeley L T I Ass'n, Bkly. California Cured Fruit Exchange to Decker Elec Constr Co, Sept. 10; Wittman, Lyman & Co.....Sept. 10, 1915
Sept. 20, 1915—LOT 6 BLK 2 Map Sbdvn Fruitvale Heights, Okd. J B Clifford to whom it may concern.....Sept. 4, 1915
Sept. 21, 1915—FTN LOT 52 Map Bowie Pty, Piedmont. Maude Cords to Alfred Cords.....Sept. 21, 1915
Sept. 21, 1915—E CRESTA BLANCA Road about 3 miles S Town of Livermore. C G Hansen to Oleson & Paulsen.....Sept. 11, 1915
Sept. 21, 1915—S 37-6 LOT 6 BLK "H" Map Tuohy's Second Add'n to Berkeley. B N Jelica to whom it may concern.....Sept. 20, 1915
Sept. 21, 1915—LOT 11 Gorrill Glen Tract, being S Damuth 10 E Fruitvale Ave, Okd. P E Baird to whom

it may concern.....Sept. 7, 1915
Sept. 22, 1915—LOT 13 BLK 1 Resbdvn of Ptn Blk 1, Hotel Claremont Tract, Oakland Tp. Mason McDuffie Co to whom it may concern.....Sept. 18, 1915
Sept. 22, 1915—LOT 2 BLK "J" Claremont Court, Oakland Tp. Mason McDuffie Co to whom it may concern.....Sept. 18, 1915
Sept. 22, 1915—LOT 5 BLK "C" Piedmont Knoll Tract, Okd. W M Greuner to whom it may concern

LIENS FILED

ALAMEDA COUNTY.

Sept. 11, 1915—LOT 47 Map Piedmont Manor (except S 23.19 feet), Piedmont. R W Kinney Co vs Walter II Creighton\$119.06
Sept. 11, 1915—LOT 47, except S 23.19 feet thereof Map Piedmont Manor, Piedmont. R W Kinney Co vs W H Creighton\$119.06
Sept. 11, 1915—LOT 7 Map Piedmont Manor, Piedmont. John P Maxwell vs Walter H Creighton and John H Kirk\$140.05
Sept. 13, 1915—LOT 47 except S 23.19 Map Piedmont Manor, Piedmont. Bruce Lumber & Mill Co vs Walter H Creighton\$398.88
Sept. 14, 1915—LOT 11 BLK 2 Colusa Ave Ext, being E Colusa Ave 40 S Joseph, Bkly. C E Sinclair vs J S Hanson\$100
Sept. 14, 1915—PTN LOT 47 Map Piedmont Manor, Piedmont. Oakland Paving Co vs Walter H Creighton.\$104.80
Sept. 18, 1915—W BROADWAY 110.81 S Garnet S 50 W 123.59 N 50 E 129.87, Okd. Eureka Mill & Lumber Co vs Marie Peres, John Doe Administrator Estate Joseph Peres and W G Needham.....\$32.82
Sept. 20, 1915—SE NINTII AND Franklin S 100 E 100 N 32 W 25 N 58 W 73, Okd. John Breunor Co, \$24.20; James Cahill & Co, \$50.34; Hogan Lumber Co, \$115.48; A Ritligstein & Son, \$21.55 vs Joseph Kann, Kate, Julia, Margaret, Mary Theresa, Hannah Elizabeth and Jeremiah Francis Donahue.....
Sept. 20, 1915—N ORANGE AND SE Oakland Ave N 21.40 N 131.5 SE to point distant 135 NE pt beg, Okd. Oscar Olsen vs Abraham Fry\$261.80
Sept. 21, 1915—(1) N TRACT LAND fmlly Clarke & Carpenter and W Pearl Street N 40xW 133; (2) S 4.60 acre tract described in Deed from J C Hayes et al to J N Webster et al bearing date March 4, 1872, recorded Liber 77 of Deeds, Page 273, E 70xN 35, Alameda. Redwood Mfg Co vs Madeline H Fontaine and O M Carlson\$315.49
Sept. 23, 1915—S LINCOLN AVE 83-6 W Ninth W 50xS 150, Ala. Hogan Lumber Co vs A Heydenaber.....\$354.10

SAN JOSE AND THE SANTA CLARA VALLEY.

SEWER CONSTRUCTION—Cost not stated. Daly City, San Mateo Co., Cal. Engineer, City Engineer Kneese, Daly City. Owners, Daly City. At the meeting of the City Trustees last week En-

Owner.....Mrs. B. Weiss Berg, 1735 Russell, Berkeley.
Architect.....None.
Contractor.....D. T. Donaldson, 1637 Stuart, Berkeley.

COST, \$500

DWELLING
(1962) W PINE 50 S Russell, Berkeley
One-story 5-room dwelling.
Owner.....Leola Hall Coggins, 2929 Piedmont Ave., Berkeley.
Architect.....None.
Contractor.....Hall & Coggins, 2929 Piedmont Ave., Berkeley.

COST, \$1700

FRAME DWELLING
(1964) LOTS 18 AND 19 BLK "H" Oakridge, Claremont, Bkly. Painting except exterior painting on exterior plaster and cement work for two-story frame dwelling.
Owner.....A. Andrew, Oakland.
Architect.....C. W. Dickey, Central Bk. Bldg., Oakland.
Contractor.....W. T. Baker Co., 1330 Webster, Oakland.
Filed Sept. 23, '15. Dated Sept. 21, '15.
1st of each month.....75%
Usual 35 days.....25%
TOTAL COST, \$565
Bond, none. Limit, 1 week. Forfeit, none. Specifications only filed.

Building Contracts Awarded

Alameda.

1946 Gliston.....Swenson 400
1947 Hinds.....Hinds 1100
1948 Horst.....Faust 1500

ALTERATIONS
(1946) NO. 2520 CENTRAL AVE., Alameda. Alterations.
Owner.....Jessie F. Gliston, Premises.
Architect.....None.
Contractor.....L. Swenson, 2246 Encinal Ave., Alameda.

COST, \$400

DWELLING
(1947) NO. 872 OAK, Alameda. One-story 6-room dwelling.
Owner.....R. B. Hinds, 1121 Park, Alameda.
Architect.....None.
Day's work.....

COST, \$1100

DWELLING
(1948) NO. 900 SANTA CLARA AVE., Alameda. One-story 6-room dwelling.
Owner.....Wm. Horst, Premises.
Architect.....None.
Contractor.....A. K. Faust, 3884 Brighton Ave., Oakland.

COST, \$1500

NOTICE OF NON-RESPONSIBILITY.

ALAMEDA COUNTY.

Sept. 17, 1915—PTN LOT 2 BLK 1, Map Plan State University Home-land Ass'n, Bkly. Martin Dooley as to improvements on leased property
Sept. 20, 1915—LOT 20 BLK 9 Map Northbrae, Bkly. North Berkeley Land Co as to improvements on leased property

gineer Kneese presented plans and specifications for the Vista Grande District improvement. The work includes the construction of a storm sewer system, manholes, concrete curbing, cement sidewalks, asphalt and concrete paving and on the steep grades leading from Mission Road on Knowles, Theta and Vista avenues vitrified brick will be installed. The cost of the work, according to Kneese, will be much lower than at first estimated. A resolution was adopted approving the plans for the work. Bids will soon be called for.

SCHOOL—1 and 2 story addition, frame, \$20,000. San Jose, Santa Clara Co., Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be taken next week for the construction of a twelve-room addition to the State Normal School at San Jose. Interior finish pine with maple floors. Exterior cement plaster. Plans can be had from the State Architect. Further mention will be made of this work.

ROAD IMPROVEMENT—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The attention of the Supervisors was called at the last meeting for immediate action in making provision for taking care of the new poor farm road. It was ordered that the County Engineer be instructed to put a two-inch Topeka, or other standard top, 16 feet wide from the Halfmoon Bay road past the county hospital to the Belmont road, the money to be paid out of the sum heretofore set aside for the Hillsborough to Crystal Springs Lakes road.

Contracts Awarded.

STREET PAVING—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer, Town Engineer, South San Francisco. Owners, Town of South San Francisco. Contractor, F. R. Richie, Chronicle Bldg., S. F. Contract price not stated.

BUILDING CONTRACTS.

SANTA CLARA COUNTY.

RESIDENCE
NO. 413 N-FIFTH ST., San Jose. One and one-half-story residence.
Owner.....Mrs. W. M. Harrington, 409 N-Fifth, San Jose.
Architect...None.
Contractor...L. W. Bush, 134 Coe, San Jose. COST, \$3590

ALTERATIONS

NO. 155 S-MARKET ST., San Jose.
Alterations.
Owner.....L. P. Coopers, Premises.
Architect...T. W. Lenzen, 2nd and San Fernando, San Jose.
Contractor...C. N. Smith, 515 S-8th St. San Jose. COST, \$1960

COTTAGE

SE ROYAL AND MARTIN STS., San Jose. Four-room cottage.
Owner.....Mrs. J. Raymer, 616 Home St., San Jose.
Architect...None.
Contractor...Bennett Bros., San Luis Obispo, Cal. COST, \$1200

COTTAGE

ROYAL AND SAN CARLOS STS., San Jose. Five-room cottage.
Owner.....N. Zolizzi, Premises.
Architect...None.
Day's work. COST, \$1000

COTTAGE

SE NINTH AND SANTA CLARA STS., San Jose. Three-room cottage.
Owner.....J. W. Graves.
Architect...None.
Day's work. COST, \$500

FRAME COTTAGE

LOCATION NOT GIVEN. All work for frame cottage.
Owner.....W. W. Albright, 211 S-8th St., San Jose.
Architect...C. S. Rhea.
Contractor...C. S. Rhea, 74 E-San Antonio St., San Jose.
Filed Sept. 13, '15. Dated Aug. 15, '15.
When plastered\$500
When completed500
Painting150
Usual 35 days.....350
TOTL COST, \$1500
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS.

SAN MATEO COUNTY.

FRAME RESIDENCE

LOT 25 BLK 43 Bowie Estate Eastern Addition, City of San Mateo. All work for one-story and basement frame residence.
Owner.....Domingo L. Devinsenzi, San Mateo.
Architect...None.
Contractor...Croop & Keegan, San Mateo.
Filed Sept. 14, '15. Dated Sept. 11, '15.
Frame up and roof sheathed..\$418.75
Brown mortar on.....418.75
Completed and accepted.....418.75
Usual 35 days.....418.75
TOTAL COST, \$1675.00
Bond, none. Limit, 60 days from Sept. 13. Forfeit, none. Plans and specifications filed.

BUNGALOW

LOT 14 BLK 6 Map No. 2 of Stanford Park, Menlo Park. All work except painting for five-room and bath bungalow.
Owner.....Alma H. Sea, S. F.
Architect...None.
Contractor...Walter H. Morton, Santa Clara, Cal.
Filed Sept. 15, '15. Dated Sept. 15, '15.
Frame up\$274.25
When plastered274.25
When completed274.25
Usual 35 days.....274.25
TOTAL COST, \$1097.00
Bond, none. Limit, 60 days. Forfeit, \$1 per day. Plans and specifications filed.

ALTERATIONS

CRYSTAL SPRINGS ROAD AND Baywood Ave, Property of Andrew Welch San Mateo. All work for alterations and additions to residence.
Owner.....Andrew Welch, San Mateo.
Architect...Howard & White, Lick Bldg., San Francisco.
Contractor...Collman & Collman Co., Sharon Bldg., S. F.
Filed Sept. 16, '15. Dated Sept. 14, '15.

Monthly payments of..... 75%
Usual 35 days..... 25%
TOTAL COST, \$5955
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

SANTA CLARA COUNTY.

RECORDED **ACCEPTED**
Sept. 13, 1915—SANTA CLARA CO. School District. Whisman School District to Sullivan & Leet.....
.....Aug. 25, 1915
Sept. 13, 1915—E SIXTEENTH, bet. Santa Clara and San Fernando, San Jose. A A Haggood to W R Latta.....Sept. 8, 1915
Sept. 13, 1915—E LA PALOMA TERRACE, Saratoga. C W Halstead to S G Pelton.....Sept. 13, 1915
Sept. 14, 1915—NW POPLAR AND Acacia, San Jose. C B Deuble to L I Kelly.....Sept. 11, 1915

LIENS FILED

SANTA CLARA COUNTY.

RECORDED **AMOUNT**
Sept. 14, 1915—LOTS 23 AND 24 BLK 2, New Park Bldv., Santa Clara. S H Chase Lumber Co vs J La Rosa.....\$159.64

COMPLETION NOTICES.

SAN MATEO COUNTY.

RECORDED **ACCEPTED**
Sept. 4, 1915—NO. 128 BELLEVUE Ave, San Mateo. S W Coleman to William S Leadley.....Sept. 4, 1915
Sept. 10, 1915—LOT 31 Burlingame Heights, City of Burlingame. Samuel McClure to whom it may concern.....Sept. 4, 1915
Sept. 14, 1915—LOT 15 BLK 4 Map No. 2, Stanford Park, Menlo Park. Jennie Borba to Menlo Realty Co.....Sept. 1, 1915
Sept. 18, 1915—FAIROAKS (Atherton) Jacob Stern to William T Casey.....Sept. 10, 1915

MARIN, CONTRA COSTA AND SONOMA COUNTIES

SEWER WORK AND SIDEWALK REPAIRS—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. At the last meeting of the Board of Town Trustees the Town Engineer was instructed to prepare plans and specifications for the repair of the sewer on Locust street. The Town Engineer was also instructed to fix grades for sidewalks and streets on Lower San Carlos avenue.

STREET PAVING—Cost not stated. Vacaville, Solano Co., Cal. Engineer, Town Engineer Steiger, Vacaville. Owners, Town of Vacaville. The plans and specifications prepared by Town Engineer Steiger for the improvement of certain streets in Vacaville were adopted at the last meeting of the Trustees and the Clerk was instructed to advertise for bids. The plans provide for oiled macadam on Main street from gutter to gutter, while the gutters will be relaid and grouted (that is, the interstices will be filled up with

ment, thus affording a smooth passage way for the water). Dobbins street from Main to Merchant, and Merchant street from Dobbins to Main will be similarly improved. The other streets, along which the State Highway will pass through town, will have fifteen-foot roadway of rock in the center, over which will be placed a surface of oiled macadam, which will extend over the shoulders on each side a distance of 2½ feet. Bush street, from McClellan street to the depot, will be similarly improved.

APARTMENT HOUSE AND STORES—Story and base, brick and concrete, \$10,000. Martinez, Contra Costa Co., Cal. Architect, James T. Narbett, 704 McDonald avenue, Richmond. Owner, Frank Prosser. The following bids were received for the construction of a building. No award has been made. Carl Nielson, \$10,143; C. D. Ehr, \$10,190; C. A. Jeffers, \$10,400; Utleben Bros., \$10,575; J. J. Widmer, \$15,584; J. S. Hannah, \$10,993; D. H. Quiddy, \$10,997; M. Morton, \$10,597; Potter & Winlund, \$10,927.

BRIDGES—Steel and reinforced concrete. Cost not stated. Napa, Napa Co., Cal. Engineer, County Surveyor, Napa. Owners, Napa County. The County Supervisors of Napa County have ordered bids received for the following bridges. For the construction of steel and concrete highway bridge across Nigger Creek, on the county and leading from Napa to Berryessa Valley. For the construction of a steel and concrete highway bridge across about Grove Creek on the county and leading from Napa to Berryessa. For the construction of a steel and concrete highway bridge across Steel Canyon Creek on the county road leading from Napa to Berryessa Valley. Bids will be received for the above work until October 13th, 10 a. m. Plans and specifications and full information may be had from the County Surveyor at Napa.

FLAT ALTERATION—Frame construction, \$1,000. Sausalito, Marin Co., Cal. Architect, W. J. Cuthbertson, 328 Montgomery street, S. F. Owner, E. H. Ladd. Work will consist of altering first story of residence into flats. There will be new interior trim, hardwood floors, plastering, plumbing and painting. Work will be done by Day Labor.

SCHOOL—1 story and base, frame, \$10,000. Tormey, Contra Costa Co., Cal. Architect, Norman R. Coulter, 46 Kearny street, S. F. Owners, Selby School District. Will contain four class rooms, library and teachers' room. Interior oak pine. Central heating system, 1 burning furnace. Exterior covered with cement plaster on metal lath. Plans being prepared.

STREET IMPROVEMENT—\$1,465. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Three bids were received by the Sausalito Trustees for the street work on West and Valley streets, all being in excess of the engineer's estimates of \$1,465. The bid of W. H. Cowen was \$1,886; Leech & DeCamp, \$1,841; Milhourn & Murray, \$1,743. No check accompanied the latter bid. Action was deferred on the bids.

STREET IMPROVEMENT—Cost not stated. Napa, Napa Co., Cal. Engineer, City Engineer, Napa. Owners, City of

Napa. At the last meeting of the Napa City Council the following action was taken in the matter of street improvements. Resolutions of intention for improvement of Ash avenue from Union street to Grant avenue, on Clay from Jefferson to Madison, and for certain work on Jackson street, were adopted. Specifications for doing sewer work on Caymus street, also for work on Vallejo and Nursery streets, were adopted and the work ordered done.

Contracts Awarded

BRIDGES AND RETAINING WALL—Reinforced concrete, \$2,772 and \$1,304. Santa Rosa, Sonoma Co., Cal. Engineer, County Surveyor, Santa Rosa. Owners, Sonoma County. Contractor, Walter L. Proctor, Santa Rosa. Contract price, \$2,772 and \$1,304.

BUILDING CONTRACTS.

MARIN COUNTY.

FRAME DWELLING
SAN ANSELMO. All work for one-story frame dwelling.
Owner.....Fred Croker, San Anselmo.
Architect...None.
Contractor...A. F. Hanson.
Filed Sept. 20, '15. Dated Sept. 11, '15.
Frame up\$400
When plastered 400
When completed 400
Usual 35 days..... 400
TOTAL COST, \$1600
Bond, none. Limit, 60 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING
SAN RAFAEL. All work for one-story and basement frame dwelling.
Owner.....August A. Bulotti, 4351 California, San Francisco.
Architect...E. F. Helms, 5th Ave near California, San Francisco.
Contractor...E. F. Helms, 5th Ave near California, San Francisco.
Filed Sept. 21, '15. Dated Sept. 20, '15.
Frame up\$491.25
Brown coated 491.25
Ready for painter..... 491.25
All bills paid..... 491.25
TOTAL COST, \$1965.00
Bond, \$500. Surety, W. Williamson.
Limit, 60 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE
PERNHILL PARK, Ross. All work for one-story and attic frame residence.
Owner.....S. B. and Elsa Weher.
Architect...Mitchell & Hodges, 742 Market, San Francisco.
Contractor...Wm. H. Dwyer.
Filed Sept. 22, '15. Dated Sept. 14, '15.
Frame up 25%
Rough coat plaster on..... 25%
Building completed 25%
Usual 35 days..... 25%
TOTAL COST, \$1716
Bond, \$353. Surety, The Aetna Accident & Liability Co., cpn. Limit, 35 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS
WATER ST., Sausalito. Alter first-story of residence into flats.
Owner.....E. H. Ladd, Premises.
Architect...W. J. Cuthbertson, 328 Montgomery, S. F.
Day's work. COST, \$1000

COMPLETION NOTICES.

MARIN COUNTY.

RECORDED ACCEPTED
Sept. 22, 1915—SAN RAFAEL. Sam Smith to Arthur Heydenaber.....
.....Sept. 20, 1915
RECORDED ACCEPTED
Sept. 4, 1915—SAN RAFAEL. S K Herzog to S Saywell.....Aug. 30, 1915

LIENS FILED.

MARIN COUNTY.

RECORDED AMOUNT
Sept. 23, 1915—FAIRFAX. Fairfax Development Co vs Clorinda Nerviani\$124.65

RELEASE OF LIENS.

MARIN COUNTY.

RECORDED AMOUNT
Sept. 22, 1915—SAN ANSELMO. P J Boscus to King Chas Laylander.....
.....\$90.55

BUILDING CONTRACTS.

CONTRA COSTA COUNTY.

ALTERATIONS
LOT 1 AND PTN LOTS 2, 7, AND 8 BLK 111, Frazer Addition or Additional Survey of Town of Martinez. Additions and alterations to one-story frame cottage.
Owner.....George Elder, South End Los Juntas, Martinez.
Architect...None.
Contractor...Ludden & Lambley, Estudillo & Thompson Sts., Martinez.
Filed Sept. 18, '15. Dated Sept. 16, '15.
Frame up\$137.25
Brown coated 137.25
Completed and accepted..... 137.25
Usual 35 days..... 137.25
TOTAL COST, \$549.00
Bond, none. Limit, within 30 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES.

CONTRA COSTA COUNTY.

RECORDED ACCEPTED
Sept. 18, 1915—IN OR NEAR TOWN of Martinez formerly known as Cutler & Frazer Tract. Shell Co of California, Inc to Petroleum Iron Works.....Sept. 13, 1915

BUILDING CONTRACTS.

SONOMA COUNTY.

PITTS ADDITION, Sebastopol. All work for repairs and enlarging frame church.
Owner.....1st Congregational Church Society of Sebastopol.
Architect...Walter B. Dickie, Ukiah.
Contractor...C. W. Shatto, Sebastopol.
Filed Sept. 16, '15. Dated Sept. 1, '15.
Frame for new work up.....\$717
Entire building plastered..... 717
Completed and accepted..... 717
Usual 35 days..... 717
TOTAL COST, \$2868
Bond, \$1500. Sureties, H. M. Weeks and

T. J. Bridgeford. Limit, 70 working days. Forfeit, \$5 per day. Specifications only filed.

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

STREET IMPROVEMENT—Cost not stated. Visalia, Tulare Co., Cal. Engineer, City Engineer, Visalia. Owners, City of Visalia. Bids are now being taken by the City Trustees for the improvement of West Main street, which will be paved to meet the State Highway. Bids close October 13th. Further information may be had from the City Engineer.

STREET PAVEMENT—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. The Bellevue road for a distance of three miles from Oak street to the river bridge west, and Brundage lane, from H street to the State Highway east, a distance of one mile, are to be paved by the Board of Supervisors. The pavement in each instance will be 16 feet in width, the specifications calling for roads similar to those on South D and South Chester avenue. Bids are now being taken on the work and will close October 8th, 10:30 a. m. Plans and specifications together with full information may be had from the City Engineer.

CANAL CONSTRUCTION—Cost not stated. Hanford, Kings Co., Cal. Engineer, County Surveyor Ben Duffield, Hanford. Owners, Kings County. Plans and specifications prepared by County Surveyor Ben Duffield have been approved by the County Supervisors and State Highway Commission, and bids will be received until October 4th for the construction of a concrete bridge to span the Lakeside Canal, 4 miles east of this city. The structure will be about 20 feet in width and 60 feet in length across the canal. Further information may be had from the County Surveyor at Hanford.

AUDITORIUM—2 story and base, brick, \$35,000. Visalia, Tulare Co., Cal. Architects, Coates & Traver, Rowell Bldg., Fresno. Owners, City of Visalia. Will contain large auditorium, display rooms and offices. Interior finish pine with maple floor in auditorium. Steam heat, oil burning plant and vacuum cleaning. Exterior faced with pressed brick. Plans being prepared.

IRRIGATION PROJECT—Cost not stated. Porterville, Tulare Co., Cal. Engineer's name not given. Owners, Strathmore-Lindsay Irrigation District. Members of the Board of Supervisors approved the plans for the proposed Strathmore Lindsay Irrigation District, to be organized under the terms of the Wright law. By impounding the flood waters it is proposed to irrigate upward of 20,000 acres of fine foothill orange land. It is estimated that the eventual cost of the work, including diversion canals and laterals, will total nearly \$2,000,000. Boundary lines of the proposed district are still at issue before the Supervisors.

LODGE HALL AND STORES—2 story and base, brick. Cost not stated. Tulare, Tulare Co., Cal. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owner, E. J. Ryan. Will contain stores on the first floor and lodge rooms

above. Interior finish pine with maple floor. Central heating system and patent store fronts. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

HIGHWAY CONSTRUCTION—\$13,800. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. Contractor, J. E. Hines, Tulare. Contract price, \$13,800.

STREET PAVING—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, City Engineer, Modesto. Owners, City of Modesto. Contractors, Worswick Paving Co., Modesto. Contract price not stated.

BUILDING CONTRACTS.

FRESNO COUNTY.

DWELLING
LOTS 1 TO 4 BLK 121, Fresno. All work for dwelling.
Owner.....M. Shapagian.
Architect...Bowen & Davis, McKenzie Bldg., Fresno.

Day's work. COST, \$3400

DWELLING
LOTS 34, 35 AND 36, Shanklin Add'n, Fresno. Dwelling.
Owner.....T. V. Harris, 112 Diana St., Fresno.

Architect...None.
Contractor..Yarnell, Garges & Holland, 2327 White St., Fresno
COST, \$2000

COMPLETION NOTICES.

FRESNO COUNTY.

RECORDED **ACCEPTED**
Sept. 22, 1915—N 6 1/2 FEET LOTS 13 to 16 Blk 110, Fresno. Freda V and J Ralph Wolford to Norris & Wallace.....Sept. 15, 1915
Sept. 22, 1915—NE 2 ACRES SEC 36, 15-25, Fresno. Alta Grammar School District to whom it may concern.Sept. 20, 1915
Sept. 15, 1915—NO. 14 OF SEC 1, 20-15 Fresno. (Drilling oil well). Kern Trading & Oil Co to Federal Drilling Co.....Sept. 13, 1915
Sept. 20, 1915—LOT 13 AND 1/2 LOT 12 Blk 163, Fresno. Minnie D Clinch to Williams & De Viese.....
.....Sept. 20, 1915

LIENS FILED.

FRESNO COUNTY.

RECORDED **AMOUNT**
Sept. 20, 1915—LOT 32 Bloomington Park, Fresno. A W Gordon vs W H Litchfield\$25
Sept. 20, 1915—S 200 FT. W OF DRY Creek of Lot 32, Bloomington Park Tract, Fresno. Craycroft-Herold Brick Co vs W H Litchfield.....\$155
Sept. 20, 1915—LOTS 21 AND 22 BLK 1, North Selma. R N White vs Edwin R Weinspach.....\$120
Sept. 17, 1915—S 200 FEET LOT 32, lying W of Dry Creek Bloomington Park Tract, Fresno. Swastika Lumber Co vs W H Litchfield.....\$24
Sept. 17, 1915—LOTS 51 AND 52 BLK 18, North Park Terrace, Fresno. E A Sands vs M K Wild and Chas Proctor\$40

NOTICE OF NON-LIABILITY.

FRESNO COUNTY.

Sept. 15, 1915—WIDE A WAKE Quartz Mining Claim. Edith A Pinell as to improvements on leased property

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

STATE HIGHWAY CONSTRUCTION—Cost not stated. California. Engineer, State Highway Commission Forum Bldg., Sacramento. Owners State of California. Bids will be opened on October 18th by the Highway Commission for construction in the following counties: Placer County, Lincoln to northern boundary, 9 miles; paved with Portland cement; Sonoma County, Reclamation to Fairville, 4 miles, graded; Mariposa County, from westerly boundary to Cathay Whit Rock road, 10 miles, to be graded. Plans can be secured from the State Highway Commission in Los Angeles or its branch offices in San Francisco or Los Angeles. An official proposal appears in another column of this issue.

GRADE CROSSING—Reinforced concrete, \$100,000. Roseville, Placer Co., Cal. Engineer's name not given. Owners, Town of Roseville and Southern Pacific Co. The City Trustees are considering the matter of a subway at this city. The crossing at the present time is exceedingly dangerous and hockade to traffic. C. M. Kipp, a local merchant, who is interested in the proposed work, has plans complete for the project and these the Trustees will consider at their next meeting. The plans call for a structure 240 feet long and 50 feet for each incline and 80 feet level under the tracks, the inclines to have a grade of 6 per cent, and the bottom of the subway to be ten feet below the present level of the sidewalk. The plan calls for the raising of the railroad tracks for a distance of 2,000 feet each side of the crossing, placing them eight feet above the present grade. This would necessitate the raising of the station and a trackage.

SEWER CONSTRUCTION—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has adopted plans and specifications for the construction of the sewer system to be installed as a result of the bond election held in this city some time ago. The work consists of the construction of sanitary sewers in the southern part of the city. A resolution was passed at the last meeting calling for bids on the work to be received on October 1st. This particular portion of the work on which bids are now being received will cost approximately \$18,633.55, according to the estimates of the City Engineer and will be on South street, from East to Edison street, then west on Soledad to West street, and on McKinley avenue from South to Eight street. The South avenue mentioned is a continuation of South street, from Edison to West street.

ROAD CONSTRUCTION—Cost not stated. Ukiah, Mendocino Co., Cal. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. The petition for the completion of the Navarro River project was recognized by the Supervisors last week, and the County Surveyor was ordered to make final surveys of the road to prepare for its construction.

RESIDENCE—1 story and base, frame, \$2,500. Sacramento, Cal. Architect, none. Owner, W. D. McKoy, 3029 E street, Sacramento. Location, 3145 E street. Will contain five rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in imitation tile. Automatic water heater. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

BRIDGE CONSTRUCTION—Reinforced concrete. Ukiah, Mendocino Co., Cal. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Plans and specifications for the construction of the Wages Creek and Westport grade bridges have been adopted by the County Supervisors and bids have been ordered called to be received up to 2 p. m. October 5th. Further information may be had from the County Surveyor at Ukiah.

BRIDGES—2, reinforced concrete. Cost not stated. Marysville, Yuba Co., Cal. Engineer, County Surveyor L. B. Crook, Marysville. Owners, Yuba County. Plans of County Surveyor L. B. Crook for two bridges to be located on the road between this city and Smartsville have been adopted by the Supervisors. The plans call for a 19-foot bridge to span a creek near Smartsville and a 24-foot extension to the Timbuctoo bridge. Both bridges are in the Fourth district, of which J. J. Casey is representative. The County Clerk was authorized to advertise for bids for the bridge construction work.

HOSPITAL—1 and 2 story and base, frame and plaster, \$20,000. Eureka, Humboldt Co., Cal. Architect, E. J. Burke, Eureka. Owners, Humboldt County. Will contain three wards and several private rooms. Interior finish pine and white enamel. Hardwood and tile floors. Central heating system. Hot water system and vacuum cleaning. Special hospital plumbing. Exterior covered with cement plaster on metal lath. Plans being prepared.

LIBRARY—1 story and base, brick, \$15,000. Grass Valley, Nevada Co., Cal. Architect, William Mooser, Nevada Bank Bldg., S. F. Owners, Town of Grass Valley. Will contain reading room, stack rooms and office for the librarian. Interior finish pine and hardwood with maple floors. Furnace heat. Metal hook stacks. Exterior faced with pressed brick. Plans complete and figures to be called for shortly.

SCHOOL—1 story, frame. Cost not stated. Boonville, Mendocino Co., Cal. Architect, none. Owner, Anderson Valley School District. Bids will be opened on October 2nd for a district school. Plans can be secured from the Superintendent of Schools at Ukiah.

SCHOOL—1 story, frame. Cost not stated. Florin School District, Sacramento Co., Cal. Architect, George C. Selton, 1005 K street, Sacramento. Own-

ers, Florin School District. Bids will be opened on October 5th for the construction of a four-class room building. Exterior covered with rustic. Plans can be secured from the architect.

STREET IMPROVEMENT—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Bids will be opened on October 5th for the improvement of Schley avenue from east line of 31st street to a point 35 feet east of east line of Yardley avenue, be improved by removing and disposing of all surplus and refuse material, grading the roadway and constructing thereon an asphalt pavement, consisting of a hydraulic concrete foundation 4 inches in thickness, an asphaltic cement flush coat and a sheet asphalt wearing surface 1½ inches in thickness.

SEWER CONSTRUCTION—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. The City Council has approved plans and specifications and will receive bids until October 5th for the third installment of storm water sewers to be done under the 1915 sewer bond fund. The specifications deal with the eastern end of the city and sewers will be laid on East, Eugenia, Della, Locust and Cedar streets, Hazel avenue, A. B. C. D. E. and F streets, East Weber avenue, East Main, East Market, Washington, East Washington, Sonora, and East Sonora streets. The City Engineer's estimate for the work is \$17,675.30, and the money is payable from the storm water sewer 1915 fund.

BRIDGES—Reinforced concrete. Cost not stated. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. Bids will be opened on October 4th by the Board of Supervisors for the construction of bridges Nos. 5 and 7 on the Biggs and Princeton road. Plans can be secured from the engineer.

STREET PAVING—\$15,843. Oroville, Butte Co., Cal. Engineer, City Engineer S. J. Norris, Oroville. Owners, City of Oroville. The City Engineer S. J. Norris has completed estimates for the Montgomery street pavement from Lincoln street to Fourth avenue, the cost of the work being placed at \$15,843. The average cost per square foot was 14.35 cents as compared with 14.4 cents for Bird street. The cost per lineal front foot was \$3.04 with 48 cents additional for street intersections. Bids on this work will soon be called for.

Contracts Awarded.

SEWER CONSTRUCTION—\$13,500 Marysville, Butte Co., Cal. Engineer, City Engineer, Marysville. Owners, City of Marysville. Contractors, Stanley & Ostrander, Sausalito. Contract price, \$13,500. Hewitt & Felch, Marysville, fill work at 42c per cubic yard.

BRIDGES—Timber and concrete, \$900 and \$1,280. Ukiah, Mendocino Co., Cal. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Contractor, A. L. Carlson, Ukiah. Contract price, \$900 and \$1,280.

STREET IMPROVEMENT—\$5,069. Eureka, Humboldt Co., Cal. Engineer, City Engineer, Eureka. Owners, City of Eureka. Contractors, Mercer-Fraser Co., Eureka. Contract price, \$5,069.

STREET PAVING—\$5,574. Arbuckle, Colusa Co., Cal. Engineer, City Engineer, Arbuckle. Owners, City of Arbuckle. Contractors, Clark & Henery, Ochsner Bldg., Sacramento. Contract price, \$5,574.

BRIDGE—Reinforced concrete, \$4,060. Sonora, Tuolumne Co., Cal. Engineer, County Surveyor, Sonora. Owners, Tuolumne County. Contractor, W. A. Stratton, Richmond. Contract price, 4,060.

BRIDGE—Reinforced concrete, \$5,000. San Andreas, Calaveras Co., Cal. Engineer, County Surveyor, San Andreas. Owners, Calaveras County. Contractors, Bluxome & Co., Monadnock Bldg., S. F. Contract price, \$5,000.

BUILDING CONTRACTS

SACRAMENTO COUNTY.

FRAME RESIDENCE

NO. 3141 E ST., on Lot 178 Casa Loma Terrace, Sacramento. One-story 6-room and bath frame residence.

Owner.....Mrs. Edward Phelps, Scott Apartments on H St., Sacramento.

Architect...None.

Contractor..W. D. McKoy, 3029 E St., Sacramento.

COST, \$2600

ALTERATIONS

NO. 2631 P ST., on E ½ of N ½ Lot 5 Blk O, P, 26th and 27th Sts., Sacramento. Remodel frame dwelling.

Owner.....Joseph Guth.

Architect...None.

Day's work.

COST, \$900

STORE BUILDING

NO. 811 L ST., on E 40 feet of W 70 feet Lot 7 Blk K, L, 8th and 9th Sts., Sacramento. One-story denison tile store building.

Owner.....John H. Shade.

Architect...None.

Contractor..J. P. Hill, 804½ J St., Sacramento.

COST, \$4000

BARN

GEO. A. MEISTER DAIRY, Sacramento. Erect barn.

Owner.....Geo. A. Meister, 315 16th St., Sacramento.

Architect...None.

Contractor..G. W. McKay, 1018 T St., Sacramento.

COST, \$2000

ALTERATIONS

NO. 822 J ST., on Lot 3 Blk J, K, 8th and 9th Sts., Sacramento. Erect brick, steel, glass and wood hall on roof of Elks' Building.

Owner.....Elks' Hall Ass'n., Premises

Architect...None.

Contractor..Siller Bros., 1614 13th St., Sacramento.

COST, \$2120

ALTERATIONS

NO. 2217 N ST., on W ½ Lot 6 Blk M, N, 22nd and 23rd Sts., Sacramento.

Raise dwelling and finish 2 flats.

Owner.....Harry L. Root, 302 O St., Sacramento.

Architect...None.

Contractor..W. R. Saunders, 2810 I St., Sacramento.

COST, \$2100

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REPAIRS

NO. 812 K ST., on S 68 feet of E ¼ of
S 80 of W ½ of E ½ Lot 2, K, L, 8th
and 9th Sts., Sacramento. Remodel
and make general repairs to building
Owner.....Lucien Caen, O St., bet 9th
and 10th, Sacramento.

Architect...None.

Contractor...Chas. A. Vanina, 2022 M
St., Sacramento.

COST, \$1650

ALTERATIONS

NO. 2315 N ST., on W ½ Lot 6, M, N, 23d
and 24th Sts., Sacramento. Remodel
basement floor and make 5 room and
bath in dwelling.

Owner.....F. H. Lloyd.

Architect...None.

Day's work. COST, \$600

ALTERATIONS

NW THIRD AND K STS., Sacramento.
Tearing out old materials, concrete
work, etc., for building.

Owner.....C. T. Burch, 119 K St., and
George W. Radovich, 130 K
St., Sacramento.

Architect...None.

Contractor...George W. Kopp, 1514 15th
St., Sacramento.

Filed Sept. 20, '15. Dated Sept. 20, '15.
COST, \$2283

DWELLING

MARSHALL AVE, Lot 8, Marshall Tct.,
Sacramento. One-story -room frame
dwelling.

Owner.....B. H. Bill, 2215 4th Ave.,
Sacramento.

Architect...None.

Day's work. COST, \$1500

ALTERATIONS

NO. 516 THIRTEENTH, on N ½ Lot 6,
E, F, 12th and 13th Sts., Sacramento.
Remodel rear porch and build sleep-
ing porch on rear of dwelling.

Owner.....Gertrude B. Phillips, Prem.

Architect...None.

Contractor...John O. Tracey, 1807 O St.,
Sacramento.

COST, \$400

FRAME FLATS

NO. 1425 TWENTY-FIRST ST., on W
44 feet of N ½ of S ½ of Lot 8 Blk
N, O, 21st and 22nd Sts., Sacramento.
Two-story frame (2) flats.

Owner.....Mrs. L. Leyhard, 2306 O St.,
Sacramento.

Architect...None.

Contractor...W. R. Saunders, 2810 I St.,
Sacramento.

COST, \$3100

FRAME RESIDENCE

NO. 3145 E ST., on Lot 177 Casa Loma
Terrace, Sacramento. One-story six-
room and bath frame residence.

Owner.....W. D. McKoy, 3029 E St.,
Sacramento.

Architect...None.

Day's work. COST, \$2500

FRAME RESIDENCE

NO. 1816 NINTH ST., on N ¼ Lot 5 Blk
R, S, 8th and 9th Sts., Sacramento.

One-story six-room and bath frame
residence.

Owner.....Philip C. Bettencourt, 721
G St., Sacramento.

Architect...None.

Contractor...Freitas & Lucas, 1604 V St.,
Sacramento.

COST, \$2500

BUILDING CONTRACTS

SAN JOAQUIN COUNTY.

FRAME RESIDENCE

LODI, CAL. All work for one and one-
half-story frame stucco residence.

Owner.....Dempsey D. Smith, Lodi,
California.

Architect...Ralph P. Morrell, 12 I. O.
O. F. Bldg., Stockton.

Contractor...F. C. Cary, Lodi, Cal.

Not filed. Dated Sept. 1, 1915.

First story joists on.....\$1000
Plastering done.....1455

Completed.....1400

Usual 35 days.....1285

TOTAL COST, \$5140

Bond, none. Limit, 90 days. Forfeit,
plans and specifications, none.

FRAME RESIDENCE

LOT 8 BLK 15, Survey 2999, Stockton.
All work for frame residence.

Owner.....Harry J. McIsaac, 331 S-
East, Stockton.

Architect...Franklyn Warner, Rm 37,
San Joaquin Bldg., Stock-
ton.

Contractor...H. W. Johnson & A. F.
Salfield, 423 Mariposa St.,
Stockton.

Filed Sept. 7, '15. Dated Sept. 7, '15.

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COMPLETION NOTICES

SAN JOAQUIN COUNTY.

RECORDED ACCEPTED
pt. 2, 1915—JEFFERSON & SAN
Joaquin (New Jefferson School),
Stockton. Board of Education to
Chirhart & Nystedt.....June 17, 1915
pt. 19, 1915—PARK & SAN JOAQUIN

(St. Agnes Academy), Stockton.
Roman Catholic Archbishop of San
Francisco to James Mulcahy.....
.....September 1, 1914

LIENS FILED.

SACRAMENTO COUNTY.

RECORDED AMOUNT
Sept. 18, 1915—W 30 FEET OF S ½
Lot 7, M. N. 2nd and 3rd Sts., Sacra-
mento. Sacramento Lumber Co vs
James A Laidlaw, Karn Singh and
McCoy & Ludwig.....\$63.69
Sept. 21, 1915—LOT 2 West Curtis
Oaks, Sacramento. Fred W Presse,
\$21.50; Wm Kinsey, \$17.50 vs M J
and Minnie Rodrigues & J W Jones

NOTICE OF NON-LIABILITY.

SACRAMENTO COUNTY.

Sept. 15, 1915—W ½ OF E ½ LOT 2,
K, L 5th and 9th; No. 512 K St.,
Sacramento. J G Black, C F Gra-
ham, M A Bateman and Chas H Gra-
ham as to improvements on leased
property

LOS ANGELES AND SOUTHERN
CALIFORNIA.

WATER SYSTEM EXTENSION —
Cost not stated, Holtville, Imperial Co.,
Cal. Engineer, City Engineer, Holt-
ville. Owners, Town of Holtville. The
City Trustees have approved a plan
submitted by property owners in block
112 to connect their homes with the
city sewer system at their own ex-
pense. The sewer line is to be built
by the property owners under their
own contract, but under the supervi-
sion of the City Engineer.

SEWER CONSTRUCTION—Cost not
stated. Santa Barbara, Santa Barbara
Co., Cal. Engineer, City Engineer,
Santa Barbara. Owners, City of Santa
Barbara. The City Council at their
meeting last week adopted a resolution
for the construction of the east side
sewer and bids will be ordered shortly.

RIVER PROTECTION WORK—Cost
not stated. Ventura, Ventura Co., Cal.
Engineer, County Surveyor, Ventura.
Owners, Ventura County. Bids are
now being received for the protection
work on the Foothill Boulevard. Ap-
proximate quantities are: Timber

piles 20 feet long, 51. ½ inch galvan-
ized wire cable, 2,000 feet, barb wire,
3,000 feet. Bids will be opened on Oc-
tober 5th at 3 p. m.

PACKING HOUSE—1 story and base,
hollow tile. Cost not stated. Whittier,
Los Angeles Co., Cal. Architects, Al-
fred W. Reed and Charles E. Gar-
stang, Black Bldg., L. A. Owners, Mur-
phy Oil Co. Will cover an area of 162
by 251 feet. Concrete floor. Special
machinery. Exterior faced with ce-
ment plaster. Plans complete and fig-
ures being taken.

JETTY—Pile construction. Cost not
stated. San Luis Obispo, San Luis
Obispo Co., Cal. Engineer, County Sur-
veyor, San Luis Obispo. Owners, San
Luis Obispo County. The Board of
Supervisors has ordered bids received
until October 11th for the construction
of a pile jetty on the north side of
Sana Maria River. The proposed jetty
will be built in a northwesterly direc-
tion and will extend out into the river
for a distance of 3,600 feet. Plans and
specifications may be had from the
County surveyor at San Luis Obispo.

HOSPITAL, COTTAGES, ETC.—1 and
2 story, frame and concrete. Cost not
stated. Ventura, Ventura Co., Cal. Ar-
chitect, State Architect George B. Mc-
Dougall, Sacramento. Owners, State of
California. Bids will be received until
October 18th for the construction of
two cottages and a detention building
at the California State Home for Girls
near Ventura. Plans and specifications
can be secured from the architect. An
official proposal appears in another
column of this issue.

RAILROAD CONSTRUCTION — Cost
as follows. San Diego, Cal. Engineer's
name not given. Owners, Atchison,
Topeka and Santa Fe. The State Rail-
road Commission has ordered the At-
chison, Topeka and Santa Fe Railroad
to construct a line connecting Ocean-
side in San Diego County, with Tem-
ecula, 25 miles northeast. The order
makes it optional to route the line by
way of Fallbrook, 12 miles from Tem-
ecula, or to run it through the Rain-
bow Valley. The cost of Iainbow Val-
ley route is placed at \$822,000 and the
Fallbrook and Temecula, \$627,000.

SCHOOL BUILDINGS—2, 1 and 2
story, Class C construction, \$200,000.
Los Angeles, Cal. Architect, Norman
P. Marsh, Broadway Central Bldg., L. A.
Owners, Jefferson School District.
Construction, reinforced concrete to
first floor line and brick above. Inter-
ior finish pine with maple floors.
Steam heat, oil burning system, vac-

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uum cleaning and program clocks. Exterior, pressed brick and cement plaster. Plans being prepared.

STREET IMPROVEMENT—Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, City Engineer, San Luis Obispo. Owners, San Luis Obispo County. The City Engineer has been instructed by the City Council to prepare the necessary plans and specifications for the improvement of Monterey street between Chorro and Broad streets. On completion of plans bids will be called for.

Contracts Awarded

HOTEL—1 and 2 story and base, frame, \$44,000. Eisinore, Riverside Co., Cal. Architect, Sam Neighbors. Owner, Mrs. Orpha Eastman, Eisinore. Contractors, G. W. Gilbreth Co., Hollingsworth Bldg., L. A. Contract price, \$44,000.

SCHOOL—2 story and base, brick, \$34,517. San Pedro, Los Angeles Co., Cal. Architect, Lyman Farwell, Lankershim Bldg., L. A. Owners, City of San Pedro. Contractor, A. S. O'Neil, Lankershim Bldg., L. A. Contract price, \$34,517.

STREET PAVEMENT—Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractors, F. R. Richie Co., Santa Barbara. Contract price not stated.

PORTLAND AND OREGON

FACTORY AND SALESROOMS—2 story and base, reinforced concrete, \$30,000. Portland, Ore. Architects, Jacobberger & Smith, Board of Trade Bldg., Portland. Owner, Gay Lombard. Location, southeast corner of Park and Davis streets. The main portion of the building will be occupied by salesrooms, which will be finished in pine and hardwood with a tile floor. The upper floor will contain shipping rooms and machine shop. Interior finish will be of pine. Exterior will be faced with cement plaster. Plans are complete and figures are being taken.

GARAGE AND SALES ROOMS—2 story and base, brick, \$25,000. Portland, Ore. Architects, Sutton & Whitney, Lewis Bldg., Portland. Owners, Kissel Car Automobile Co. Location, corner of Broadway and Davis streets, covering an area of 100 by 100 feet. Interior finish pine and hardwood. Concrete floor. Metal window sash and frames. Exterior faced with pressed brick. Plans complete.

RESIDENCE—3 story and base, frame and hollow tile, \$25,000. Portland, Ore. Architect, D. C. Lewis, Couch Bldg., Portland. Owner, Gordon Voorhies. Location, Golf Park. Will contain fourteen rooms, several baths and sleeping porches. Interior finish pine and hardwood. Hardwood floors, central heating system, hot water circulating system and vacuum cleaning. Open fire places and tile or brick mantels. Tile bath rooms. Exterior cement plaster. Plans complete and figures under advisement.

GRAIN ELEVATOR—Reinforced concrete and steel. Cost not stated. Astoria, Ore. Engineers, Port of Astoria Commission, Astoria. Owners, City of Astoria. Plans and specifications have been completed by the engineers

of the Port of Astoria Commission, and bids are now being taken for the construction of a large grain elevator. Bids close September 28th, 2 p. m. The contract is to include excavation, sheet piling, reinforced concrete work and iron work necessary to construct the superstructure. The approximate quantities follow: 3,600 yards sand excavation, 350 feet sheet piling, 1,300 cubic yards concrete, 115 tons reinforcing steel, 5 tons structural steel, 150 quarts waterproofing, 16 tons miscellaneous cast and wrought iron.

STORES AND OFFICES—2 story and base, reinforced concrete, \$25,000. Portland, Ore. Architect, Martin Schacht, Yeon Bldg., Portland. Owners, Harrington Estate. Location, Broadway, covering an area of 100 by 100 feet. Will contain sales rooms on the first floor and offices above. Interior finish, pine and hardwood. Central heating system, patent store fronts. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

SCHOOL—1 story and base, hollow tile, \$18,965. Beaverton, Ore. Architects, Tourtellotte & Hummell, Rothchild Bldg., Portland. Owners, City of Beaverton. Contractor, A. W. Kutsche, Yeon Bldg., Portland. Contract price, \$18,965.

SCHOOL—1 story and base, brick, \$13,294. Prairie City, Ore. Architect, E. E. McClaren, Lumber Exchange Bldg., Portland. Owners, Prairie City. Contractor, C. W. Frazier, 1396 Curtis street, Portland. Contract price, \$13,294.

SCHOOL—2 story and base, brick, \$12,300. Hubbard, Ore. Architects, Brown & Forbes, Mohawk Bldg., Portland. Owners, Hubbard City. Contractors, Stebinger Bros., 626 Broadway, Portland. Contract price, \$12,300.

OFFICE BUILDING PLASTERING—\$40,000. Portland, Ore. Architect's name not given. Owners, First National Bank. Contractor, A. Knowles, 985 Folsom street, S. F. Contract price, \$40,000.

SEATTLE AND WASHINGTON

LODGE HALL—3 story and base, brick and terra cotta, \$150,000. Seattle, Wash. Architect, George W. Lawton, Alaska Bldg., Seattle. Owners, Seattle Masonic Hall Association. Location, Harvard and Pine streets. Will have a complete steel frame, brick walls, faced with terra cotta and pressed brick. Interior finish, pine and hardwood. Hardwood floors. Hollow tile interior partitions, metal window sash and frames. Ornamental plaster. Marble and tile. Plans complete and figures being taken. Bids open September 27th.

HOSPITAL—2 story and base, brick or concrete, \$30,000. Seattle, Wash. Architect, B. Marcus Pretica, Pantages Theatre Bldg., Seattle. Owners, Council of Jewish Women. Location, 18th avenue South and Main street, covering an area of 48 by 112 feet. Will contain private rooms, wards and operating rooms. Interior finish pine and white enamel. Hardwood floors, steam heat and vacuum cleaning. Exterior faced with pressed brick. Plans complete and figures being taken.

Contracts Awarded.

STATE HOSPITAL BUILDINGS—Reinforced concrete and steel, \$227,000. Olympia, Wash. Architect's name not given. Owners, State of Washington. Contractors, Boyajohn-Arnold Co., Panama Bldg., Portland. Contract price, \$227,000.

STORES AND OFFICES—4 story and base, reinforced concrete, \$50,000. Seattle, Wash. Architects, Carl Goss and Charles Bebb, associated, Denn Bldg., Seattle. Owners, Puget Sound News Co. Contractors, A. W. Quist Co., Hoge Bldg., Seattle. Contract price, \$50,000.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC. REQUIRED BY THE ACT OF AUGUST 24, 1912.

OF BUILDING AND ENGINEERING NEWS published weekly at San Francisco, California, for October 1, 1915.
Editor, Geo. Nelson, 560 Mission Street
Managing Editor, L. A. Larsen, 560 Mission Street
Business Manager, L. A. Larsen, 560 Mission Street
Publisher, L. A. Larsen, 560 Mission Street.

Owner, L. A. Larsen, 560 Mission Street.
Known bondholders, mortgagees, and other security holders, holding 1 percent or more of total amount of bonds, mortgages, or other securities: None.

L. A. LARSEN, Owner.
Sworn to and subscribed before me this 23rd day of September, 1915.

CHALMER MUNDAY,
Notary Public in and for the City and County of San Francisco, State of California.

(My commission expires Oct. 18, 1917.)
[SEAL]

CLEAN WATER, GOOD SEWERS AND FEWER TYPHOID DEATHS.

Clean water to drink—this is the first step to take toward making typhoid fever as rare in California as the mastodon or the sabre-toothed tiger.

To help people get clean water to drink, and to help prevent the present wicked and inexcusable sacrifice of several hundred innocent lives every year to typhoid fever, the State Board of Health has just established a Bureau of Sanitary Engineering, with its offices and laboratories at the University of California, and has appointed as Chief Engineer and Director of the Bureau Chester G. Gillespie, of high reputation as a sanitary engineer and one of the first men who ever completed the full professional course in Sanitary Engineering in the University. He received his professional training at the hands of Charles Gilman Hyde, Professor of Sanitary Engineering in the University of California, who for a number of years has been Consulting Engineer of the State Board of Health and has been doing work of great value for the improvement of public health conditions in California. Since Gillespie's graduation eight years ago he has been actively at work designing and building chlorination and filter plants, sewage-disposal systems, water works, etc., in various parts of the United States.

The State's new Sanitary Engineer is only just arrived in Berkeley to begin his work. Already requests are coming for him from more than thirty California towns for advice as to how they ought to go about getting clean water, and how to protect themselves against typhoid, intestinal complaints in children, and other water-borne diseases.

Not only as to water-supply problems will the new bureau be of great service, but also in the matter of sewage-disposal, for advice will be given to the engineers and authorities in towns and villages throughout California as to how best to treat sewage so as to render it harmless to the community which seeks to dispose of it, and to towns down-stream as well.

There are already laws requiring that all public water supplies must have permits from the State Board of Health, approving the sanitary quality of sources and supply. There are laws, so, that a community must not discharge sewage into inland waters, such as lakes and rivers, nor into tidal waters, without permits from the State Board of Health. In order that this legislation may be carried out, the new bureau will make a careful study of water-supply and sewage-disposal conditions throughout the whole State. Remarkable advance has been made in California in the last few years in reducing the death-rate from typhoid, last year only about three-fifths as many people died of typhoid in California, in proportion to population, as did four years earlier. In 1910 there were 477 deaths from typhoid, which, with a population of 2,386,000, represented a death rate of 19.9 per hundred thousand from this one disease. In 1914, with an estimated population of 2,623,000, there were 374 deaths, of .14 per hundred thousand.

Yet, most of these 374 deaths were totally unnecessary!

Among the great factors which brought about this gratifying reduction were the work of the State Board of Health in arousing the interest of the whole community in the fight against typhoid, the investigation of typhoid outbreaks by the State Hygienic Laboratory, such as its investigation resulting in the discovery of the woman, a typhoid-carrier, who had given the disease to ninety-four people by preparing one single dish of spaghetti, and the work of the State Board of Health in sending free to any physician in California anti-typhoid vaccine, prepared at the State Hygienic laboratory at the University, a vaccine by the use of which anyone who desires may be immunized against typhoid fever.

The creation of this new Bureau of Sanitary Engineering insures valuable co-operation between the State and the individual communities of California for the suppression of sources of typhoid infection, through purification of contaminated water-supplies and through improved methods of sewage-disposal. Another great task to be done is to arouse every farmer and every country-dweller in California to the importance, for the protection of his own family and of the community

in general, to seeing to it that his own farm or ranch has a proper sanitary method for the disposal of human wastes, so that streams may not become contaminated, and milk-cans and the milk supply be not exposed to infection.

Typhoid is primarily a country and small-town disease, because large cities take more care to have clean water and adequate systems of sewage disposal. There are two rural counties in the interior of California, for example, that have an annual death rate from typhoid eight times as heavy as that of San Mateo County, for instance. The real reason for this is that the sources of water-supply in San Mateo County have been better protected from danger of pollution. Its towns do not pour their sewage into streams from which other people must take their drinking water.

The new Chief Engineer and Director of the Bureau of Sanitary Engineering began his professional work by spending several years in filtration experiments for the People's Water Company of Oakland. Then he aided in the designing and building of the huge swimming pool on the University campus. Then he went east, participated in the designing of the filter plant for Minneapolis, had charge of the designing of a water-filtration plant for Evanston, Ill., and returned recently to Sacramento to design a sewage-screen system for the treatment of sewage from the annexed districts and from certain older portions of the city of Sacramento.

For the first time since the great European war began it is possible to make comparisons with the building record of the same month of last year. For August, 1914, marked the beginning of the great conflict and comparisons with the month show a gain for the present year. Comparative figures returned from some 68 different cities representing building centers show a gain of about 14 per cent in the total returns. The following is the record of the American Contractor:

City	Aug. 1915.	Aug. 1914.
Akron	\$ 499,010	\$ 602,315
Alameda	47,232	24,926
Albany	249,745	479,685
Atlanta	370,600	372,033
Baltimore	447,923	1,012,846
Berkeley	134,900	161,750
Birmingham	137,615	314,549
Buffalo	1,175,000	950,000
Cedar Rapids.....	125,000	282,000
Chattanooga	46,540	116,270
Chicago	9,513,150	3,769,450
Cincinnati	3,048,475	1,128,060
Cleveland	1,987,520	2,318,470
Columbus	544,895	647,325
Dallas	155,117	220,175
Dayton	405,890	111,613
Denver	179,810	150,620
Des Moines	150,500	111,150
Detroit	3,217,490	2,353,345
Elmhurst	262,051	238,023
East Orange	53,368	43,210
Port Wayne	176,530	153,800
Grand Rapids	281,765	268,677
Harrisburg	29,325	101,275
Hartford	528,934	185,990
Indianapolis	462,972	572,436

Kansas City.....	725,830	527,395
Lincoln	133,015	136,665
Little Rock.....	101,798	83,213
Los Angeles.....	1,001,980	2,051,296
Louisville	203,930	426,860
Manchester	206,765	137,255
Memphis	273,295	175,660
Milwaukee	1,073,659	673,729
Minneapolis	1,031,070	943,975
Nashville	81,843	91,441
Newark	569,441	3,196,233
New Haven.....	440,274	500,567
New Orleans.....	216,708	236,910
New York City....	16,201,812	11,268,535
Manhattan	7,960,328	4,476,176
Bronx	1,620,725	1,272,343
Brooklyn	3,999,697	4,022,600
Queens	2,456,778	1,290,758
Richmond	164,318	206,658
Oakland	506,041	411,890
Oklahoma	86,820	99,115
Omaha	350,610	521,065
Patterson	182,827	221,568
Peoria	114,810	253,081
Philadelphia	3,993,655	2,642,810
Pittsburgh	740,265	1,127,069
Portland	728,970	409,390
Richmond	197,019	183,410
Rochester	772,174	808,457
Salt Lake City....	213,300	480,445
San Antonio.....	151,260	170,050
San Francisco....	1,199,448	1,512,651
St. Joseph	103,428	93,623
St. Louis	932,446	797,165
St. Paul	1,066,026	646,923
Schenectady	142,774	96,368
Sheraton	88,779	155,358
Seattle	454,960	1,565,525
Shreveport	41,584	79,506
Sioux City	258,975	223,485
Spokane	50,335	31,585
Springfield, Ill..	109,500	72,800
Syracuse	401,000	256,948
Tacoma	53,378	139,460
Toledo	747,083	490,047
Topeka	66,719	20,399
Troy	82,465	51,275
Utica, N. Y.....	235,985	86,670
Wilkes-Barre	55,022	58,391
Worcester	531,538	679,692

Total

\$61,020,981 \$53,456,418

It will be seen that the comparison shows a substantial gain over August 1914; that the most pronounced gains have been made in the middle west and not in the large cities. And that while the record is not up to normal it is at least coming back to something near that place.

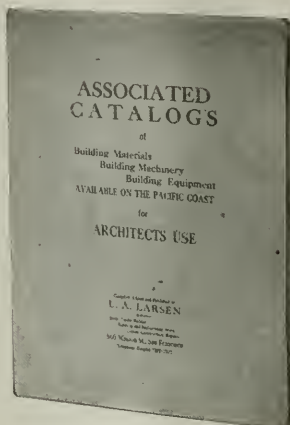
TO MAKE COAL-TAR DYES IN AMERICA.

It has been announced in the daily press that an American inventor has developed an entirely new process for producing dyestuffs from coal tar, and that preparations are now under way looking to the immediate working of the process, which is stated to be revolutionary in its character. A representative of the Government has been investigating the new process, and is reported as having stated that the process would free this country from dependence on foreign markets. Who the inventor of the new process is has not been disclosed, nor are any details of the invention to be obtained. It is stated, however, that large quantities of dyestuffs will be turned out before the end of the year.

Associated Catalogues.



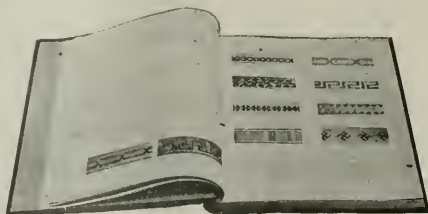
Here is where the Architect usually files the circulars, catalogues, announcements, etc., that come to his office. He can't take care of them. There are too many of them.



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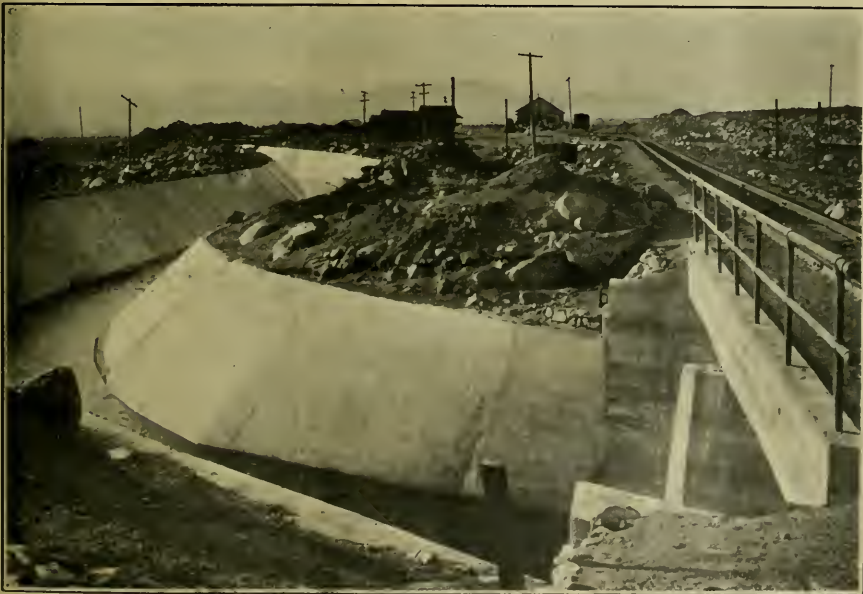
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Frederick H. Meyer, Architect

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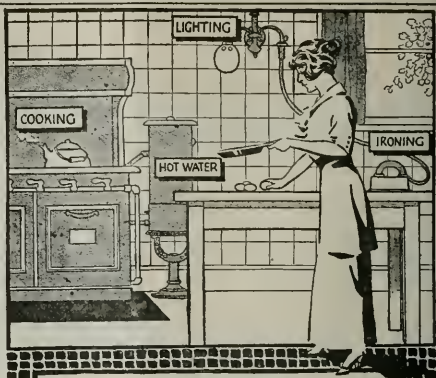
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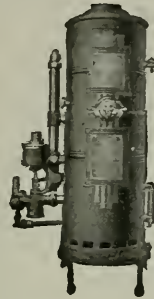
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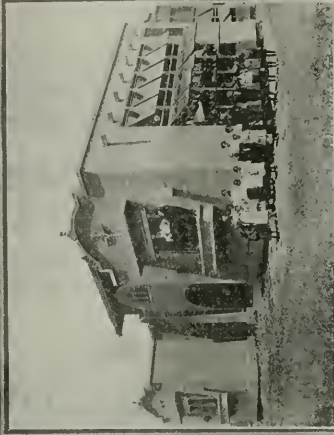
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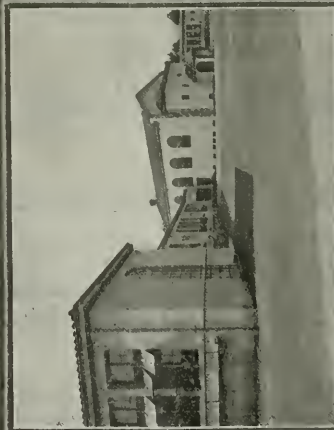
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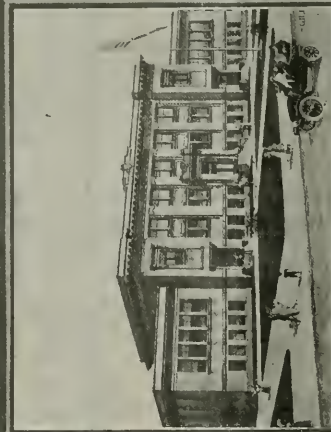
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Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
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Issued Weekly, \$3.00 per year

San Francisco, October 6, 1915

Fifteenth Year, No 40

The Sewerage System of Los Angeles.*

by

W. T. Knowlton, Engineer of Sewers.

Early History.

The earliest record which has been found of the construction of public sewers in Los Angeles begins in 1873, as 1863. It is probable, however, that city was about 7,000.

Investigation has shown that there were sewers in existence as far back as 1863. It is probable, however, that these earliest sewers were private conduits made of wood and serving but a few residences, which at that time were mostly built of adobe.

It is thought that the location of these private sewers was along Los Angeles street, between Aliso street and the Plaza, and that they may have been connected with the zanjas or drainage ditches. The original sewer of Los Angeles was built by the proprietors of the Bella Union Hotel, and on account of its discharging into a zanja on Commercial street, was ordered closed by the Supreme Court as it was injurious to the health and property of people living below its outlet.

The Los Angeles Evening Telegram of August, 1882, refers to the main sewer of the city in that year as extending along Los Angeles street from Arcadia street to Seventh street; thence deflecting easterly toward San Pedro street; thence southerly to Washington street. It then discharged at a point about 1,000 feet easterly of the intersection of Washington street and San Pedro street onto the land of a Mr. Briswalter. This sewer, like others constructed before 1880, was made of brick covered with wood.

The same newspaper describes the location of other sewers built at that time, and mentions that the construction of those sewers was similar to the main sewer. As the latter was poorly constructed it was considered objectionable, and it was then felt that it would soon require replacement. It may be mentioned here that this main sewer and those similarly built of wood and brick have been filled in and superseded by sewers which were much deeper and more durable.

Several sewers laid between 1880 and 1883 were constructed of cement pipe. A few years ago it was found that the shells of these cement pipes had in many places deteriorated to such an extent that these sewers were abandoned and others, built of vitrified pipe, constructed in their place.

Since 1886 records show that most of the sewers have been constructed of vitrified pipe, and the length of sewers built of this material at the present time forms over 94 per cent of the length of the sewerage system. The sizes of the vitrified pipes and cement pipes have varied from six inches to twenty-four inches in diameter, and the brick sewers have varied from egg-shaped conduits of sixteen inches smaller diameter to oval-shaped sewers of six feet vertical diameter.

Until 1887 the sewerage system did not consist of more than seventeen miles of sewers. The disposal of sewage up to that time was by irrigation upon the ranches south of Washington street. In 1887, however, the City Surveyor, Mr. Fred Eaton, prepared a comprehensive plan for the construction of sewers in all parts of the city as it then existed, which at that time had an area of 29.2 square miles, or 1.2 square miles more than the area of the original city at the time of its incorporation in 1850.

System Proposed in 1887.

Mr. Eaton's plan was submitted by the City Council to Mr. Rudolph Hering of New York, Consulting Engineer, for his examination before its adoption. In Mr. Hering's report, reference was made to the construction of an outfall sewer proposed at that time to have a capacity for 200,000 persons. This outfall sewer was planned to intercept the flow from three main sewers, known as the "Western Intercepting Sewer," "Central Intercepting Sewer," and "Southern Intercepting Sewer." Into these three main sewers it was proposed to discharge the sewage of the smaller sewers which would be required in all of the streets of the city as it then existed. It was planned that the outfall sewer should discharge into the Pacific Ocean at a point about 11.5 miles southwest of the southwest corner of the city. This lo-

cation is known at the present time as Hyperion, and is about a mile north of the town of El Segundo, and about midway between Ocean Park and Hermosa Beach. It was further planned that the sewage could be used for irrigation if required.

In Mr. Hering's report it was noted that the system planned was for sewage only, and that the average amount of sewage per capita was assumed at 100 gallons per day with a maximum of 150 gallons during any part of the day. It was considered that the system could be properly ventilated by means of holes in the manhole covers, rather than through the house drains. It may be mentioned at this point that this system of ventilation has since been reversed and that the ventilation of the sewers in Los Angeles at the present time is mainly through the house connections, as this has been found by practice to be the most efficient method in many cities.

System as First Constructed.

On account of the increased growth of the city, which began about 1895 to be quite rapid, it was later found necessary to make some changes in the plans prepared by Mr. Eaton. These changes did not require any marked difference in the original plan, excepting in the southerly and southeasterly portions of the city. The addition of new streets and the increase of new territory in these locations made it necessary to change the location of the Central Intercepting Sewer.

This sewer, which may be called the main sewer for the center of the city, was originally planned to be built from the intersection of Jefferson street and Grand avenue, northeasterly to the First street bridge, thence across the river, and along its east bank to a point where recently was located the pigeon farm which was destroyed by the floods of 1914. The size of the sewer was to vary from 3 feet 2 inches by 4 feet 3 inches to 1 foot 6 inches by 2 feet 3 inches. As built, however in 1890, it was laid more than a mile to the east, crossing the river at Sixth street, and varying in size from 4 feet 2 inches to 2 feet 6 inches.

The Western Intercepting Sewer was laid in 1889 along Hoover street be-

*Read September 8, 1915, at the 13th Annual Convention of the League of California Municipalities in Oakland, California.

tween Jefferson street and Seventh street. Its size varied from 24 inches to 20 inches in diameter. It may be noted that both of these main interceptors were laid as circular sewers rather than the equivalent capacity in egg-shaped sewers.

The Southern Intercepting Sewer, as planned, was never built. In addition to the two main sewers above mentioned, laterals were laid in 1893 and 1894, along Flower street, Hill street, Maple avenue and Alameda street.

In 1896 the city was extended two miles westerly from Hoover street to Arlington avenue and two miles southerly from the South Charter Boundary to Slauson avenue, thereby adding ten square miles to its area. About this time the annexation of Highland Park and Garvanza to the northeast, and the University section in the southwest were made. Thus in 1900 the area of the city was 50 per cent more than it was in 1887, the population about 100,000 and the mileage of sewers was 160.

Old Outfall Sewer.

After the collection system planned by Mr. Eaton had been partially constructed, plans for an outfall sewer were finished, and in 1893 and 1894 this sewer was built. This outfall sewer began at the intersection of Jefferson street and Grand avenue. It was 12.4 miles in length, had a capacity of 30 second feet, and cost \$370,000. In its entire length there were three tunnels, two of which were 1,000 feet long, and the third, driven through the Inglewood Hills, was over a mile long. A part of this sewer was built of wooden stave pipe, banded with iron hoops. This type of construction was made necessary from the fact that the sewer, crossing two depressions in the surface of the land, formed two inverted siphons, each siphon being about three feet in diameter and over three miles in length. The remainder of this outfall sewer was built of brick, except at the ocean end, in which 24-inch cast iron pipe was used to carry the sewage out along the ocean bed for a distance of 600 feet. After the first severe storm, some of these iron pipe joints were broken, causing the sewage to discharge on the beach into a pool. A trestle was placed to prevent any further dislodgment of the pipe, but frequent repairs to both trestle and pipe line were required.

When this outfall sewer had been in use less than twelve years, it was found that the siphons were too small to carry the sewage of the city, and that a deterioration of the brick masonry was taking place, due to acid action caused by the sulphur bacteria in the sewage. The pressure on the wooden stave pipes of the siphons was sufficiently offset by the iron bands. The latter, however, occasionally rusted and deteriorated on account of the action of the alkali in the ground. The amount of sewage carried through, the first siphon became so great that it was necessary to relieve this part of the outfall sewer by overflow laterals which conveyed the excess volume of sewage to points where it would do the least damage. The discharge of sewage on land was, however, producing dissatisfaction, and it was found

impossible to divert the excess flow from the first siphon.

The flow through the outfall sewer to the ocean has been diverted at several places that the ranchers might make use of this source of supply for irrigation. The Cndahy ranch in the southeast, and the lands along the outfall sewer at several points between Santa Barbara avenue and Inglewood may be mentioned as among the places where this irrigation has been in practice.

Because of its growth to the south and southwest, the city encroached upon the farming districts, and objections were raised to this method of sewage disposal. The sentiment prevailing at this time became quite strong and against sewage irrigation, because it was considered that both from a business and also from a residential standpoint the discharge of sewage upon land would lower its value and interfere with the use of the land.

New Outfall Sewer.

The City of Los Angeles found it had accordingly outgrown its outfall sewer, and a bond election for funds for a new outfall sewer took place in October, 1902. The plans for the new outfall required a much lower elevation than that of the old outfall, as new additions to the south and southwest could not drain into the latter. This lowering of the grade permitted the new outfall to sewer practically all of the city as it existed in 1906, which was about 27,700 acres in area. On the other hand, however, the lowering of the grade caused considerable trouble and expense in the construction of the new outfall as almost three miles of its length of twelve miles was below ground water. The route for this sewer differed to some extent from that of the old outfall, but it discharged at the same place on the ocean front. Its size varied from 3 feet 3 inches circular to 6 feet 1 inch high by 5 feet 0 inches wide, and it was planned to be made mostly of brick. The capacity of the sewer was constant from the intersection of Slauson avenue and Arlington street to the ocean, and on a basis of 100 gallons per capita, it should provide for a population of 750,000. At the present time the average discharge is about 40 second feet, the total capacity being for a discharge of 116 second feet.

At the outlet end a pier 800 feet long was constructed and a 30-inch steel pipe was connected to the end of the old pipe and supported under the pier. The brick sewer ended 500 feet from shore, and 60 feet above high water.

Connection between the brick sewer and the outfall on the pier was made later by a reinforced concrete sewer 42 inches in diameter, lined with the best quality of vitrified brick to withstand scouring action. At the lower end of this 42-inch connecting sewer were gate valves which served to by-pass the sewage while repairs are made to the pier sewer outfall.

The velocity of flow through the new outfall varied from 4.2 feet per second to 7.8 feet per second. The time of passage between the upper end of the outfall at Jefferson street and University avenue and the outlet at Flye-

rión is estimated to be about four hours.

The work of construction by contract on the new outfall began in 1904. Two years later it was decided to have the City of Los Angeles complete the unfinished parts of its construction by day labor, as the contractors had defaulted on the balance of their contract. The principal and most difficult part of the unfinished work, which was completed by the city, was a tunnel two miles long with a maximum depth of 90 feet. To overcome the ground water encountered, proper machinery was installed which successfully handled the depth of 18 to 20 feet of water which was found above the invert grade. About two-thirds of this tunnel work was in wet ground, but by a continuous day labor work by a special department organized and maintained under the immediate supervision of Mr. Homer Hamlin, City Engineer, all of the new outfall sewer which was left unfinished by the original contractors, was completed and the new sewer was placed in use in 1907.

On account of damages to the outfall pier in 1908, changes were made in that portion of the outfall on the pier by replacing the 30-inch steel pipe with a 34-inch wooden stave pipe, at the outlet end of which was placed a 40-inch riveted steel pipe in a vertical position, thereby causing the sewage to be discharged at a depth of six feet below the mean sea level, and at a distance of 942 feet from shore. At this point the water is sixteen feet deep. During the past spring this vertical part of the pier outfall was washed away, and work is now under way for its replacement.

Additions to System Since 1907.

After the new outfall sewer was completed, the South Los Angeles Main Sewer was built. This sewer, laid easterly along Slauson avenue from its junction with the outfall sewer at Arlington street to Compton avenue, thence northerly and easterly through a portion of the City of Vernon, and across the Los Angeles River at McLean road, to the southerly end of Boyle Heights, is the main intercepting sewer for most of the city between Slauson avenue and Jefferson street, and also for the larger part of the Boyle Heights District. Tributary sewers quickly followed the construction of this main sewer. The South Los Angeles Main Sewer was built of brick along its lower end, and had a diameter of about four feet. To economize in cost of construction the upper end of this sewer, which had a diameter varying from 33 inches to 27 inches, was built of a combination of a concrete invert and a brick arch. It was considered that the use of the brick arch was more durable, where sanitary sewage only is concerned, than the use of a concrete arch.

In 1905, an extension of about three miles was made to the Central Intercepting Main Sewer previously described; which permitted the Highland Park and Garvanza sections of the city to construct their lateral sewers, and thereby afforded the benefit of the system to these sections.

Items Of Interest.

Proposed Pittsburg - Pacific Rate Of 55 Cents.

All the transcontinental railroads—the northern roads being the Union Pacific, Great Northern, Northern Pacific and Chicago, Milwaukee & St. Paul and the southern roads, the Atchafson, Topeka and Santa Fe and the Southern Pacific—Have sent petitions to the Interstate Commerce Commission asking that they be allowed to make a through rate on finished iron and steel articles from Pittsburg to Pacific coast points of 55c per 100 lbs., which is the same rate as now applies from Chicago to the Pacific coast. No doubt is felt at Pittsburg that the Interstate Commerce Commission will allow the applicants to establish this rate and it is expected to go into effect within a week or not more than ten days. The 55c rate from Pittsburg to the Pacific coast will be extended to apply on tin plate.

The advantage to Pittsburg iron and steel manufacturers of a lower all-rail rate to the Pacific coast is obvious. Considerable time is saved in shipping by rail instead of to New York and via the Panama Canal. Whether the rate from Pittsburg to the Pacific coast via New York and the Panama Canal, which is now 56.9c will be reduced to meet the proposed 55c all-rail rate cannot be stated at this time. Unless it is reduced, it is certain this shipments of iron and steel articles from Pittsburg to the coast, via the transcontinental roads, will be materially increased, both on account of the lower rate and of the time saved.

Our Export Trade.

Secretary McAdoo has transmitted to President Wilson his report of the proceedings and conclusions of the Pan-American commercial conference last May of representative bankers, business men and statesmen of the United States and eighteen Latin-American republics. Mr. McAdoo summarized his suggestions for carrying on the work of the conference and improving the financial and commercial relations between the participating countries as follows:

That the twelve federal reserve banks establish promptly joint agencies in the leading cities of all the countries of Central and South America for the purpose of providing enlarged credit facilities, as outlined in the first part of this report.

That the government of the United States provide the necessary steamship facilities by subscribing the capital stock of a corporation organized for the purpose of owning and operating the necessary steamship lines.

That the international high commis-

sion on uniformity of laws be granted an appropriation of \$25,000 to enable it to carry on the important work it has undertaken and represent the United States in the meeting of the international high commission of all Latin-American republics.

That a Pan-American financial conference be held annually in the city of Washington and that the congress authorize the President to extend invitations to the republics of Latin-America to attend a conference at the capital during 1916 and that an appropriation of \$50,000 be made for said conference.

In support of his suggestion for the establishment of joint agencies of federal reserve banks in neighboring republics, Mr. McAdoo says that extension of the credit facilities of this nation in those countries will inure to "their and our advantage."

He declares that the plan advanced during the conference here for the amendment of the national bank act so that national banks could become stockholders in an independent bank which would do a foreign business is inferior to that he now proposes for joint agencies of reserve banks.

A Freight Regulator.

With the motor truck a present fact in our industrial life, and with the general system of excellent roads existing in California, the railroads are going to find a new and live competitor which is sure to prove an efficient regulator of freight charges. The Wichita Transportation Company is operating five trucks between El Centro, Imperial County, and San Diego-by-the-Sea successfully. These five trucks cost about 12,000, less than the cost of building one mile of railroad. The trucks are operated in a region without railroad competition. The railroads have introduced a case into the courts complaining that the truck company is not operating according to the laws of the state governing transportation service.

Los Angeles Harbor.

The city of Los Angeles is first on the coast in the number of municipally owned docks and warehouses.

With the water frontage at San Francisco controlled by the state, the city of Los Angeles is far ahead of all that have municipal ownership. Complete figures bringing the number of municipal wharves and warehouses right down to date including the Salt Lake wharves, which have just been taken over by the city, were compiled recently at the request of the harbor commission of the city of Montreal.

Here is the tabulation of wharves and warehouses on the inner and outer harbor owned by the city and by private corporations:

	Feet.
Municipal—	
Dock No. 1	2,520
East Channel	402
Fish wharf	950
First street wharf	295
Banning wharf	152
Pier A	2,055
Fries street	330
Water street	670
East San Pedro wharf	2,296
Fish harbor wharf	1,630
Total	11,300
Private—	
Consolidated Lumber Co.	1,800
Crescent Wharf & Warehouse Co	852
E. K. Wood Lumber Co.	825
Hammond Lumber Co.	1,000
Kerkhoff-Cuzner Mill and Lumber Co.	1,196
Outer Harbor Dock & Wharf Co.	5,400
Pacific Wharf & Storage Co.	1,500
San Pedro, Los Angeles & Salt Lake Railroad	1,600
San Pedro Lumber Co.	1,081
Pacific Coast Steamship Co.	437
Southern Pacific Co.	6,121
Southern California Lumber Co.	797
Total	22,609
Total, municipal and private	33,909

	Feet long.
Municipal—	
Dock No. 1	1800
Pier A, shed No. 1	1000
Pier A, shed No. 2	495
Water street shed	510
First street shed	250
Total	4055

All of the above are 100 feet wide except First street shed.

	Feet long.
Private—	
Crescent Wharf & Warehouse Co	373
Outer Harbor Dock & Wharf Co.	1423
Pacific Wharf and Storage Co.	510
Southern Pacific Co.	640
Total	2956

With the exception of one shed of the Outer Harbor Dock and Wharf Company the private sheds are narrow.

Important papers of interest to miners are ready for free distribution by the bureau of mines, Department of the Interior, according to information received here.

Only a limited supply of the publications are available for free distribution and in writing for them persons are requested to ask for only those needed and designate which they want by the number and title. The papers prepared and the subjects dealt with are: Bulletin 75, Rules and Regulations for Metal Mines; technical paper 83, The Buying and Selling of Ores; technical paper 107, Production of Explosives in the United States; technical paper 109, Composition of the Natural Gas Used in Twenty-five Cities; technical paper 110, Monazite, Thorium and Mesothorium; miners' circular 18, Notes on Miners' Carbide Lamps.

Hollywood Water Extension.

The following letter is self-explanatory:

Los Angeles, Cal., Sept. 14, 1915.
H. T. Wright, Esq.,

Secretary of Hollywood Board of
Trade, Los Angeles, Cal.

My Dear Mr. Wright: In response to your letter of inquiry of recent date in regard to the purposes and policies of the public service commission with reference to the proposed issue of bonds in the Hollywood, Colegrove and Palms sections, I beg leave to submit the following:

The proposed bond district is in two sections.

1. That portion of Los Angeles city west of Vermont and north of Wilshire, including Hollywood and Colegrove, and

2. That portion south of Wilshire boulevard, including the recently annexed district known as The Palms.

The entire bond issue will be \$1,550,000, the proceeds to be divided as follows:

(a) For north of Wilshire,
Hollywood and Colegrove. \$1,000,000
(b) For south of Wilshire and

The Palms 550,000
The bonds to run for forty years, interest not to exceed 6 per cent.

Five hundred and fifty thousand dollars south of Wilshire and The Palms to build a new distributing system to cover that territory.

One million dollars north of Wilshire and Hollywood and Colegrove as follows:

1. Payment to Union
Hollywood Water
Company \$550,000
2. Extensions, en-
largements, im-
provements, Santa
Monica boulevard
main and replacing
Worn out pipe, etc
..... 234,736
3. Cahuenga pass
trunk line, Frank-
lin avenue tunnel
via Ventura road to
Franklin avenue;
total cost 136,675
- Amount chargeable
to San Fernando
Valley \$38,350.00
- Amount chargeable
to city and bond
district 98,325.00
- Fifty per cent
chargeable to
bond district
(Hollywood) 49,162.50
4. Franklin line east
total 147,639
- Fifty per cent
chargeable to
district 73,819.50
5. Franklin line west
..... 42,282

It is a fact that heretofore all the interest and sinking fund on the bonds issued for the purpose of purchasing the water distributing system of the old Los Angeles City Water Company have been paid out of the water revenues and that no taxes have ever been levied for these purposes.

This board, however, is of the opinion that this method is unjust and inequitable, as it compels the users of water to pay for the expense of building and maintaining the water system for the benefit of all property in the city or district and all property is benefited by the building of such a system and should pay its just proportion of the cost.

We believe that the just and equitable method is for the bonds to be paid by an assessment upon all of the property of the district, but if the majority of the water users in the proposed district and the city council desire to continue the policy of paying these charges from the money of the water users of the district, the board will probably adopt that method. It has been suggested that at the bond election an informal vote be taken of the electors of the district so that they may express their preference in this regard.

The present rates must be maintained in this district until funds are provided for the various contingencies above mentioned. No other method of raising this money can be devised except by voting these bonds. As soon as this money has been provided the board will reduce the rates the same as in the balance of the city.

Unless the people provide for the issuance of these bonds it will leave the district in a very bad condition with no adequate system for the supplying of water and no provision for future development, or for making extensions or replacing defective pipe, and it will soon endanger the purchase from the Union Hollywood Water Company, as the income at the present rates is insufficient to make the payments under the contract and provides nothing for betterments or extensions of the system or for the growth of that portion of the city.

Assessed value of property of district, \$34,000,000.

Annual assessment \$0.3874 on each \$100 the first year and \$0.2507 the average rate for the whole time to pay the bonds.

For illustration: A property owner whose property is assessed for \$2,000 would pay an average tax of \$5.01 per year. If he is a user of water, saving to him would be from \$12 to \$25 per year. Very truly,

R. F. DEL VALLE,
President.

According to Col. W. H. Holabird, receiver for the California Development Company, development of new land in the Imperial Valley must depend on the Federal Government.

"The Development Company has about completed its 900-foot dam at Hanlon heading, eight miles south of Yuma," said Colonel Holabird recently. "When the last gap in that dam is stopped up every drop of water in the Colorado River will be in use in the valley. here will be 150,000 acres still unsettled, but its development must depend on the storage of water by the Government."

Petroleum In August.

Reaching the highest mark recorded since July, 1914, the shipments to trade of oil produced in California totaled 8,077,86 barrels during the month of August.

In comparison with July the figures prepared by the statistical bureau of the Independent Oil Producers' agency show that last month the shipments advanced approximately 400,000 barrels above the total for the previous month.

While the indications are that August shipments were abnormal the statistics bear positive proof of the assertions that the prospects for the oil industry of this state are brightening. The slump that was occasioned by the declaration of war in Europe has been overcome and the situation may be regarded as steadily becoming stronger.

Following are the statistics for August:

District—	Gross Barrels.
Kern River	791,445
McKittrick	298,072
Midway-Sunset	3,334,516
Lost Hills-Belridge	376,200
Coalinga	1,148,678
Santa Maria	418,110
Ventura-Newhall	86,885
Los Angeles-Salt Lake	168,266
Whittier-Fullerton	1,053,375
Summerland	4,500

Total	7,680,047
July	7,738,643

Difference 58,596

Shipments and Stocks.

Stocks August 1, 1915.....	59,650,219
August production	7,630,643

Total	67,330,266
August shipments to trade.....	8,077,586

Stocks Sept. 1 1915.....	59,252,680
Stocks decreased in August.....	397,539

Stocks January 1, 1915.....58,259,119

Summary of Field Operations—Wells.

	Rigs Up.....	Drilling.....	Completed.....	Producing.....	Abandoned.....
District—					
Kern River	12	1	1481	..	..
McKittrick ....	..	..	259	..	..
Midway-Sunset .	4	46	15	1296	1
Lost Hills - Bel- ridge	1	6	..	249	1
Coalinga	2	9	..	818	2
Santa Maria	1	10	3	237	6
Ventura-Newhall	1	20	2	431	2
Los Angeles-Salt Lake .....	..	1	..	696	..
Whittier - Ful- lerton	2	56	3	584	1
Summerland .....	..	..	..	102	..
Totals	11	150	23	6153	13
July	10	132	36	6083	19
Difference	1	18	13	70	6

News from the California State Commissions.

STATE CORPORATION DEPARTMENT.

Illustrating some of the methods adopted by Commissioner of Corporations H. L. Carnahan to prevent shares of stock from getting loose on the open market until some definite value is established behind them are two mining cases just passed by the department.

In that of the Mace Asbestos Mining Company, which proposes to operate a lease in Amador County, the request to issue 1,000 shares apiece to four men in payment for their services in securing the lease and turning it over to the company was granted. The permit requires, however, that these shares be deposited as an escrow so that none of them may be sold or offered for sale until the company has accumulated sufficient surplus profits to pay a ten per cent dividend on all outstanding shares. If the lease proves of value the promoters will profit with the stockholders who pay cash for their shares. If it fails to make good, the shares having no value will never reach the public.

The Gold Point Mining Company is practically a close corporation of four individuals proposing to take over a lease and option to purchase certain claims on the North Yuba River above Downieville. The company is permitted to issue approximately 50,000 shares for money. The property, however is involved in litigation, and all shares issued must be deposited and withheld from further sale until the company has acquired good and sufficient title to the property.

Odd Fellows Hall Association, Los Angeles, is permitted to sell \$45,000 bonds for the purpose of retiring outstanding bonds and notes held by various lodges of the order.

G. & M. Sales Co., Inc., is permitted to sell 800 shares at par, \$10 per share, to net not less than \$0 for the purpose of establishing a sales agency for Jackson's Napa Soda water in New York State.

Kellar-Thomason Co., Los Angeles, is permitted to sell 500 shares at par, \$100 per share, to net not less than \$0.

Long Beach Harbor Co. is permitted to sell 5,754 shares to present stockholders at 50 cents to provide funds for meeting interest, taxes and other charges against a tract of land held by the company.

Thex Springs Mining Company is permitted to issue 26,000 shares to E. S. Armstrong and S. F. Brock in payment for four quartz mining locations in Inyo County, to sell 24,000 shares at 25 cents to subscribers on subscriptions previously taken and to sell an additional 49,997 shares at the same price,

without deduction for commissions or other sales expense.

Allison-McHarg Co. is permitted to issue 124 shares to Mary C. Allison and 123 shares to Edith Allison McHarg in exchange for certain real property.

Co-operative Home Builders Co., San Francisco, is permitted to issue 15,000 shares on subscriptions previously taken, and to sell 10,000 shares at par, \$1 per share, to net 100 per cent. The company was organized among the United Railroad employees.

Pinless Line Sales Company, San Francisco, is permitted to issue seven shares in payment for an agency contract and two shares at par, \$250 per share, the seven shares to be deposited as an escrow pending action by the Patent Office on the device, on which the company has secured territorial rights.

Tuolumne Merchandising Co. is permitted to issue its shares to Paul Morris in exchange for the business and assets of the West Side Store at Tuolumne, Cal.

American Saw Mills.

For the benefit of all who would know where the hardwoods and the soft woods in their numerous varieties are to be found, the Bureau of Foreign and Domestic Commerce, of the Department of Commerce, and the Forest Service, of the Department of Agriculture, have co-operated in publishing a directory of American sawmills, which might also be described, because of the detailed information regarding timber, as a complete guide to the forest resources of the United States.

This accurate knowledge of the places from which lumber may be obtained is one result of the closer government supervision of forests, as the same service that protects the trees gathers the facts that will aid the factories and dealers.

The history of this branch of American industry is a record of shifting production from extreme northeast, to the northern part of the central section of the country, to the South and West, and the directory of sawmills shows the proportions of the total output now derived from each of these sections.

This publication, with its detailed information, offers almost a glimpse of the mills in operation, for the returns compiled tell of the kinds of wood each produces, the capacity of the plant in board feet per day, and per cent of output in boards, timbers or framing. They indicate mills producing laths, shooks, ties or shingles, and record the largest size a mill can furnish, largest size it can dress, largest it can kiln dry, the least thickness

it can resaw, and its specialties.

A rapid survey of the field of production is afforded by a map of the United States presenting in graphic form the yield of lumber in 1912 by States and kinds of wood. It shows large amounts from such States as Louisiana, Washington, Oregon, Michigan, North Carolina, Wisconsin, Virginia, West Virginia, Mississippi, Arkansas, Pennsylvania, Minnesota and others, with smaller amounts down to the less productive States. There are also tables giving similar data for the various species, and a list of associations with the addresses of their officers and the kinds of wood the members produce. Rail and water routes to the individual mills are indicated in the returns from their owners that are published.

The book, which is Miscellaneous Series No. 27 of the publications of Foreign and Domestic Commerce, may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., or from the branch offices of the Bureau, at 25 cents per copy. San Francisco Branch, Customhouse.

The first clod for the construction of Kings County highway system, for which \$675,000 bonds were voted in May, was turned by Chairman J. M. McClellan of the Board of Supervisors. The same shovel was used which turned the first sod for the construction of Kings County's courthouse twenty-four years ago. A large crowd witnessed the inspiring scene. The highway system will connect all towns and cities of the county.

Three banking institutions holding trust mortgages aggregating \$23,600,000 secured on bonds covering the operative properties of the People's Water Company have commenced six suits for foreclosure in the Superior Court. The trust concerns are the Union Trust Company, San Francisco; Mercantile Trust Company, San Francisco, and the Oakland Bank of Savings. The suits are a necessary step in the reorganization of the company, it was declared.

Owing to ambiguity in the specifications regarding the furnishing of concrete by the county, the bids for the construction of five miles of county road between Palmdale and Lancaster were rejected without being opened by the Board of Supervisors of Los Angeles County, and the road department was instructed to prepare a new set of specifications.

For the same reason the advertisement calling for bids for the Artesia-Anaheim road was ordered withdrawn until the defect can be remedied.

Technical Societies.

SAN FRANCISCO ASSOCIATION OF MEMBERS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.

Organized April 28, 1905.

This association which this summer rounded out its tenth year of existence has grown steadily since its inception, and now numbers some 200 members.

For the benefit of our readers we give here some extracts from the by-laws and the last annual report.

The object of this association is the advancement of engineering knowledge and practice, the maintenance of a high professional standing amongst its members, and the furtherance of the general welfare of the American Society of Civil Engineers.

Among the means employed for this purpose are meetings for the presentation and discussion of professional papers, particularly those issued by the American Society of Civil Engineers, and the encouragement of engineers who are not members to attend and take part in the professional and social features of such meetings.

The membership of this Association is restricted to persons who are members of the American Society of Civil Engineers in any grade. All such may become members of this Association without payment of entrance fee, but should the membership in the American Society of Civil Engineers of any person cease from any cause, he shall at the same time cease to be a member of this Association.

The annual dues payable by all members are \$5.00, payable annually in advance on the first day of January, and any member whose dues are more than one year in arrears shall cease to be a member of this Association.

The officers of this Association are a president, two vice-presidents, a secretary and a treasurer, who, with the two latest living past presidents, constitute a board of directors, in which the government of the Association is vested.

The officers are elected at the annual meetings of the Association.

The annual meeting of the Association is held on the third Friday of December in each year.

Regular meetings are held bi-monthly at such time and place as may be appointed by the board of directors. The established custom is to meet on the third Fridays of February, April, June, August, October and December. At these meetings the business of the Association is transacted and the discussion of professional papers published by the American Society of Civil Engineers, or specially arranged for the occasion is in order. Such discussions may be furnished to the Secretary of the American Society of Civil Engineers for publication, subject to

the approval of the publication committee of that Society.

Weekly luncheons in College Room. Regular meetings monthly as arranged. Engineers welcome; informal; no program.

Past Presidents.

Wm. W. Harts	1905
Edwin Duryea, Jr.	1906
Arthur L. Adams*	1907
Chas. D. Marx	1908
Luther Wagoner	1909
Franklin Riffle	1910
C. Derleth, Jr.	1911
C. E. Grunsky	1912
Charles B. Wing	1913
C. H. Snyder	1914

Two hundred members.

*Deceased

Officers for 1915.

President—A. M. Hunt.
Vice-Presidents—H. L. Haehl, M. C. Couchot.
Secretary—E. T. Thurston, Jr.
Treasurer—P. E. Harroun.
Board of Directors—M. C. Couchot, H. L. Haehl, A. M. Hunt, P. E. Harroun, E. T. Thurston, Jr., C. H. Snyder, C. B. Wing.

SAN FRANCISCO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS. 233 Post Street.

President.....	W. B. Faville
Sec.-Treas.....	Sylvain Schnaittacher

LOS ANGELES AND SOUTHERN CALIFORNIA.

AMER. SOC. OF CIVIL ENGINEERS. So. Calif. Association of Members.

President.....	Chas. T. Leeds
First Vice-President.....	Geo. S. Binckley
Second Vice-President.....	H. Hawgood
Treasurer.....	Chas. H. Lee

Meetings bi-monthly. Address all communications to W. K. Barnard, Secretary, 701 Central Bldg., Los Angeles.

AMERICAN INSTITUTE ELEC. ENGINEERS—Los Angeles Section.

Chairman.....	E. R. Northmore
Secretary.....	C. G. Pyle
Asst. Secretary.....	Edward Woodbury

EXECUTIVE COMMITTEE—J. A. Lighthipe, J. E. Barker, Geo. A. Damon, A. W. Nye.

Regular meetings third Tuesday in each month. Address all communications to C. G. Pyle, Secretary, Standard Underground Cable Co., 914 Hibernian Bldg., Los Angeles.

ENGINEERS AND ARCHITECTS ASSOCIATION OF SOUTHERN CALIFORNIA.

President.....	Samuel Storrow
Vice-President	A. H. Koebig
Second Vice-President.....	W. A. E. Noble
Secretary-Treasurer.....	H. Z. Osborne, Jr.

DIRECTORS—Arthur S. Bent, J. J. Backus, A. C. Martin, Kenneth Shibley. Regular monthly meetings as arranged by program committee. Address all communications to H. Z. Osborne, Jr., Secretary, care City Engineer's Office, Los Angeles.

AMERICAN INSTITUTE OF ARCHITECTS—SOUTHERN CALIFORNIA CHAPTER.

President.....	Albert C. Martin
Vice-President.....	S. Tilden Norton
Secretary.....	Fernand Parmentier
Treasurer.....	August Wackerbarth

DIRECTORS—J. C. Allison, J. J. Blick, J. J. Backus.

Regular meetings second Tuesday evening each month. Address all communications to A. R. Walker, Acting Secretary, 1403 Hibernian Bldg.

PERSONAL.

W. H. Connell, Chief Highway Engineer of Philadelphia, and W. D. Uhler, Chief Engineer of the Pennsylvania Highway Department, recently made a tour of Los Angeles to inspect methods of street construction, repair and cleaning, in company with City Engineer Hamlin, Chief Deputy City Engineer Hansen, Mr. Nanry and Director Jesse D. Burks of the municipal efficiency department.

O. K. Parker, former engineer for the Southern California Automobile Club, now connected with the Harold L. Arnold organization, has been appointed consulting engineer for the Los Angeles Speedway Association. Mr. Parker is one of the best known men in Southern California to the motoring public. It was due more to his personal efforts than any other one factor that the road sign system south of the Tehachapi has gained national recognition as the best in the United States.

Engineer George P. Robinson, 729 Central Bldg., Los Angeles, has secured the contract for the preliminary surveys for the new Los Angeles speedway.

Mortimer Fleischacker, San Francisco banker and capitalist, has been appointed by Gov. Johnson the fifth member of the Rural Credits Commission, provided for by the last Legislature. The appointments of the other members, announced some time ago by Harris Weinstock, also were made official by the Governor. Besides Fleischacker, the commission members are State Senator W. E. Brown of Los Angeles, David P. Barrows of the University of California, Elwood Mead of the University of California and Harris Weinstock of San Francisco.

The County Highway Commission of Ventura County and the Supervisors have reached the conclusion to name County Surveyor Petit as engineer in charge of the building of \$1,000,000 worth of good roads in that county.

A million dollar good road bond issue was carried there by a vote of 4387 to 446. The money will be expended in building the main line roads of the county.

ADVANCE NEWS

Classified according to Character of Work



Devoted to the Architectural, Engineering, Building and Industrial Activities of the Pacific Coast.

Circulates among the leading Architects, Engineers, Surveyors, Contractors and Municipal Authorities on the Pacific Coast.

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$30,000. Architect, W. G. Hind, 46 Kearny street, S. F. Owner's name withheld. Location, Bush near Hyde. Will contain 23 suites of two rooms and bath. Interior finish pine with elm panels and hardwood floors. Steam heat, hot water system and wall beds. Ornamental plaster in lobby. Marble and tile wainscot in vestibule. Exterior covered with pressed brick veneer and cement plaster. Plans complete and segregated figures being taken.

SAN FRANCISCO—Apartment house, 4 story and base, brick and steel, \$40,000. Architect, E. H. Denke, 1317 Hyde street, S. F. Owners, Max and Dora Kolander, 1750 Franklin street, S. F. Location, south Bush west of Jones, covering an area of 54 feet 10 inches by 107 feet. Will contain 14 suites of five rooms and two suites of four rooms. Interior finished in hahogany and white enamel. Hardwood floors. Steam heat, oil burning equipment and hot water supply. Automatic elevator. Marble and tile wainscot in lobby. Wall beds. Bath rooms finished in tile. Exterior faced with pressed brick and terra cotta. Plans complete and segregated figures being taken.

STOCKTON, SAN JOAQUIN CO., CAL.—Apartments and offices, 3 story and base, brick. Cost not stated. Architect, Franklin Warner, San Joaquin Bldg., Stockton. Owner, Henry B. Budd. Location, East Channel between Sutter and San Joaquin streets, covering an area of 50½ feet by 75 feet. Will contain two stores and twelve suites of three and four rooms. Interior finish pine and elm panels. Some hardwood floors. Wall beds, steam heat, hot water supply and oil burning furnace. Exterior faced with pressed brick. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$15,000. Architect, none. Owner, James Welsh, 519 16th avenue, S. F. Location, southeast corner 15th avenue and Geary street, covering an area of 50 by 64 feet. Will contain eleven suites of two and three rooms. Interiors finished in pine with some elm panels and hardwood floors. Wall beds, steam heat and tile bath rooms. Exterior covered with rustic and cement plaster on metal lath. Plans complete and in the hands of the owner who will do the work by Day Labor.

SAN FRANCISCO—Apartment house, 6 story and base, brick and steel, \$150,000. Architect, J. C. Hladik, Monadnock Bldg., S. F. Owner, Geodi Prioste. Location, northwest corner of Van Ness and McAllister street. Will contain nine stores, office and lobby on first floor. Upper floors will contain 200 rooms arranged in two,

three and four room suites. Wall beds, steam heat, elevator service, hot water system and vacuum cleaning. Bath rooms finished in tile. Patent store fronts. Exterior faced with white glazed terra cotta. Plans complete and segregated figures being taken.

BANKS

LOS ANGELES, CAL.—Bank and offices, 4 story and base. Class A construction. Cost not stated. Architect, John Parkinson, Security Bldg., L. A. Owners, Security National Bank. Location, Spring street adjoining Security Building. First floor arranged for bank and upper floors for offices. Interior finish pine and hardwoods with marble bases and wainscoting. Hollow tile interior partitions, concrete floors, metal window sash and frames. Ornamental plaster and bronze in bank. Steam heat and elevator service. Exterior faced with granite. Plans complete.

BONDS

EUREKA, HUMBOLDT CO., CAL.—The Fortuna High School District will have to hold another bond election for a new school building, because the former issue has been declared invalid. The bonds were for \$24,000.

LOS ANGELES, CAL.—The City Council has decided to submit to the voters at the October 26th election, a proposition calling for a bond issue of \$15,000 for building of a bridge across the Los Angeles River, connecting Lake Shore and Brand Boulevards.

THE DALLES, ORE.—The Wasco Good Roads Association recommended to the County Court that an election to vote bonds of \$262,500 be held. Of this amount \$62,500 is to be used on the Columbia Highway.

CHEHALIS, WASH.—An election will be held in the immediate future to vote bonds of \$62,000 with which to pay off outstanding warrants.

CALEXICO, IMPERIAL CO., CAL.—A bond election will be held shortly to vote bonds for the construction of a civic center.

LOS ANGELES COUNTY, CAL.—The Board of Supervisors by a vote of three to two decided to submit to vote on October 26 the question of raising \$2,650,000, by a bond issue for road building in the county. If the bonds are voted, Supervisor Hinchaw has submitted the following expenditures:

Completion of Mint Canyon road	\$200,000
Arroyo Seco to Sky Line, to meet proposed State Highway	500,000
Sky Line, 30 miles	150,000
San Gabriel Canyon to Sky Line and Devil's Punch Bowl	750,000
Pico Boulevard	50,000

Harbor Boulevard	400,000
Venice to Manhattan Beach....	50,000
La Brea Canyon	65,000
Orange Grove avenue, Pasadena, to Central avenue, Sierra Madre	75,000
Redondo and Point Firmin....	150,000
Durfee road	50,000
Irwindale avenue, Poothill Boulevard to Covina road	30,000
Citrus avenue, Covina, to Walnut	75,000
Lexington road, south of El Monte	30,000
Ventura County, Castaic connection	75,000

HOQUIAM, WASH.—Another election will be held to vote \$100,000 bonds with which to construct lateral highway and bridges. Each project will be voted on separately. The issue recently failed to carry.

FRESNO, FRESNO CO., CAL.—The proposition of calling a bond election to vote bonds for needed improvements in this city is now being considered by the officials. It is proposed to enlarge the present sewer system, storm sewers and an extension of fire protection as well as an increase in apparatus.

EUREKA, HUMBOLDT CO., CAL.—Bids will be received up to October 11th by the County Supervisors for the purchase of either one hundred or one hundred and twenty-five California State Highway 4 per cent bonds. Further information relative to the sale may be had from the Clerk of the Supervisors.

BAKERSFIELD, KERN CO., CAL.—Owing to the crowded conditions of the present school buildings, the proposition of bonding the city for several thousand dollars in which to enlarge them is now under consideration.

ABERDEEN, WASH.—Bonds of \$400,000 to build water works and \$25,000 for the construction of a bridge across the Chehalis River, have been voted by the taxpayers.

MANHATTAN BEACH, LOS ANGELES CO., CAL.—Bonds have been voted for the erection of a new city hall building, to cost in the neighborhood of \$15,000. Plans for the structure are now under way in the office of Train & Williams, Exchange Bldg., Los Angeles.

BRIDGES, DAMS AND HARBOR WORK.

MODESTO, STANISLAUS CO., CAL.—Bridges, reinforced concrete and steel. Cost not stated. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Bids will be opened on October 12th for the construction of four reinforced concrete bridges located as follows: Over Lower Lateral No. 2, about one and one-quarter miles south of the town of Ceres; over Lateral No. 4 on the Crows Landing road, about nine and one-half miles south of Modesto; over the Elmdale ditch near the corner common to sections 29, 30, 31 and 32 T. 3 S., R. 11 E., about two miles north of the town of Denair, and over a dry creek near the northwest corner of section 5, T. 3 S., R. 10 E., about one and one-half miles north and one and one-quarter miles east of the town of Claus.

HANFORD, KINGS CO., CAL.—Bridges and culverts, reinforced concrete. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. Bids will soon be called for by the County Supervisors for the construction of bridges and culverts on the unit of the highway running from the east terminus of Seventh street south eight miles. Specifications for this portion of the highway are nearing completion.

BEATRICE, HUMBOLDT CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Bids will be opened on October 13th for the construction of a reinforced concrete culvert in Road District No. 3. Plans and specifications can be secured from the County Surveyor.

EUREKA, HUMBOLDT CO., CAL.—Trestle, timber. Cost not stated. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Bids will be opened on October 13th for the construction of a timber trestle in Road District No. 3. Plans and specifications can be secured from the County Surveyor.

VISALIA, TULARE CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, Visalia. Owners, Tulare County. Tulare County officials are planning to bridge Cross Creek before the state highway construction crew reaches that point. While four or five bridges are required, only two of them will be concrete, the rest being corrugated pipes. These will be of 24-inch diameter and will be ample to carry off the flood waters.

MADERA, MADERA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, City of Madera. Bids will be opened on October 18th for the construction of a 270-foot bridge over the Fresno River at D street. Plans can be secured from the City Engineer at Madera on deposit of \$5.

Contracts Awarded.

HONOLULU, HAWAII—Coaling station, \$450,000. Engineer's name not given. Owners, Inter Island Steam Navigation Co. Contractors, C. W. Hunt Co., New York. Contract price, \$450,000.

SALINAS, MONTEREY CO., CAL.—Bridge, reinforced concrete, \$2,100. Engineer, County Surveyor Cozzens, Salinas. Owners, Monterey County. Contractor, Lou G. Hare, Salinas. Contract price, \$2,100.

CHURCHES

SAN FRANCISCO—Church, 2 story and base, brick and steel, \$60,000. Architect, William H. Crim, Jr., 425 Kearny street, S. F. Owners, Second Church of Christ, Scientist. Location, corner of Dolores and Cumberland. Will cover a considerable ground area. Design classic. Interior arranged for auditorium, class rooms and reading rooms. Finish, pine and hardwood. Steam heat and vacuum cleaning. Ornamental plaster. Exterior faced with pressed brick trimmed with terra cotta. Plans nearly complete and figures to be called for shortly.

JAMESTOWN, TUOLUMNE CO., CAL.—Church, 1 story and base, frame, \$12,000. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Roman Catholic Church. Design, Spanish colonial. Will contain main auditorium seating 350 people and Sunday school rooms. Interior finished in pine with some ornamental plaster. Art glass windows. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

FACTORIES AND WAREHOUSES

OAKLAND, CAL.—Warehouse, 3 story and base, brick and steel, \$60,000. Architect, Walter D. Reed, Oakland Bank of Savings, Oakland. Owners, Crane Co. Location, 5th and Webster streets. Will contain large storage space. Interior finish pine. Cement floors. Metal window sash and frames, special conveyor machinery. Exterior faced with pressed brick and stone. Plans complete and figures being taken.

Contracts Awarded.

ASTORIA, ORE.—Grain elevator, reinforced concrete, \$22,668. Engineer, Port of Astoria Commission, Astoria. Owners, City of Astoria. Contractor, H. E. Doering, Portland. Contract price, \$22,668.

FIRE HOUSES AND JAILS.

BAKERSFIELD, KERN CO., CAL.—Jail lighting fixtures. Cost not stated. Architect, Orville L. Clark, Brower Bldg., Bakersfield. Owners, Kern County. Bids will be opened on October 9th for furnishing and installing lighting fixtures in the new County Jail Building. Plans and specifications can be secured from the architect.

FIRE REPORT

BAKERSFIELD, KERN CO., CAL.—The Lowell and Bloom clothing store in this city was destroyed by fire last week, entailing a loss estimated at \$25,000.

GRASS VALLEY, NEVADA CO., CAL.—"Rolda Mun," a summer resort owned by F. C. Luck, and situated on the narrow gauge line in Chicago Park, was destroyed by fire recently, causing a loss of \$4,000. The structure was two stories in height and of frame construction.

CONCORD, CONTRA COSTA CO., CAL.—The Presbyterian Church has been destroyed by fire at a loss of \$8,000. Preparations are being made to have the structure rebuilt.

SAUSALITO, MARIN CO., CAL.—The Miramar Cafe, a landmark of this town, has been destroyed by fire. The loss is estimated at \$5,000.

FLATS

SAN FRANCISCO—Flats, 3 story and base, frame, \$7,500. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, G. De Martini. Location, east Mason south of Broadway. Will contain three flats of six rooms each. Interior finish pine. Some hardwood floors. Open fire places and tile mantels. Bath rooms finished in imitation tile. Exterior covered with brick veneer.

ry and shiplap. Plans complete and figures being taken.

SAN FRANCISCO—Flats, 3 story and base, frame, \$5,000. Architect, Paul F. Martini, 2123 Powell street, S. F. Owner, O. Torrie. Location, corner of Jackson and Lombard. Will contain six-room flats and a garage. Interior finish, pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Imitation tile in bath rooms. Automatic water heaters. Tile and mosaic in lobby. Exterior covered with cement plaster and shiplap. Plans are complete and figures are being taken.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, none. Owner, W. L. Hemmings, Inc., 1600 Fell street, S. F. Location, north California street east of 15th avenue, covering an area of 25 by 65 feet. Will contain two modern flats. Interior finished in pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flat and store, 2 story and base, frame, \$7,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. Location 45th avenue and J street. Will contain store on first floor and modern flat above. Interior finished in pine and elm panels. Hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with shiplap. Plans complete and figures being taken.

SAN FRANCISCO—Flat and store, 2 story and base, frame, \$3,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, A. Malucelli. Location, corner of 25th avenue and Lane. Will contain one store and a six-room flat. Interior finished in pine. Some hardwood floors. Open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with rustic. Plans complete and figures being taken.

GARAGES

SAN FRANCISCO—Garage, 2 story and base. Class A construction, \$35,000. Architect, August G. Headman, New Call Bldg., S. F. Owner's name withheld. Location down town district, covering an area of 37½ by 137½ feet. Designed for commercial garage. Reinforced concrete walls, floors and steel roof trusses. Interior finish, steel. Metal window sash and frames. Special gasoline storage tanks. Exterior faced with pressed brick. Plans being prepared.

SAN FRANCISCO—Garage, 1 story and base. Class C construction, \$25,000. Architect, J. R. Miller, Lick Bldg., S. F. Owner represented by Buckbehn Co. Location, southwest corner of Bush and Pierce, covering an area of 100 by 100 feet. Will contain stores besides a commercial garage. Interior finish pine. Exterior faced with cement plaster. Plans nearly ready for figures.

GOVERNMENT WORK & SUPPLIES

Pearl Harbor, H. T., Piers.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for the construction of reinforced concrete torpedo-boat piers at the naval station, Pearl Harbor, H. T.: Item 1, price for piers Nos. 1, 2, 3, and 4, complete; 2, price for piers Nos. 1, 2 and 3; 3, piers Nos. 1 and 2; 4, price per lin ft increase or decrease in length of concrete piles under items 1, 2, and 3.

Tibbetts-Pacific Co., 16 California street, San Francisco, Cal., item 1, \$162,900; 2, \$123,900; 3, \$89,500; 4, \$2,750.

Spaulding Construction Co., Rialto Building, San Francisco, Cal., item 1, \$114,962; 2, \$87,200; 3, \$59,443; 4, \$130.

John Monk, Sharon Building, San Francisco, Cal., item 1, \$111,870; 2, \$55,709; 3, \$59,555; 4, \$140 and \$1.60.

Healy-Tibbetts Construction Co., 9 Main street, San Francisco, Cal., item 1, \$151,000; 2, \$119,000; 3, \$86,000; 4, \$150.

McLeran & Peterson, 55 New Montgomery street, San Francisco, Cal., item 1, \$120,000; 2, \$90,000; 3, \$60,000; 4, \$150.

Hawaiian Dredging Co., Honolulu, H. T., item 1, \$112,935; 2, \$85,870; 3, \$58,800; 4, \$150, \$120, \$210 and \$1.40.

Lord-Young Engineering Co., 12 Merchant street, Honolulu, H. T., item 1, \$114,600; 2, \$85,600; 3, \$55,700; 4, \$250.

Pearl Harbor, H. T., Marine Railway.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for constructing a marine railway at the U. S. naval station, Pearl Harbor, H. T.:

Item 1, work complete; 2, work complete in accordance with bidder's design as outlined in paragraph 95 of the specification; 3, deduct from items 1 and 2 for omitting paving.

The Crandall Engineering Co., 102 Border street, East Boston, Mass., item 2, \$181,100; 3, \$800.

The Tibbetts-Pacific Construction Co., 16 California street, San Francisco, Cal., item 1, \$164,800; 3, \$1,100.

Booker, Kiehl & Whipple, 305 Central Building, Seattle, Wash., item 1, \$159,000; 3, \$157,900.

The Lord-Young Engineering Co., 12 Merchant street, Honolulu, H. T., item 1, \$122,700; 3, \$1,300.

Pearl Harbor Wharf.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for constructing a reinforced concrete wharf at the U. S. naval station, Pearl Harbor:

Item 1, wharf complete; 2, price for each 3-column bay, 14 feet long, by which the number of such bays shown on plans may be increased or decreased; 3, price for each 4-column bay, 14 feet long, by which the number of such bays shown on plans may be increased or decreased.

Tibbetts-Pacific Co., 16 California street, San Francisco, Cal., item 1, \$220,900; 2, \$2,040; 3, \$3,650.

The Healy-Tibbetts Construction Co., 9 Main street, San Francisco, Cal.,

item 1, \$167,300; 2, \$1,600; 3, \$2,300.

The Spaulding Construction Co., 914 Rialto Building, San Francisco, Cal., item 1, \$151,500, 2, \$1,957; 3, \$2,412.

Lord-Young Engineering Co., 12 Merchant street, Honolulu, H. T., item 1, \$164,800; 2, \$2,000; 3, \$2,760.

The Hawaiian Dredging Co., Honolulu, H. T., item 1, \$155,900; 2, \$1,825; 3, \$2,650.

Grand Junction, Colo., Models.

The contract for furnishing plaster models for the U. S. post office at Grand Junction, Colo., has been awarded to C. W. Buhler, Washington, D. C., at \$200.

Carson City, Nev., Painting.

The contract for certain interior and exterior painting in the U. S. post office at Carson City, Nev., has been awarded to John S. Graham at \$650.

Flathead Irrigation Project.

The Reclamation Service is asking for proposals for the construction of about ten miles of laterals and appurtenant structures in connection with the Flathead irrigation project, Mont. The work involves about 43,000 cubic yards of excavation, 140 cubic yards of concrete, 430 square yards of paving, the placing of about 9,500 pounds of reinforcing steel, and the placing in wooden structures of about 32,000 feet h. m., of lumber. The work is situated on the east bank of the Flathead River, from one to seven miles northeast of Dixon. The bids will be opened at the office of the U. S. Reclamation Service at St. Ignatius, Mont., October 12.

War Prices for Chemicals and Drugs.

Owing to conditions caused by the European war prices for certain chemicals used in laboratory and photographic work and for certain drugs necessary in hospital work have so advanced that the various branches of the Treasury Department are only purchasing such supplies in quantities necessary to cover immediate needs. Other drugs and chemicals are purchased in the usual wholesale quantities. It is stated that aspirin and novocain are practically unobtainable and that the price of phenol is more than nine times greater than it was last year. Some of the greatest advances have been in the prices asked for oxalic, benzoic and carboic acids, potassium salts, mercury salts, balsam of Peru, neosalvarsan and salvarsan, thymol and thymol iodide, sulphonal, acetanilid, beta naphthol, bismuth salts, chloral hydrate, chloroform, venale, chromium trioxide, rocorcin, veronal, trional and sodium salicylate.

HALLS AND SOCIETY BUILDINGS

SAN FRANCISCO—Club house, 3 story and base, frame. Cost not stated. Architect, H. C. Bauman, Hearst Bldg., S. F. Owners, Dorian Olympia Club. Location, northwest corner 32nd avenue and California street. Will contain club rooms for men and women, social hall and several living apartments. Interior finish pine and white enamel. Hardwood floors. Central heating system and open fire places. Mantels, tile or brick. Bath rooms

finished in tile. Exterior covered with cement plaster. Plans being prepared. **HEPPNER, ORR**—Lodge hall, 2 story and base, brick, \$15,000. Architect, C. C. Robbins, Ainsworth Bldg., Portland. Owners, Heppner Masonic Temple Association. Will cover an area of 40 by 100 feet. First floor arranged for stores. Upper floor will contain lodge rooms and offices. Interior finish pine and hardwood with hardwood floor. Central heating system. Patent store fronts. Exterior faced with pressed brick. Plans complete and figures being taken.

HOSPITALS.

SAN PEDRO, LOS ANGELES CO., CAL.—Hospital, 2 and 3 story and base, brick. Cost not stated. Architect, Charles E. Durr Co., 523 South Beacon street, San Pedro. Owners, Sisters of Mercy. Will cover an area of 49 by 80 feet and contain wards for 30 patients, two operating rooms and baths. Interior finish pine with hardwood and tile floors and white enamel. Steam heat, hospital plumbing and hot water system. Vacuum cleaning. Exterior faced with cement plaster. Clay tile roof. Plans complete and figures being taken.

HOTELS.

PETALUMA, SONOMA CO., CAL.—Hotel and stores, 3 story and base, brick and steel. Cost not stated. Architect's name not given. Owners, Matthies Estate. Location, Main street. Will contain several stores besides hotel office and lobby. Upper floors designed for 60 rooms and several baths. Interior finish pine. Steam heat, oil burning furnace and hot water system. Patent store fronts, marble and tile bases. Tile baths. Exterior faced with pressed brick. Plans complete and in the hands of H. C. Matthies, 180 Jessie street, S. F. Work to be done by Day Labor.

PASADENA, LOS ANGELES CO., CAL.—Hotel addition, 3 story, frame. Cost not stated. Architect, Myron Hunt, Hibernian Bldg., L. A. Owners, Maryland Hotel Co. Will cover an area of 44 by 130 feet and contain 40 rooms and 23 baths. Interior finish pine. Bath rooms finished in tile. Steam heat, hot water system and vacuum cleaning. Exterior covered with cement plaster on metal lath. Plans being figured.

MARTINEZ, CONTRA COSTA CO., CAL.—Hotel, 2 story and base, frame, \$10,000. Architect's name not given. Owner, Mrs. Hooker, Crockett. Location, Alhambra Heights. Will contain 14 rooms, dining room and kitchen. Interior finish pine. Some hardwood floors. Furnace heat and open fire place. Mantel brick. Exterior covered with rustic and cement plaster. Plans complete and contract to be awarded at once.

IRRIGATION PROJECTS

COLUSA, COLUSA CO., CAL.—Reclamation work, levees, etc., \$600,000. Engineer's name not given. Owners,

Reclamation Districts 108, 479 and 787. Practically \$580,000 will be spent in the west side levee district next season to strengthen the Sacramento River levees from Colusa to Knights Landing, a distance of 50 miles. The west side district includes 107,000 acres, the greater part of which composes Reclamation Districts 108, 479 and 787. The newly elected commissioners of the district, J. W. Browning, E. L. Dow, J. H. Ralsdon, Alfred Davis and W. P. Dwyer, held a meeting in Sacramento recently and took preliminary steps towards the construction work, and instructed the engineers to prepare plans for the levee for submission to the State Reclamation Board for approval.

MODESTO, STANISLAUS CO., CAL.—Irrigation work. Cost not stated. Engineer, F. C. Herrmann, Modesto. Owners, Modesto Irrigation District. At a recent meeting of the Modesto Irrigation District, plans and specifications for enlargement of the main canal of Modesto Irrigation District between the Upper Dominici and Raliden fills, for enlargement of the canal below the intake at the La Grange dam, and for construction of five reinforced concrete drops on the lower part of the canal were adopted, and the secretary was authorized to advertise for bids to be opened on October 16th. The first two pieces of work are for excavation of earth, hardpan and rock. Further information together with plans for the proposed work may be had from the engineer at Modesto.

CALIFORNIA—Irrigation projects. Cost as follows. Engineer, United States Reclamation Service, Washington, D. C. Owners, United States Government. Funds appropriated by Congress for reclamation projects during the fiscal year 1916 were apportioned by the reclamation service to the amount of \$10,948,834. Of this sum California secures the following allotments: Orland project, \$70,195; preliminary investigations, Iron Canyon, \$25,000; Pitt River, \$25,000; Lassen County co-operative work, \$50,000; Shasta County co-operative work, \$100,000; general investigations in the State, \$5,000. For the California-Arizona Yuma project, \$659,460 is allotted, and for the California-Oregon Klamath project, the service set aside \$164,863. For the Colorado River basin \$25,000 was apportioned.

LIBRARIES.

DINUBA, TULARE CO., CAL.—Library, 1 story and base, brick or concrete, \$10,000. Architects, Bowen & Davis, McKenzie Bldg., Fresno. Owners, Town of Dinuba. Will contain reading room, librarian's office and stack rooms. Interior finish pine. Central heating system. Maple floor. Metal book stacks. Exterior faced with pressed brick or cement plaster. Plans being revised.

EXETER, TULARE CO., CAL.—Library, 1 story and base, brick or concrete, \$10,000. Architect, A. Merrill Bowser, Fresno. Owners, Town of Exeter. Will contain one reading room, assembly hall, office and stack room. Interior finish pine with maple floor.

Central heating system and vacuum cleaning. Metal book stacks. Exterior faced with cement plaster or pressed brick. Plans being prepared.

SAN FRANCISCO—Library, 2 story and base, brick and steel, \$35,000. Architect, John Reed, Jr., First National Bank Bldg., S. F. Owners, City and County of San Francisco. Location, Jersey street. Will contain two reading rooms, office and stack room. Interior finish pine and hardwood with maple floors. Steam heat, oil burning furnace and vacuum cleaning. Metal book stacks and metal window sashes and frames. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

PANAMA-PACIFIC EXPOSITION WORK.

SAN FRANCISCO—Wrecking station building. Cost not stated. Architect none. Owners, State of Illinois. Bids will be received up to October 19th at 12 noon for wrecking the Illinois station building. Two propositions will be considered: First wrecking complete and second wrecking, not including the electric fixtures. Plans and complete information can be secured from Adolph Karpen, Commissioner, Karpe Bldg., Chicago. An official proposal appears in another column of this issue.

RAILROAD CONSTRUCTION AND EQUIPMENT.

MENDOCINO AND HUMBOLDT COUNTIES, CAL.—Passenger station, 9, 1 story, frame. Cost not stated. Engineer, Engineering Department Northwestern Pacific Co., Phelan Bldg., S. F. Owners, Northwestern Pacific Railroad Co. Plans are complete and figures have been taken for nine small frame passenger stations to be erected along the line of the Northwestern Pacific in the two counties above mentioned. Awards of contracts will be made shortly.

RESIDENCES.

SAN FRANCISCO—Residence, 1 story and base, frame, \$3,000. Architect, none. Owners, McArthur Bros. 1560 Fell street, S. F. Location east 11th avenue 300 north Cabrillo. Will contain seven rooms, bath and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 1 story and base, frame, \$3,000. Architect, none. Owners, Johnson and Johnson, 818 14th street, S. F. Location west 17th avenue north of Clemer street. Will contain six rooms, bath and sleeping porch. Interior finish pine and some white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residence, 1½ story and base, frame, \$2,500. Architect, John F. Haner, 3579 19th street, S. F. Owner's name withheld. Location San Carlos and 19th street. Will contain five rooms and bath. Interior finish pine with some white enamel. Hardwood floors and open fire places. Bath room finished in tile. Automatic water heater. Exterior covered with rustic. Plans being prepared.

SAN FRANCISCO — Residence, 1 story and base, frame, \$4,000. Architect, Joseph A. Leonard, 85 Cerritos, S. F. Owners, Urban Realty Co. Location, west Victoria south Urhano. Will contain eight rooms, two baths and sleeping porch. Interior finish pine and hardwood. Hardwood floors and open fire places. Furnace heat. Mantels tile and brick. Bath rooms finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, H. C. Bauman, Chronicle Bldg., S. F. Owner, E. A. Janssen. Location, east 12th avenue south of Anza. Will contain six rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile or brick. Imitation tile in bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$6,500. Architects, Welsh & Carey, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location Claremont Park. Will contain eight rooms, two baths and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire place and furnace heat. Tile mantel. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

SAN FRANCISCO — Residences, 3, 2 story and base, frame, \$3,000 each. Architect, August G. Headman, New Call Bldg., S. F. Owner, Benj. Schloss. Location, 27th avenue and California street. Each will contain seven rooms and bath. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Bath rooms finished in tile. Exterior cement plaster on metal lath. Plans complete and figures being taken.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, Mrs. J. D. Hogan, 1312 5th avenue, S. F. Location east 8th avenue south of Irving. Will contain six rooms and bath. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile or brick mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, Mary R. Hallatt, 1265 11th avenue, S. F. Location, east 15th avenue south of Geary. Will contain six rooms and bath. Interior finish pine with some elm panels. Hardwood floors and open fire place. Man-

tel tile. Automatic water heater. Tile in bath room. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. — Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, C. J. Pfrang, 5487 Claremont avenue, Oakland. Location, corner of 5th and Dover. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Open fire place and tile or brick mantel. Hardwood floors. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. — Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, H. Goranson, 431 48th street, Oakland. Location, south Ygnacio east of 50th avenue. Will contain five rooms, bath and sleeping porch. Interior finish pine with white enamel and hardwood floors. Open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. — Residences, 2, 1 story and base, frame, \$2,500 each. Architect, none. Owner, Joseph T. Hinch, 1748 Broadway, Oakland. Location, west View north Mather. Will contain five rooms each with bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire places and tile mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL. — Residence, 2 story and base, frame, \$6,000. Architect, none. Owner, B. A. Stewart, 8 Fairview avenue, Oakland. Location, north Woolsey east College. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwoods with some white enamel. Hardwood floors, open fire places and furnace heat. Bath rooms finished in tile. Brick or tile mantels. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. — Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, C. J. Pfrang, 5487 Claremont avenue, Oakland. Location corner of 63rd and Dover streets. Will contain five rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Bath room finished in imitation tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL. — Residence, 1 story and base, frame, \$2,000. Architect, Eugene K. Martin, 2192 Shattuck avenue, Berkeley. Owner, R. McDermott. Location, east Santa Fe near Camalla. Will contain five rooms and bath. Interior finish pine. Hardwood floors. Open fire place and tile mantel. Exterior covered with cement plaster. Plans being prepared.

SACRAMENTO, CAL. — Residence, 1½ story and base, frame, \$1,500. Architect, none. Owner, A. W. Norris, 409 21st, Sacramento. Location, 3012 G

street. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors and open fire places. Furnace heat. Brick mantels. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. — Residences, 2, 1 story and base, frame, \$2,500 each. Architect, none. Owner, F. R. Jordan, 705 11th street, Oakland. Location, west Ayala south of Rose. Will contain five rooms and bath each. Interior finish pine and elm panels. Some hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

ALAMEDA, ALAMEDA CO., CAL. — Residence, 2 story and base, frame, \$4,500. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, R. Weldon. Location, Rio Vista avenue. Will contain eight rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire places and furnace heat. Bath room finished in tile. Mantels tile or brick. Automatic water heater. Exterior covered with rustic and cement plaster. Plans being prepared. Work to be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, H. C. Bauman, Hearst Bldg., S. F. Owner, E. A. Janssen. Location, east 12th avenue south of Anza. Will contain five rooms and bath. Interior finish pine and elm panels. Hardwood floors. Open fire place. Tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residences, 2, 2 story and base, frame, \$5,000 each. Architect, none. Owners, Conservative Building and Investment Co., Phelan Bldg., S. F. Location, south Alton east Ninth avenue. Will contain eight rooms, bath and sleeping porches. Interiors finished in pine and hardwood with some white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile or brick. Bath rooms finished in tile. Automatic water heaters. Exterior covered with rustic and asbestos plaster. Plans complete and work to be done by Day Labor.

ALAMEDA, ALAMEDA CO., CAL. — Residence, 1 story and base, frame, \$2,500. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, E. Kopf. Location, Waterside Terrace. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior cement plaster. Plans being prepared and work to be done by Day Labor.

ALAMEDA, ALAMEDA CO., CAL. — Residences, 3, 1 story and base, frame, \$2,100 to \$2,600 each. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, C. C. Adams. Rooms and three will contain six Two of the dwellings will contain five

rooms. Interiors will be finished in pine and elm. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile floor and wainscot. Automatic water heaters. Exterior will be covered with cement plaster. Plans are being prepared.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$4,000. Architect, E. W. Cannon, Central Bank Bldg., Oakland. Owner, W. J. Moylan. Location, corner of Northbrae and Monterey. Will contain eight rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and furnace heat. Mantel tile or brick. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

BERKELEY, ALAMEDA CO., CAL.—Residences, 2, 1½ story and base, frame, \$2,500 each. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, M. P. Brash. Location, Northbrae. Will contain five rooms and bath each. Interior finished in pine with some white enamel and elm panels. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans being prepared.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$4,500. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owners, E. R. Peake Co. Location, Berkeley. Will contain nine rooms, bath and sleeping porch. Interior finish pine, white enamel and elm. Hardwood floors. Open fire place and tile mantel. Furnace heat. Automatic water heater. Bath room finished in tile. Exterior covered with rustic and cement plaster. Plans being prepared and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$2,500. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owners, F. R. Peake Co. Location, Berkeley. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and furnace heat. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architect, none. Owners, Costello & Feerick, 93 College avenue, S. F. Location, west 16th avenue north Balboa. Will contain five rooms and bath. Interior finish pine, white enamel and hardwood. Hardwood floors, open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residences, 2, 1 story, frame. Cost as follows. The following Day Labor jobs are reported as about to be started in Fresno: G. E. Powell, 3159 Iowa street, 1 story frame dwelling, \$1,600, and F. C. Wilson, 2321 Hills street, 1 story frame dwelling, \$1,700.

HOLLYWOOD, LOS ANGELES CO.,

CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, Arthur S. Heineman, 831 San Fernando street, L. A. Owner, Robert Fuller. Location, Camino Palmero and Franklin avenue. Will contain 14 rooms, three baths and sleeping porch. Separate garage in rear. Interior finish pine, white enamel and hardwood. Hardwood floors, furnace heat, hot water circulating system and vacuum cleaning. Bath rooms finished in tile. Tile and brick mantels. Exterior covered with cement plaster. Plans being prepared.

SCHOOLS.

SAN FRANCISCO—School auditorium 1 and 2 story, brick and concrete. Cost not stated. Architect, W. C. Hays, First National Bank Bldg., S. F. Owners, Wilmerding School. Location, Potrero between 17th and 18th streets. Will be used for a joint auditorium for two industrial schools. Interior finish, pine with maple floors. Central heating system. Exterior faced with pressed brick or cement plaster. Work to be done by owners.

BERKELEY, ALAMEDA CO., CAL.—College building. Cost not stated. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. Location, University Campus. Bids are now being taken for the exterior facing of the Benj. Ide Wheeler Hall. Two propositions are to be considered: Proposition 1, granite, and proposition 2, cement. Bids will be opened on October 25th. Plans can be secured from the secretary of the Regents at Berkeley. An official proposal appears in another column of this issue.

CALEXICO, IMPERIAL CO., CAL.—School, 1 and 2 story and base, hollow tile or reinforced concrete. Cost not stated. Architects, Allison & Allison, Hiernian Bldg., L. A. Owners, Calxico School District. Bids will be received on October 8th for the general construction with three alternates, for the plumbing and sewerage and for the heating and ventilating of Grammar School No. 1. Plans and specifications can be secured from the architect.

HAYWARD, ALAMEDA CO., CAL.—School gymnasium, 1 story, frame, \$10,000. Architect, Henry C. Smith, Humboldt Bank Bldg., S. F. Owners, Hayward Union High School District. Will contain separate rooms for girls and boys. Interior finish pine. Central heating system. Exterior covered with cement plaster. Plans complete and figures being taken. Bids close on October 16th.

EL CENTRO, IMPERIAL CO., CAL.—Schools, 3, 1 and 2 story, brick, \$135,000. Architect, S. B. Zimmer, El Centro. Owners, Town of El Centro. Bonds are to be voted at once for three new buildings and for extensive alterations and additions to the old schools. Further mention will be made of the work when plans are prepared.

SEATTLE, WASH.—Home economics, 2 story and base, reinforced concrete, \$150,000. Architects, Charles Bebb & Carl Gould, Denny Bldg., Seattle. Owner, University of Washington. Although plans and specifications are not complete the date for opening bids on the proposed two-story fireproof home

economics building for the University of Washington has been set for October 29th.

SEWERS, STREET WORK & WATER SYSTEMS.

RICHMOND, CONTRA COSTA CO., CAL.—Street improvement. Cost as follows. Engineer, City Engineer, Richmond. Owners, City of Richmond. At the last meeting of the City Council the following action was taken on street and sewer improvements. An estimate of the cost of the proposed construction of the sewers in the Canal subdivision was placed at \$11,600; for grading the estimate was placed at \$71,100; for the construction of the pump was placed at \$4,700, a total of \$87,400. This estimate does not include the construction profit or incidental expenses. The improvement of Bay avenue from Potrero to the Southern Pacific was postponed indefinitely. Plans and specifications for the improvement of the Canal subdivision were ordered prepared.

SAN JOSE, SANTA CLARA CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications prepared by the County Surveyor having been approved the Clerk of the Supervisors has been directed to advertise for bids for the improvement of Lincoln avenue in Supervisor District No. 4. Bids close October 25th at 11 a. m. Further information may be had from the County Surveyor at San Jose.

STOCKTON, SAN JOAQUIN CO., CAL.—Street paving, \$2,290.45. Engineer, City Engineer, Stockton. Owners, City of Stockton. At last week's meeting of the City Council specifications for the improvement of a portion of the waterfront space on the south side of Stockton Channel from the east curb line of Van Buren street to the east line of Lincoln street were adopted. Asphalt macadam is to be used in paving. The City Engineer's estimate is \$2,290.45. Bids on this work will be called for within the next few days.

RED BLUFF, TEHAMA CO., CAL.—Road work. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Bids will be opened on October 15th at 10 a. m. for graveling portions of Belle Mill road and Sherwood Boulevard.

BAKERSFIELD, KERN CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. Bids will be opened on October 11th by the City Council for the construction of three separate sewer jobs. The work requires 6, 8 and 10 inch ironstone pipe. Plans can be secured from the City Clerk.

SALINAS, MONTEREY CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor Cozzens. Salinas. Owners, Monterey County. At the last meeting of the Supervisors County Surveyor H. L. Cozzens' plans and specifications for the improvement of the Carmel Valley road, from the Laureles ranch house to Tassajara Hot Springs, were adopted and approved by the Board. Bids for this work will be opened on October 11th.

BERKELEY, ALAMEDA CO., CAL.—

street improvements. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be opened on October 13th for street work. Two separate contracts are to be let. The work includes grading, concrete and asphalt macadam and curbs. Plans can be secured from the City Engineer.

Contracts Awarded.

MISSION SAN JOSE, ALAMEDA CO., CAL.—Removing hills, \$19,688. Engineer, County Surveyor, Oakland. Owners, Alameda County. Contractors, Hutchinson Co., 1300 Franklin street, Oakland. Contract price, \$19,688.

VENTURA, VENTURA CO., CAL.—Bridge paving, \$1,150. Engineer, City Engineer, Ventura. Owners, City of Ventura. Contractor, Conrad Scherrer, 2 A. Contract price, \$1,150.

SAN JOSE, SANTA CLARA CO., CAL.—Road improvement, \$49,497. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, John W. McDonald, San Jose. Contract price, \$49,497.

SAN BRUNO, SAN MATEO CO., CAL.—Street improvements, \$66,000. Engineer, City Engineer, San Bruno. Owners, Town of San Bruno. The City Trustees of San Bruno have awarded contracts for \$66,000 worth of municipal improvements. Hamlin & Weber of San Jose have been awarded a contract amounting to \$22,216 for sewer construction, and Charles J. Lindgren, Menard Bldg., S. F., has been awarded a \$29,959 contract for sidewalks and a \$15,600 contract for storm sewers and bridges.

SAN RAFAEL, MARIN CO., CAL.—Road improvement. Cost as follows. Engineer, County Surveyor, San Rafael. Owners, Marin County. Contractor, S. P. Brownlee, County Road, Kentfield. Contract for new road in Chileno Valley, \$1,750 and graveling Olema road, \$1,606.

DANVILLE, CONTRA COSTA CO., CAL.—Paving, concrete, \$1,678.75. Engineer, Town Engineer, Danville. Owners, Town of Danville. Contractor, A. Rodriguez, Danville. Contract price, \$1,678.75.

RICHMOND, CONTRA COSTA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. Contractor, G. W. Cushing, 420 Macdonald avenue, Richmond. Contract price not stated.

MARTINEZ, CONTRA COSTA CO., CAL.—Paving, grading, sewers and sidewalks. Cost not stated. Engineer's name not given. Owners, Martinez Land Co. Contractor, W. H. O'Brien, Martinez. Contract price not stated.

SALINAS, MONTEREY CO., CAL.—Road construction, \$5,868.31. Engineer, County Surveyor Cozens, Salinas. Owners, Monterey County. Contractors, Granite Block Co., Salinas. Contract price, \$5,868.31.

STORES AND OFFICES.

OAKLAND, CAL.—Stores, 1 story and base, frame, \$1,000. Architect, William Wilde, 1725 Broadway, Oakland. Owner, O. J. Mead. Location, Broadway between 29th and Orchard streets. Will contain two small stores. Patent store fronts. Interior finish pine. Exterior

covered with corrugated iron. Plans complete and figures being taken.

CALEXICO, IMPERIAL CO., CAL.—Stores and offices, 2 story and base, brick. Cost not stated. Architect, Ralph Swearingen, Calexico. Owners, Imperial Valley Hardware Co. Will cover an area of 112 by 152 feet. First floor will be arranged for a large store and upper floor will contain 30 modern offices. Interior finish pine and hardwood. Modern plumbing. Patent store fronts. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

STOCKTON, SAN JOAQUIN CO., CAL.—Store and office alteration and addition, brick and steel, \$20,000. Architect, Joseph Losekann, San Joaquin Bldg., Stockton. Owner, R. E. Wilhoit. Contractor, Thomas Lewis, 1320 South San Joaquin, Stockton. Contract price, \$20,000.

THEATRES.

OAKLAND, CAL.—Theatre, 1 story and base, brick, \$14,000. Architect, Merrill Newsum, 1742 Broadway, Oakland. Owner, A. F. Werum. Location, Boulevard and 35th avenue. Will contain auditorium seating 330 people. Interior finish pine and ornamental plaster. Modern ventilation. Special electric work. Exterior faced with pressed brick. Plans complete and figures being taken.

SPRINGFIELD, ORE.—Theatre, 2 story and base, brick, \$25,000. Architect, Y. D. Yensil, Eugene. Owner, J. A. Seavey. Will cover an area of 40 by 120 feet. Interior finish pine and ornamental plaster. Steam heat and Special electric work. Exterior faced with pressed brick. Plans being prepared and figures to be called for shortly.

Contracts Awarded.

SAN FRANCISCO—Theatre, 1 story and base, brick and concrete, \$10,000. Architect, Mr. Frazer, Spreckles Bldg., S. F. Owner, H. Stewart, 4041 24th street. Contractor, P. A. Palmer, Menard Bldg., S. F. Contract price, \$10,000.

SEALED PROPOSALS

PROPOSALS FOR CANAL SUPPLIES.

PROPOSALS FOR EXCAVATION.

EXCAVATION, ETC.—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service at St. Ignatius, Mont., until 3 o'clock p. m., October 12, 1915, for the construction of about ten miles of laterals and appurtenant structures, involving about 43,000 cubic yards of excavation, 110 cubic yards of concrete, 430 square yards of paving, the placing of about 9,800 pounds of reinforcing steel and the placing in wooden structures of about 32,000 feet b. m. of lumber. The work is situated on the east bank of the Plattehead River, from one to seven miles northeast of Dixon, Mont. For particulars address U. S. Reclamation Service, Washington, D. C.; Denver, Colo.; or St. Ignatius, Mont. A. P. DAVIS, chief engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA, PANAMA, 975—Proposals for material for the Locomotive, Jib Crane, 50 Gross Tons Capacity, for Dry Dock No. 1, Balboa Terminals.—Sealed proposals will be received at

the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m., November 3, 1915, at which time they will be opened in public for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 973) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. ROGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR EARTH WORK.

CANAL WORK—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service at Powell, Wyo., until 2 o'clock p. m., October 20, 1915, for the construction of canals and structures on the Shoshone project, Wyoming, involving 560,000 cubic yards of excavation, 1400 cubic yards of reinforced concrete, 9,000 square yards of grouted paving and the placing in wooden structures of about 130,000 feet b. m. of lumber. The work is located near the stations of Garland, Montana, Franine and Deaver, Wyo., on the C. B. & Q. Railway. For particulars address the United States Reclamation Service, Washington, D. C.; Denver, Colo.; or Powell Wyo. A. P. DAVIS, chief engineer.

PROPOSALS FOR CANAL WORK.

CANAL WORK—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Montrose, Colo., until 4 o'clock p. m., October 20, 1915, for the construction of about 11 miles of the Ironstone Canal, Uncompahgre Valley project, in the vicinity of Olathe, Col. The work involves the excavation of about 209,200 cubic yards of material in open cut. For particulars address the United States Reclamation Service, Montrose, Colo.; Tramway Building, Denver, Colo.; or Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR ICE PLANT.

ICE PLANT—Sealed proposals indorsed "Proposals for ice-making and cold storage plants" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., October 16, 1915, and then and there publicly opened, for furnishing f. o. b. cars, San Francisco, and the installing in Peking, China, of an ice-making and cold storage plant at the U. S. Marine barracks, Peking, China. Plans and specifications may be obtained on application to the bureau. H. R. STANFORD, chief of bureau.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC WORKS of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 10th day of October, 1915, for doing the following work:

Electric clock system and mail chutes for the City Hall.

Said work must be done in accordance with the specifications in the office of the Board of Public Works, to which reference is hereby made, and must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works and completed within one hundred (100) calendar days thereafter.

The amount of bond for faithful performance of contract has been fixed as follows:

Proposition No. 1, \$1,750.00
Proposition No. 2, 1,500.00
Proposition No. 3, 750.00

All proposals offered must be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the aggregate of the proposal.

Printed proposal forms will be fur-

nished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids. By order of the Board of Public Works, F. J. CHURCHILL, Secretary.

PROPOSALS FOR THE SALE, WRECKING AND REMOVAL OF THE ILLINOIS STATE BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED PROPOSALS for the sale, wrecking and complete removal of the Illinois State Building at the Panama-Pacific International Exposition, at San Francisco, Cal., are asked by the Illinois Commission to the Panama-Pacific International Exposition.

Two proposals are desired, one to be for the sale, wrecking and complete removal of the building and fixtures, and the other for the sale, wrecking and complete removal of the building without lighting fixtures.

Radiators are not to be included in proposals.

All proposals shall be securely sealed accompanied by a certified check for ten per cent (10%) of the amount of the proposal, and mailed as follows: "To Adolph Karpen, Chairman, Illinois Commission to the Panama-Pacific International Exposition, Suite 1110, Karpen Building, Chicago, Illinois." Proposals will be received up to and including noon of Tuesday, October 19, 1915.

ILLINOIS COMMISSION TO THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

John G. Oglesby, Secretary. (*)

PROPOSALS FOR BATTLESHIPS.

BATTLESHIPS—Proposals for constructing by contract of two battleships, Nos. 43 and 44, will be received at the Navy Department until 12 o'clock noon, November 17, 1915, when they will be publicly opened. A circular of requirements for said vessels is now ready and plans and specifications for their construction will be ready September 20 for distribution among prospective bidders. Forms of proposal and contract may be had on application to the department after September 30. JOSEPHUS DANIELS, secretary of the navy.

STATE OF CALIFORNIA. DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock P. M. on October 15, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:

Placer County, from Lincoln to northern boundary (III-Pla-3-B), about 9 miles in length, to be paved with Portland cement concrete.

Sonoma County, from Reclamation to Fairville (IV-Son-8-A), about 4.2 miles in length, to be graded.

Mariposa County, from westerly boundary to Cathay-White Rock Road (VI-Mpa-18-A), about 10 miles in length, to be graded.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated.

The Division Engineers offices are located at Williams, Dunsuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. BARRINGTON,
CHARLES F. STERN,
California Highway Commission.

AUSTIN B. FLETCHER,
Highway Engineer.

WILSON R. ELLIS,
Secretary. (*)

Dated: September 21, 1915.

PROPOSAL FOR BIDS.

BIDS are requested for the exterior of Benjamin Ide Wheeler Hall, University of California, Berkeley, California. Bids will be received on two bases: First, for granite; second, for cement finish on concrete.

Sealed bids will be received at the office of the Comptroller of the University of California, Berkeley, Calif., at or before 9 A. M., October 25, 1915, for complete exterior in cement plaster on concrete, as per plans and specifications on file and obtainable after 9 A. M., October 9, 1915, at the Cashier's window in said office.

A deposit of \$50.00 will be required for each set of plans and specifications taken out, which deposit will be refunded upon return of said plans and specifications, accompanied by a regular bid for the work. No bids will be received unless accompanied by a certified check or bond in favor of the undersigned, equal to 10% of the bid, to secure execution of the contract by the successful bidder.

The right is reserved to reject any or all bids.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA. (*)

LARGEST MECHANICAL POST OFFICE BUILDING.

Prediction Made That New York Plant Will Revolutionize Methods.

NEW YORK.—What is said to be the largest and most elaborately equipped mechanical plant for the handling of mail in the world is now located at the Grand Central terminal here and put in active operation recently. The structure occupies an entire city block. It was constructed by the railroad company, and leased by the post office department. Although the building is at present only three stories high, its construction is of a character that will permit it to be carried up to a maximum of 20 stories in the future, and it is probable that New York will be the first city to have one of the new post office skyscrapers now advocated by the department. The new building has 100,000 square feet of floor space, and its need was due to the rapid growth of the parcel post business now handled from this city. The exterior of the building is of white stone and cream-colored brick. Inside it is a vast net work of belts, chains, conveyors and lifts, all of which are operated by electricity, controlled by the pressing of a button. These devices will eliminate the old system of loading and unloading mail cars by trucks.

The plant is so situated, being directly over the railroad tracks, that eight mail cars can be unloaded or loaded at once, the whole operation being controlled by the pressing of a button. Many of the devices installed to load and unload cars are very new, and are having their first trial. Post office officials and railroad men predict that the new plant with revolutionize the method of handling enormous quantities of mail at big railroad centers.

SEARCH FOR TIN IN AMERICA.

In view of the interest in an adequate tin supply for the United States and the discussion of the smelting of Bolivian ore on the Atlantic seaboard, and possibly on Puget Sound, the publication by the United States Geological Survey of a special bulletin on tin mining in Alaska is opportune. It is noteworthy, too, that specimens of stream tin were collected by Survey geologists in Alaska in 1900, before this metal was known to occur in the Territory. Soon after that prospecting for tin became active, and two years later a commercial production of tin ore was made.

The Survey was also closely identified with the finding of lode deposits of tin. In 1903 two prospectors brought to Survey geologists in Alaska some specimens of float from Lost River which they thought might be tin ore. All the specimens but one were worthless. From this one the geologists obtained tin by smelting it in a teacup in their cookstove after which the geologists and the prospectors went to Lost River and discovered a vein of lode tin. This lode on Lost River has since been extensively mined. Some of the Alaska tin ore has been reduced at Seattle, Wash., within the last two years.

The report just issued presents a review of other work by the Geological Survey and the re-examination of the more important tin deposits by Geologist Henry M. Eakin.

The total tin production for the period 1902-1914 amounted to 526 tons of metallic tin, valued at \$380,000. The Alaskan tin ores have heretofore been shipped for reduction to Swansea, Wales, and Singapore. A copy of the report (Bulletin 622-B) may be obtained on application to the Director, United States Geological Survey, Washington, D. C.

ROOM FOR THIRTY STUDENTS IN UNIVERSITY ACCOUNTING CLASS.

Thirty places are open in the University Extension course in "Advanced Accounting Practice and Principles" which is offered at the High School of Commerce on Thursday evening from 7 to 10 P. M. Mr. Lissy Lilly, instructor in Accounting at the University of California, is in charge of the class.

The work in the course consists of practical problems with lectures on principles. The subject matter includes incorporation, dissolution, mergers, partnerships, and other problems which would be of value to those who are preparing to enter the profession of accounting and others who are desirous of doing advanced work in accounts.

ADVANCE NEWS

Classified according to Location

SAN FRANCISCO.

IRRIGATION PROJECTS—Cost as follows. California. Engineer, United States Reclamation Service, Washington, D. C. Owners, United States Government. Funds appropriated by Congress for reclamation projects during fiscal year 1916 were apportioned for the reclamation service to the amount of \$10,948,834. Of this sum California secures the following allocations: Orland project, \$70,195; preliminary investigations Iron Canyon, \$1,000; Pitt River, \$25,000; Lassen county co-operative work, \$50,000;asta County co-operative work, \$10,000; general investigations in the state, \$5,000. For the California-Arizona Yuma project, \$659,580 is allotted, and for the California-Oregon Klamath project, the service set aside \$4,862. For the Colorado River basin \$1,000 was apportioned.

RESIDENCE—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owners, MacArthur Bros., 10 Fell street, S. F. Location, east 17th avenue 300 north Cabrillo. Will contain seven rooms, bath and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Tile or brick mantels. Bath room finished in tile. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,000. San Francisco. Architect, none. Owners, Johnson and Johnson, 518 14th street, S. F. Location, east 17th avenue north of Clement street. Will contain six rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1½ story and base, frame, \$2,500. San Francisco. Architect, John F. Hauer, 3579 19th street, S. F. Owner's name withheld. Location, San Carlos and 19th streets. Will contain five rooms and bath. Interior finish pine with some white enamel. Hardwood floors and open fire place. Bath room finished in tile. Automatic water heater. Exterior covered with stucco. Plans being prepared.

RESIDENCE—1 story and base, frame, \$4,000. San Francisco. Architect, Joseph A. Leonard, 85 Cerritos street, S. F. Owners, Urban Realty Co. Location, west Victoria south Urbano. Will contain eight rooms, two baths and sleeping porch. Interior finish pine and hardwood. Hardwood floors and open fire places. Furnace heat. Mantels tile and brick. Bath rooms finished in tile. Automatic water heat-

er. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, H. C. Bauman, Chronicle Bldg., S. F. Owner, E. A. Janssen. Location, east 12th avenue south of Anza. Will contain six rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile or brick. Imitation tile in bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$6,500. San Francisco. Architects, Welsh & Carey, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location, Claremont Park. Will contain eight rooms, two baths and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and furnace heat. Tile mantel. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

RESIDENCES—3, 2 story and base, frame, \$3,000 each. San Francisco. Architect, August G. Headman, New Call Bldg., S. F. Owner, Benj. Schloss. Location, 27th avenue and California street. Each will contain seven rooms and bath. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Bath rooms finished in tile. Exterior cement plaster on metal lath. Plans complete and figures being taken.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, Mrs. J. D. Hogan, 1342 8th avenue, S. F. Location, east 18th avenue south of Irving. Will contain six rooms and bath. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile or brick mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, Mary B. Hallett, 1265 7th avenue, S. F. Location, east 18th avenue south of Geary. Will contain six rooms and bath. Interior finish pine with some elm panels. Hardwood floors and open fire places. Mantel tile. Automatic water heater. Tile in bath room. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 3 story and base, frame, \$5,000 each. San Francisco. Architect, none. Owners, Conservative Building and Investment Co., Phelan Bldg., S. F. Location, south Alton east Ninth avenue. Will contain eight rooms, bath and sleeping porches. In-

teriors finished in pine and hardwood with some white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile or brick. Bath rooms finished in tile. Automatic water heaters. Exterior covered with rustic and asbestos plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, H. C. Bauman, Hearst Bldg., S. F. Owner, E. A. Janssen. Location, east 12th avenue south of Anza. Will contain five rooms and bath. Interior finish pine and elm panels. Hardwood floors. Open fire place. Tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

WRECKING STATE BUILDING—Cost not stated. San Francisco. Architect, none. Owners, State of Illinois. Bids will be received up to October 19th at 12 noon for wrecking the Illinois State Building. Two propositions will be considered, first wrecking complete and second wrecking not including the electric fixtures. Plans and complete information can be secured from Adolph Karpen, Commissioner, Karpen Bldg., Chicago. An official proposal appears in another column of this issue.

APARTMENT HOUSE—3 story and base, frame, \$30,000. San Francisco. Architect, W. G. Hind, 46 Kearny street, S. F. Owner's name withheld. Location, Bush near Hyde. Will contain 23 suites of two rooms and bath. Interior finish pine with elm panels and hardwood floors. Steam heat, hot water system and wall beds. Ornamental plaster in the lobby. Marble and tile wainscot in vestibule. Exterior covered with pressed brick veneer and cement plaster. Plans complete and segregated figures being taken.

APARTMENT HOUSE—4 story and base, brick and steel, \$40,000. San Francisco. Architect, E. H. Denke, 1317 Hyde street, S. F. Owners, Max and Dora Kolander, 1750 Franklin street, S. F. Location, south Bush west of Jones, covering an area of 54 feet 10 inches by 107 feet. Will contain 14 suites of five rooms and two suites of four rooms. Interior finished in mahogany and white enamel. Hardwood floors. Steam heat, oil burning equipment and hot water supply. Automatic elevator. Marble and tile wainscot in lobby. Wall beds. Bath rooms finished in tile. Exterior faced with pressed brick and terra cotta. Plans complete and segregated figures being taken.

CHURCH—2 story and base, brick and steel, \$60,000. San Francisco. Architect, William H. Crim, Jr., 425 Kearny street, S. F. Owners, Second Church of Christ, Scientist. Location, corner of Dolores and Cumberland. Will cover a considerable ground area. Design

classic. Interior arranged for auditorium, class rooms and reading rooms. Finish, pine and hardwood. Steam heat and vacuum cleaning. Ornamental plaster. Exterior faced with pressed brick trimmed with terra cotta. Plans nearly complete and figures to be called for shortly.

FLATS—3 story and base, frame, \$7,500. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, G. De Martini. Location, east Mason south of Broadway. Will contain three flats of six rooms each. Interior finish pine. Some hardwood floors. Open fire places and tile mantels. Bath rooms finished in imitation tile. Exterior covered with brick veneer and shiplap. Plans complete and figures being taken.

FLATS—3 story and base, frame, \$5,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, O. Torrie. Location, corner of Stockton and Lombard. Will contain two six-room flats and a garage. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Imitation tile in bath rooms. Automatic water heaters. Tile and mosaic in lobby. Exterior covered with cement plaster and shiplap. Plans are complete and figures are being taken.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, W. L. Hemminga, Inc., 1600 Fell street, S. F. Location, north California street east of 15th avenue, covering an area of 25 by 65 feet. Will contain two modern flats. Interior finished in pine with some elm panels. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FLAT AND STORE—2 story and base, frame, \$7,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. Location, 48th avenue and J street. Will contain store on first floor and modern flat above. Interior finished in pine and elm panels. Hardwood floor. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with shiplap. Plans complete and figures being taken.

FLAT AND STORE—2 story and base, frame, \$3,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, A. Malucelli. Location, corner of 25th avenue and Lane. Will contain one store and a six room flat. Interior finished in pine. Some hardwood floors. Open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with rustic. Plans complete and figures being taken.

GARAGE—2 story and base. Class A construction, \$35,000. San Francisco. Architect, August G. Headman, New Call Bldg., S. F. Owner's name withheld. Location, down town district, covering an area of 57½ by 137½ feet. Designed for commercial garage. Reinforced concrete walls, floors and steel roof trusses. Interior finish pine. Metal window sash and frames. Special gasoline storage tanks. Exterior

faced with pressed brick. Plans being prepared.

GARAGE—1 story and base. Class C construction, \$25,000. San Francisco. Architect, J. R. Miller, Lick Bldg., S. F. Owner represented by Buckbee-Thorn Co. Location, southwest corner of Bush and Pierce, covering an area of 100 by 100 feet. Will contain stores besides a commercial garage. Interior finish pine. Exterior faced with cement plaster. Plans nearly ready for figures.

CLUB HOUSE—3 story and base, frame. Cost not stated. San Francisco. Architect, H. C. Bauman, Hearst Bldg., S. F. Owners, Dorian Olympia Club. Location, northwest corner 32nd avenue and California street. Will contain club rooms for men and women, social hall and several living apartments. Interior finish pine and white enamel. Hardwood floors. Central heating system and open fire places. Mantels tile or brick. Bath rooms finished in tile. Exterior covered with cement plaster. Plans being prepared.

SCHOOL AUDITORIUM—1 "and" 2 story, brick and concrete. Cost not stated. San Francisco. Architect, W. C. Hays, First National Bank Bldg., S. F. Owners, Wilmerding School. Location, Potrero between 17th and 18th streets. Will be used for a joint auditorium for two industrial schools. Interior finish pine with maple floors. Central heating system. Exterior faced with pressed brick or cement plaster. Work to be done by owners.

APARTMENT HOUSE—3 story and base, frame, \$15,000. San Francisco. Architect, none. Owner, James Welsh, 519 16th avenue, S. F. Location southeast corner 15th avenue and Geary street, covering an area of 50 by 64 feet. Will contain eleven suites of two and three rooms. Interiors finished in pine with some elm panels and hardwood floors. Wall beds, steam heat and tile bath rooms. Exterior covered with rustic and cement plaster on metal lath. Plans complete and in the hands of the owner who will do the work by Day Labor.

APARTMENT HOUSE—6 story and base, brick and steel, \$150,000. San Francisco. Architect, J. C. Illadik, Monadnock Bldg., S. F. Owner, Geo. Urioste. Location, northeast corner of Van Ness and McAllister street. Will contain nine stores, office and lobby on first floor. Upper floors will contain 200 rooms arranged in two, three and four room suites. Wall beds, steam heat, elevator service, hot water system and vacuum cleaning. Bath rooms finished in tile. Patent stone fronts. Exterior faced with white glazed terra cotta. Plans complete and segregated figures being taken.

LIBRARY—2 story and base, brick and steel, \$35,000. San Francisco. Architect, John Reed, Jr., First National Bank Bldg., S. F. Owners, City and County of San Francisco. Location, Jersey street. Will contain two reading rooms, office and stack room. Interior finish pine and hardwood with maple floors. Steam heat, oil burning furnace and vacuum cleaning. Metal book stacks and metal window sash and frames. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

RESIDENCE—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owners, Costello & Feerick, 93 College avenue, S. F. Location, east 16th avenue north Balboa. Will contain five rooms and bath. Interior finish pine, white enamel and hardwood. Hardwood floors, open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

Contracts Awarded.

COALING STATION—\$450,000. Honolulu, Hawaii. Engineer's name not given. Owners, Inter Island Steam Navigation Co. Contractors, C. W. Hunt Co., New York. Contract price, \$450,000.

THEATRE—1 story and base, brick and concrete, \$10,000. San Francisco. Architect, Mr. Frazer, Spreckels Bldg., S. F. Owner, H. Stewart, 4041 24th street. Contractor, P. A. Palmer, Monadnock Bldg., S. F. Contract price, \$10,000.

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Amt.
2749	Hall	Hall	3000
2750	McGrue	McGrue	3000
2751	Stern	Stern	12000
2752	Conner	Conner	3500
2753	Ham	Ham	5000
2754	Ham	Ham	5000
2755	Sudden	Porderer	1063
2756	Sudden	Bradley	4250
2757	Salvato	Devencenzi	2800
2758	Seymour	Black	5300
2759	Tait	Dez	1400
2760	S F Home Bldg.	Owner	500
2761	Rehisch	Hilp	400
2762	Stager	Marsden	500
2763	Robinson	Hatch	400
2764	Anderson	Anderson	400
2765	Schmidt	Schmidt	800
2766	Palace Hotel	Owner	1000
2767	Reilly	Reilly	4000
2768	Hallett	Hallett	2400
2769	Hogan	Hogan	2500
2770	Goodwin	Ward	800
2771	Blumstein	Donovan	2400
2772	Lamerding	Martini	4800
2773	Hind	Leigh	1800
2774	Hind	Leigh	2000
2775	Cogan	Cogan	1500
2776	de la Mantanya	Owner	18500
2777	Sutro	Johnson	500
2778	Ellinwood	Routh	\$500
2779	Wilson	Wilson	5000
2780	Pirpo	Pagano	4250
2781	Margenstern	Whitlier	500
2782	Swanson	Swanson	400
2783	Westminister	Duffie	400
2784	Gregoire	Terranova	1800
2785	Berrie	Molpatti	1500
2786	Berthienne	King	1000
2787	Harper	Cleese	2400
2788	Quandt	Klahn	2600
2789	Gray	Hamill	2800
2790	Schuler	Warden	6125
2791	Fallon	Fallon	1000
2792	Foulowskowi	Reed	800
2793	Conserv Bldg Co.	Owner	5000
2794	Same	Same	4950
2795	Cal Baking Co.	Owner	500
2796	Johnson	Johnson	2900
2797	McArthur	McArthur	3000
2798	Pazio	Pazio	600
2799	Urban Rlty	Urban	4000
2800	Torre	Torre	4400
2801	Boyle	Renish	2500
2802	Rogers	Pross	4750
2803	Hemminga	Owner	5000
2804	Janessa	Janseen	2500
2805	Lichenstein	Nielsen	800
2806	Reinhart	Netinet	8000
2807	Reed	Reed	500
2808	Weinhard	Weinhard	6500
2809	Scheil	Nelson	1950
2810	Kahn	Duval	750
2811	Mech Inst	Lynch	10500
2812	Zarzowski	Biza	2000
2813	Funkenstein	Owner	1500
2814	Zanini	Perasso	1250
2815	Nippert	Rednal	4800
2816	Stewart	Donahue	500
2817	Kelser	Swanson	400

2818 TrapaniHofmeister 400
 2819 MusanteShell 400
 2820 Gurtwright Htl. Brumfield 400
 2821 CollinsFederal Sign 400
 2822 DeniganCunningham 400
 2823 TurnerPerguson 400
 2824 HindinAbrahams 400
 2825 CrockerMahony 750
 2826 BenoneSerguson 400
 2827 CrockerMcGuigan 500
 2828 ShermanSherman 700
 2829 CostelloFeerick 3000
 2830 CogswellW'n Iron 16952
 2831 SameLange 101000
 2832 WatermanLittle 27465
 2833 MoellerLeigh 2460

(2749) W ELEVENTH AVE, 100 S Balboa. Two-story and basement frame dwelling.
 Owner.....C. A. Hall, 1318 5th avenue, San Francisco.

Architect.....None.
 Day's work. COST, \$3000

(2750) W CONNECTICUT, 154 N 18th. Two-story and basement frame flats.
 Owner.....George McGruer, 55 Cumberland, S. F.

Architect.....None.
 Day's work. COST, \$3000

(2751) NE PACIFIC and Leavenworth. Three-story and basement frame apartments.
 Owner.....S. J. Sterner, 374 6th avenue, S. F.

Architect.....None.
 Day's work. COST, \$12,000

(2752) S CABRILLO, 57-6 W 11th avenue. Two-story and basement frame flats.
 Owner.....Jas. H. Conner, 578 10th avenue, S. F.

Architect.....None.
 Day's work. COST, \$3500

(2753) S CALIFORNIA, 95 E 19th avenue. Two-story and basement frame flats.
 Owner.....L. B. Ham, 1643 Lake, San Francisco.

Architect.....None.
 Day's work. COST, \$5000

(2754) S CALIFORNIA, 70 W 19th avenue. Two-story and basement frame flats.
 Owner.....L. B. Ham, 1643 Lake, San Francisco.

Architect.....None.
 Day's work. COST, \$5000

(2755) N WASHINGTON 103 W Spruce N 127-8 1/2xW 62-6. Sheet metal work for concrete and wood residence.
 Owner.....Margaret E. Sudden, 62 Jordan avenue, S. F.

Architect.....G. A. Applegarth, Claus Spreckels Bldg., S. F.
 Contractor.....Forderer Cornice Works, 269 Potrero avenue, S. F.

Filed Sept. 25, '15. Dated Sept. 11, '15.
 On 1st of each month..... 75%
 Usual 35 days 25%

TOTAL COST, \$1068.25
 Bond, \$335. Sureties, U. S. Fidelity and Guaranty Co. Forfeit, none. Limit, as rapidly as practical. Plans and specifications filed.

(2756) LATHING AND PLASTERING on above.
 Contractor.....Bradley & O'Reilly, 180 Jessie, S. F.

Filed Sept. 25, '15. Dated Sept. 18, '15.
 Payments same as above.

TOTAL COST, \$1250
 Bond, \$2125. Sureties, Massachusetts

Bonding and Insurance Co. Forfeit, none. Limit, as rapidly as practical. Plans and specifications filed.

(2757) S CHENERY, 213 from Roanoke, 25x125. All work for a one-story and basement frame residence.
 Owner.....Frank Salvato, 373 Chenery street, S. F.

Architect.....None.
 Contractor.....Devenenzi Bros. & Co., 1069 Union street, S. F.

Filed Sept. 25, '15. Dated Aug. 19, '15.
 Frame up\$700
 Brown coated 700
 Completed and accepted 700

Usual 35 days 700
 TOTAL COST, \$2800
 Bond, Sureties, Forfeit, none. Limit, 90 days after August 23. Plans and specifications filed.

ALTERATIONS

(2758) E CLAYTON 112-6 S Page S 25 x137-6. Alterations and additions to two-story frame building into flats.
 Owner.....John F. Seymour, 52 Pierce San Francisco

Architect.....Havens & Toepke, 46 Kearny, San Francisco.
 Contractor.....Wm. J. Black, 1306 Guerrero, San Francisco.

Filed Sept. 27, '15. Dated Sept. 23, '15.
 New frame & building enclosed.\$ 975
 Rough plumbing in and brown coated 975

Standing finish on 975
 Completed and accepted..... 1070

Usual 35 days.....1325
 TOTAL COST, \$5300

Bond, \$2600. Sureties, Margaret L. Nisbet and Eleanor M. Black. Limit, 75 days. Forfeit, \$5. Plans and specifications filed.

ELECTRIC SIGN

(2759) NO. 165 O'FARRELL Electric sign.
 Owner.....Tait Zinkand Cafe, Prem.

Architect.....Ward & Blohme, Alaska Commercial Bldg., S. F.
 Contractor.....Thos. Day Co. and Ralph McLeran, 150 Jessie, S. F.

COST, \$1400

ALTERATIONS

(2760) NO. 2969 MISSION. Alter flats.
 Owner.....S. F. Home Bldg. Co., 2563 Mission, San Francisco.

Architect.....O. E. Evans & Co., Inc., 2861 Mission, San Francisco

Day's work. COST, \$500

ALTERATIONS

(2761) NO. 2699 CALIFORNIA. Alter dwelling.
 Owner.....Mrs. H. M. Rehüsch, Berkeley.

Architect.....None.
 Contractor.....Barrett & Hilp, 424 Sharon Bldg., San Francisco.

COST, \$400

SIDEWALK, ETC.

(2762) NO. 1501 HAIGHT. Erect brick sidewalk and cement work.
 Owner.....Stager Bros., Premises.

Architect.....None.
 Contractor.....J. W. Marsden, 1452 Haight San Francisco.

COST, \$100

ALTERATIONS

(2763) NO. 2679 TWENTY-FIRST.

Move and raise dwelling and concrete foundation.

Owner.....C. F. Robinson, Premises.
 Architect.....None.

Contractor.....H. S. Hatch, 4439 Geary, San Francisco.

COST, \$400

ALTERATIONS

(2764) W TWENTY-FOURTH AVE 150 S Lincoln Way. Alter dwelling.
 Owner.....C. Anderson, 981 Haight, San Francisco.

Architect.....None.
 Day's work. COST, \$190

FRAME DWELLING

(2765) E BANKS 150 N Powhattan. One-story and basement frame dwlg.
 Owner.....John C. Schmidt, 91 Ellsworth, San Francisco.

Architect.....None.
 Day's work. COST, \$800

MARQUISE

(2766) SW MARKET AND NEW Montgomery. Erect marquise.
 Owner.....Palace Hotel Co, Prem.

Architect.....Geo. W. Kelham, 305 Sharon Bldg., San Francisco.

Day's work. COST, \$1000

ALTERATIONS

(2767) NO. 118 ANDERSON. Move & alter dwelling.
 Owner.....Mrs. M. Reilly, Premises.

Architect.....None.
 Day's work. COST, \$400

FRAME DWELLING

(2768) E EIGHTEENTH AVE 275 S Geary. Two-story and basement frame dwelling.
 Owner.....Mary B. Hallett, 1265 7th Ave., San Francisco.

Architect.....None.
 Day's work. COST, \$2400

FRAME DWELLING

(2769) E EIGHTH AVE 275 S Irving. Two-story and basement frame dwlg.
 Owner.....Mrs. J. L. Hogan, 1342 8th Ave., San Francisco.

Architect.....None.
 Contractor.....J. D. Hogan, 1342 8th Ave., San Francisco.

COST, \$2500

ALTERATIONS

(2770) NO. 2245 FILBERT. Alter and add to flats.
 Owner.....Julia Goodwin, Premises.

Architect.....None.
 Contractor.....Ward & Goodwin, 110 Jessie, San Francisco.

COST, \$500

PAINTING, ETC.

(2771) W TAYLOR 137-6 N Sutter N 35-9xW 137-6. Painting and papering for building.

Owner.....Biltmore Realty Co.
 Architect.....Edw. T. Foulkes, Crocker Bldg., San Francisco.

Contractor.....Vincent J. Donovan, 729 Minna, San Francisco.

Filed Sept. 28, '15. Dated Sept. 18, '15.
 On or before 10 days after 1st of each month 75%
 Usual 35 days 25%

TOTAL COST, \$2400

Bond, none. Limit, due diligence. Forfeit, none. Plans and specifications filed.

FRAME FLATS

(2772) S UNION 131-8 W Hyde W 21x

S65. All work except shades and lighting fixtures for two-story frame flats.
 Owner.....Carl Lamerdin, 1959 Vallejo San Francisco.
 Architect...Paul F. De Martini, 2123 Powell, San Francisco.
 Contractor..Paul P. De Martini, 2869 Octavia, San Francisco.
 Filed Sept. 28, '15. Dated Sept. 20, '15.
 Frame up and rafters on.....\$1200
 Brown coated 1200
 Completed and accepted..... 1200
 Usual 35 days..... 1200
TOTAL COST, \$4800
 Bond, \$2400. Sureties, G. R. Cordano and A. P. Giannini. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

FRAME DWELLING
 (2773) E EIGHTEENTH AVE 160 N Judah. One-story and basement frame dwelling.
 Owner.....Hind Estate Co., 320 Montgomery, San Francisco.
 Architect...C. Stern, 1251 Naples, San Francisco.
 Contractor..Leigh & Schultiz, 419 21st Ave., San Francisco.
COST, \$1850

FRAME DWELLING
 (2774) E EIGHTEENTH AVE 185 N Judah. Two-story and basement frame dwelling.
 Owner.....Hind Estate Co., 320 Montgomery, San Francisco.
 Architect...C. Stern, 1251 Naples, San Francisco.
 Contractor..Leigh & Schultiz, 419 21st Ave., San Francisco.
COST, \$2000

FRAME DWELLING
 (2775) NE BERLIN AND OLMSTEAD. One-story and basement frame dwlg.
 Owner.....Thos. Cogan, 729 Berlin, San Francisco.
 Architect...None.
 Contractor..E. J. O'Connor, 551 Goettingen, San Francisco.
COST, \$1500

BRICK STORES AND SALOON
 (2776) E DRUMM, WASHINGTON & Merchant. Two-story brick stores and saloon.
 Owner.....Sara Jane de la Montanya, 1760 Pacific Ave., S. F.
 Architect...None.
 Contractor..J. de la Montanya, 1104 Nevada Bank Bldg., S. F.
COST \$18,500

GARAGE
 (2777) NO. 3660 JACKSON. Erect private garage.
 Owner.....Alfred Sntro, Premises.
 Architect...Bliss & Faville, Balboa Bldg., San Francisco.
 Contractor..J. Harold Johnson, 740 9th Ave., San Francisco.
COST, \$500

FRAME DWELLING
 (2778) E DIVISADERO 102-84 N Jackson. Three-story and basement frame dwelling.
 Owner.....Dr. Lathrop M. Ellinwood, 200 Cherry, San Francisco.
 Designer...Russell Monson, 803 Merchants National Bank Bldg San Francisco.

Contractor...Henry E. Routh, 76 DeSoto San Francisco.
COST, \$3500

ALTERATIONS
 (2779) NO. 1925 GOUGH. Alter apartments.
 Owner.....A. W. Wilson, Premises.
 Architect...None.
 Day's work. **COST, \$500**

ADDITION
 (2780) E GRANT AVE 69 S Union. Add one-story frame for hotel.
 Owner.....S. Firpo & Finnochio Bros.
 Architect...None.
 Contractor..B. Pagano, 1628 Stockton, San Francisco.
COST, \$4250

ALTERATIONS
 (2781) NO. 596 THIRD. Alter restaurant.
 Owner.....Alfred W. Margenstern, 4038 Lawton, S. F.
 Architect...None.
 Contractor..J. Whittier, 278 Natoma, S. F.
COST, \$500

ADDITION
 (2782) NO. 185 LOWER TERRACE. Move and add to dwelling.
 Owner.....Herman Swanson, 2362 Bryant, San Francisco.
 Architect...None.
 Day's work. **COST, \$400**

REPAIRS
 (2783) SE PAGE AND WEBSTER. Repair church.
 Owner.....Westminster, Society, Premises.
 Architect...None.
 Contractor..C. W. Duffie, 870 Page, San Francisco.
COST, \$400

FRAME DWELLING
 (2784) SW SILLIMAN AND COLBY. Two-story and basement frame dwlg.
 Owner.....Jos. Gregoire, 911 Silliman, San Francisco.
 Architect...None.
 Contractor..Geo. Terranova, 185 Ellsworth, San Francisco.
COST, \$1800

FRAME DWELLING
 (2785) S SAN BRUNO 36-6 E Waterloo. One-story and basement frame dwlg.
 Owner.....Bernard Berri, 2003 San Bruno, San Francisco.
 Architect...None.
 Contractor..G. D. Molpatti, 301 Nevada, San Francisco.
COST, \$1500

PLUMBING, ETC.
 (2786) NE GEARY & COOK. Plumbing, painting and plastering for apartments.
 Owner.....F. C. and H. W. Berthienne, Continental Hotel, S. F.
 Architect...Frye & Thayer, 20 Montgomery, San Francisco.
 Contractor..C. King, Inc., 1900 Golden Gate Ave., San Francisco.
COST, \$1000

FRAME RESIDENCE
 (2787) W SIXTEENTH AVE 175 N Balboa N 25xW 120. All work except lighting fixtures and wall paper for two-story frame residence.

Owner.....Gus D. Harper Jr. and Regina T. Harper, 1267 Broadway, San Francisco.
 Architect...Plans by Contractor.
 Contractor..Geo. F. Cleese, 524 27th Ave., San Francisco.
 Filed Sept. 29, '15. Dated Sept. 28, '15.
 Frame up\$1000
 Brown coated 1000
 Completed and accepted..... 1000
 Usual 35 days..... 1000
TOTAL COST, \$4000
 Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE
 (2788) S FORD 125 W Sanchez W 25x S 114. All work except painting, gas and electric fixtures, shades and finish hardware for two-story frame residence.
 Owner.....Herber Quandt, 49 Harper, San Francisco.
 Architect...A. Klahn, 27 Chenery, S. F.
 Contractor..A. Klahn & Son, 27 Chenery, San Francisco.

Filed Sept. 29, '15. Dated Sept. 22, '15.
 Frame up\$500
 Brown coated 500
 White Coated 500
 Finished 500
 Usual 35 days..... 600
TOTAL COST, \$2600
 Bond, none. Limit, 90 days. Forfeit, \$1. Plans and specifications filed.

FRAME RESIDENCE
 (2789) E EIGHTEENTH AVE 325 S Geary S 25xE 120 O L 267. All work for two-story frame residence.
 Owner.....John Gray, 2252 Clement, San Francisco.
 Architect...None.
 Contractor..Thomas Hamill, 268 25th, San Francisco.

Filed Sept. 29, '15. Dated Sept. 27, '15.
 Frame up\$700
 Brown coated 700
 Completed 700
 Usual 35 days..... 700
TOTAL COST, \$2800
 Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications, none.

FRAME FLATS
 (2790) S MINNA 75 E Julia E 25xS 80. All work for three-story and basement frame flats.
 Owner.....Anselmo F. Schuler, 114 Alabama, San Francisco.
 Architect...David C. Coleman, 702 Market, San Francisco.
 Contractor..Fred Warden, 180 Jessie, San Francisco.

Filed Sept. 29, '15. Dated Sept. 29, '15.
 Frame up and roof on.....\$1531.25
 Brown coated 1531.25
 Completed and accepted..... 1531.25
 Usual 35 days..... 1531.25
TOTAL COST, \$6125.00
 Bond, \$3062.50. Surety, A. Monson. Limit, 90 days. Forfeit, \$3.00. Plans and specifications filed.

ALTERATIONS
 (2791) NO. 128 THIRD. Alter hotel lobby.
 Owner.....A. Fallon, 1802 Market, San Francisco.
 Architect...None.
 Day's work. **COST, \$1000**

FRAME DWELLING
 (2792) W SAN BRUNO 125 N Mansell. One-story and basement frame dwlg.

Owner.....John Powlowski, 3165 San Bruno, San Francisco.
 Architect...None.
 Day's work. COST, \$800

FRAME DWELLING
 (793) S ALTON 216 E Ninth Ave.
 Two-story and basement frame dwlg.
 Owner.....Conservative Bldg. & Invest.
 Co., 200 Phelan Bldg., S. F.
 Architect...None.
 Day's work. COST, \$5000

FRAME DWELLING
 (794) S ALTON 253 E Ninth Ave.
 Two-story and basement frame dwlg.
 Owner.....Conservative Bldg. & Invest.
 Co., 200 Phelan Bldg., S. F.
 Architect...None.
 Day's work. COST, \$4950

ALTERATIONS
 (795) FILLMORE AND EDDY. Alter for ovens.
 Owner.....California Baking Co., Premises.
 Architect...None.
 Day's work. COST, \$500

FRAME DWELLING
 (796) W SEVENTEENTH AVE 78-11 N Clement.
 Two-story and basement frame dwelling.
 Owner.....Johnson & Johnson, 818 14th, San Francisco.
 Architect...None.
 Day's work. COST, \$2900

FRAME DWELLING
 (797) E ELEVENTH AVE 300 N Cabrillo.
 Two-story and basement frame dwelling.
 Owner.....MacArthur Bros., 1560 Fell San Francisco.
 Architect...None.
 Day's work. COST, \$3000

ALTERATIONS
 (798) NO. 4476 MISSION. Alter dwlg.
 Owner.....G. Fazio, 4484 Mission, San Francisco
 Architect...None.
 Day's work. COST, \$600

FRAME DWELLING
 (799) W VICTORIA 100 S Urban Drive.
 One-story and basement frame dwelling.
 Owner.....Urban Realty Improvement Co., 85 Cerritos Ave., S. F.
 Architect...Jos. A. Leonard, 85 Cerritos Ave., San Francisco.
 Day's work. COST, \$4000

FRAME FLATS
 (2800) SE LOMBARD AND STOCKTON.
 Two-story and basement frame (2) flats.
 Owner.....O. Torre, 2053 Grant Ave., San Francisco.
 Architect...Paul F. De Martini, 2123 Powell, San Francisco.
 Day's work. COST, \$1400

FRAME FLATS
 (2801) W RITCH 250 N Brannan.
 Two-story and basement frame (2) flats.
 Owner.....G. W. Renish, 1751 9th Ave and Mrs. Boyle, Care New Mechanics' Hotel, Brannan near 4th, San Francisco.
 Architect...None.
 Day's work. COST, \$2500

FRAME FLATS
 (2802) S TEHAMA 150 W Fourth.

Three-story and basement frame (3) flats.
 Owner.....J. Rogers.
 Architect...None.
 Contractor...W. Props, 1301 Gough, San Francisco.
 COST, \$4750

FRAME FLATS
 (2803) N CALIFORNIA 127-6 E 15th Ave.
 Two-story and basement frame (2) flats.
 Owner.....W. L. Hemminga, Inc., 1600 Fell, San Francisco.
 Architect...None.
 Day's work. COST, \$5000

FRAME DWELLING
 (2804) E TWELFTH AVE 100 S Anza.
 Two-story and basement frame dwlg.
 Owner.....E. A. Janssen, Hearst Bldg., San Francisco.
 Architect...H. C. Bauman, 606 Chronicle Bldg., San Francisco.
 Day's work. COST, \$2500

FRAME GARAGE
 (2805) E FLORIDA 50 N 24th.
 One-story frame garage.
 Owner.....C. Lichtenstein, 2643 Bryant, San Francisco.
 Architect...None.
 Contractor...J. F. Nielson, 2350 Bryant, San Francisco.
 COST, \$800

FRAME APARTMENTS
 (2806) N SACRAMENTO 102-6 W Baker.
 Three-story and basement frame (6) apartments.
 Owner.....C. Reinhart, 60 Rivoli, S. F.
 Architect...Rousseau & Rousseau, 110 Sutter, San Francisco.
 Contractor...Alex. Martinet, 1538 Felton, San Francisco.
 COST, \$8000

NOTE:—Job started.

ADDITION
 (2807) NO. 4410 TWENTY-THIRD.
 Move and add to dwelling.
 Owner.....Mrs. A. Reed, Premises.
 Architect...None.
 Contractor...A. Reed, Premises.
 COST, \$500

ALTERATIONS
 (2808) N FOLSOM bet. Embarcadero & Steuart.
 Raise building, underpin, install new plumbing, etc.
 Owner.....Henry Weinhard Brewery, 1255 Harrison, S. F.
 Architect...None.
 Day's work. COST, \$6500

FRAME DWELLING
 (2809) W EIGHTEENTH AVE 125 S Geary.
 One-story and basement frame dwelling.
 Owner.....Emma and Bertha Schell, 417 18th Ave., S. F.
 Architect...None.
 Contractor...Nelson Bros., 515 Dolores, San Francisco.
 COST, \$1950

ALTERATIONS
 (2810) NO. 2709 JACKSON. Install closet.
 Owner.....Henry Kahn, Premises.
 Architect...A. Lansburg, 703 Mission, San Francisco.
 Contractor...Oliver Duval & Son, Dalziel Bldg., Oakland.
 COST, \$750

ALTERATIONS
 (2811) NO. 17 POST. Remove partitions and re-build new of metal studs and lath and plaster; move plumbing fixtures, cut opening in wall for window, install galvanized iron skylight, terra cotta tile, dumb waiter shaft, etc., for club rooms.
 Owner.....Mechanics' Institute, Prem.
 Architect...Morris M. Bruce, 1281 Flood Bldg., San Francisco
 Contractor...P. J. Lynch, 110 Jessie, San Francisco.
 COST, \$10,500

FRAME FLATS
 (2812) W TENTH AVE 350 N Kirkham.
 Two-story and basement frame flats.
 Owner.....Frank Zagrzewski, 1445 10th Ave., San Francisco.
 Architect...John Zagrzewski, 1445 10th Ave., San Francisco.
 Contractor...Paul Bizuba, 106 Persia, San Francisco.
 COST, \$2000

ALTERATIONS
 (2813) SE O'FARRELL & STOCKTON. Alter store.
 Owner.....E. Funkenstein et al, 447 Newhall Bldg., S. F.
 Architect...B. J. Joseph, 447 Newhall Bldg., San Francisco.
 Day's work. COST, \$1500

FRAME COTTAGE
 (2814) N SILLIMAN 50 E Holyoke E 25 x N 100. All work except finish hardware, gas and electric fixtures and shades for one-story and basement frame cottage.
 Owner.....Frank and Teresa Zanini, 436 Silliman, San Francisco
 Architect...None.
 Contractor...Joseph Perasso, 801 Athens San Francisco.
 Filed Sept. 30, '15. Dated Sept. 28, '15.
 Roof on\$37.50
 Brown coated 37.50
 Completed and accepted..... 37.50
 Usual 35 days..... 37.50
 TOTAL COST, \$1350.00

Bond, \$800. Sureties, Luigi Perasso and Giacomo Carugli. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

FRAME DWELLING
 (2815) S FILBERT 164 W Baker W 26-6xS 137-6. All work for two-story frame dwelling.
 Owner.....Paul M. Nippert, 433 California, San Francisco.
 Architect...None.
 Contractor...W. W. Rednall, 2500 Filbert, San Francisco.
 Filed Sept. 30, '15. Dated Sept. 28, '15.
 Roof on\$1200
 1st coat plaster on..... 1200
 Completed 1200
 Usual 35 days..... 1200
 TOTAL COST, \$4800
 Bond, \$4000. Sureties, J. C. Doherty and Geo. W. Lee. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

ALTERATIONS
 (2816) NO. 4041 TWENTY-FOURTH. Remove and alter dwelling.
 Owner.....H. Stewart.
 Architect...None.
 Contractor...P. A. Donahue, 272 Lisbon, San Francisco.
 COST, \$500

FRAME DWELLING

(2817) S BALBOA 50 W 31st Ave.
One-story and basement frame dwlg.
Owner.....Emma Keiser, 3109 Balboa,
San Francisco.
Architect...None.
Contractor..Mr. Swanson, 2742 Geary,
San Francisco.

COST, \$400

ADDITION

(2818) W SIXTEENTH AVE NO. 281.
Add one room.
Owner.....Mrs. A. Trapani, Premises.
Architect...None.
Contractor..Hofmeister & Berdahl, 629
Cole, San Francisco.

COST, \$400

ALTERATIONS

(2819) SE CLEMENT AND SIXTH
Ave. Alter interior of store.
Owner.....Chas. Musante, San Rafael.
Architect...None.
Contractor..E. H. Snell, 135 18th Ave.,
San Francisco.

COST, \$400

ELECTRIC SIGN

(2820) N SUTTER 100 W Powell.
Electric signs.
Owner.....Cartwright Hotel, Prem.
Architect...None.
Contractor..Brumfield Elec. Sign Co.,
18 7th, San Francisco.

COST, \$400

ELECTRIC SIGN

(2821) NO. 31 MARKET. Electric
sign.
Owner.....J. V. Collins, Premises.
Architect...None.
Contractor..Federal Sign System Elec.,
615 Mission, San Francisco.

COST, \$400

REPAIRS

(2822) NW McALLISTER AND VAN
Ness. Repair fire damage.
Owner.....E. C. Denigan, 224 Pacific
Bldg., San Francisco.
Architect...None.
Contractor..C. W. Cunningham, 222
Grove, San Francisco.

COST, \$400

ADDITION

(2823) NO. 7 IMPERIAL AVE. Add
and alter dwelling.
Owner.....Wm. Turner, Premises.
Architect...None.
Contractor..Ferguson & Son, 1739
Union, San Francisco.

COST, \$400

ADDITION

(2824) NO. 100 GERARD. Add porch
and bath.
Owner.....W. Hindin, Premises.
Architect...None.
Contractor..H. Abrahams, 134 Hale,
San Francisco.

COST, \$400

ALTERATIONS

(2825) NO. 2301 LAGUNA. Alter for
garage.
Owner.....Mary Ives Crocker, Prem.
Architect...N. Blaisdell, 255 California
San Francisco.
Contractor..Mahony Bros., Crocker
Bldg., San Francisco.

COST, \$750

ALTERATIONS

(2826) N HAYES 75 E Central Ave.
Alter stores.
Owner.....J. Benone, 166 Stillman,
San Francisco.
Architect...None.
Contractor..Serguson Bros., 303 Guer-
rero, San Francisco.

COST, \$400

NEW SIDEWALK LIGHTS

(2827) SW PREMONT AND MISSION.
New sidewalk lights.
Owner.....Crocker Estate, Shreve
Bldg., San Francisco.
Architect...None.
Contractor..John McGuigan & Co., 142
Silver, San Francisco.

COST, \$500

FRAME DWELLING

(2828) W POTRERO AVE 210-½ S
25th (rear). One-story and basement
frame dwelling.
Owner.....C. Sherman, 2526 E-14th,
Oakland.
Architect...None.
Contractor..J. Sherman, 2863 25th, S. F.

COST, \$700

FRAME DWELLING

(2829) W SIXTEENTH AVE 150 N
Balboa. Two-story and basement
frame dwelling.
Owner.....Costello & Feerick, 93 Col-
lege Ave., San Francisco.
Architect...None.
Day's work.

COST, \$3000

CLASS "A" SCHOOL

(2830) SW FOLSOM AND TWENTY-
sixth W 170 S 150-9¼ M or 1 S 86 deg
35 min E 175 m or 1 N 173 M B 200.
Structural steel and cast iron work
for three-story and basement Class
"A" school building.

Owner.....J. W. Kerr, Jno. H. Sammi,
Geo. W. Reed, R. V. Lucy,
Herman Van Loven and H.
T. Harper as Trustees
Cogswell Polytechnical
College, SE 26th and Fol-
som, San Francisco.
Architect...Frederick H. Meyer,
Bankers' Invest. Bldg., S. F.
Contractor..Western Iron Works, 141
Beale, San Francisco.

Filed Oct. 1, '15. Dated Sept. 16, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%

TOTAL COST, \$16,952

Bond, \$8476. Surety, New Amsterdam
Casualty Co. Limit, 5 months. Forfeit,
none. Plans and specifications filed.

(2831) EXCAVATION, CONCRETE,
cement, brick, marble, granite, iron,
sheet metal, kalamcin, composition
roofing, metal furring and partitions,
glass, glazing, carpentry, plaster,
painting, plumbing and electrical
work on above.

Contractor..Lange & Bergstrom, Shar-
on Bldg., San Francisco.
Filed Oct. 1, '15. Dated Sept. 16, '15.
Payments same as above.....

TOTAL COST not to exceed \$101,000
Bond, \$53,000. Surety, The Aetna Acci-
dent & Liability Co. Limit, Nov. 30,
1916. Forfeit, none. Plans and speci-
fications filed.

NOTE—Contractor to receive \$5000.

FRAME APARTMENTS

(2832) NW GEARY AND COMMON-

wealth Ave W 103xN 100 W A 645.
All work for two-story and basement
frame (12) apartments.
Owner.....Emma A. Waterman, 183
Jordan Ave., San Francisco
Architect...C. O. Clausen, Hearst Bldg
San Francisco.
Contractor..Wm. Little, 664 10th Ave.,
San Francisco.

Filed Oct. 1, '15. Dated Sept. 27, '15.
Frame up\$5140
Brown coated 5140
Standing finish on 5140
Completed and accepted..... 5140
Usual 35 days..... 6905

TOTAL COST, \$27,465

Bond, \$13,732. Limit, 90 days. Forfeit,
\$20. Plans and specifications filed.

RESIDENCE

(2833) E THIRTY-SECOND AVE 175
S Clement S 25x E 120. All work for
two-story five-room residence.
Owner.....Gustave Moeller.
Architect...None.
Contractor..Leigh & Schultz, 419 21st,
San Francisco.

Filed Oct. 1, '15. Dated Sept. 3, '15.
Frame up\$690
Brown coated 590
Completed 590
Usual 35 days..... 590

TOTAL COST, \$2460

Bond, none. Limit, 70 days from Sept.
3, 1915. Forfeit, none. Plans and
specifications, none.

LEASES.

Oct. 1, 1915—NO. 1133 GRANT AVE, W
line bet. Pacific and Broadway.
Lucie Marchebout to Shin Dart Sam
5 years. \$8400. Cancelled Sept. 17,
1915, by Lucie Marchebout and Shin
Dart Sam.

Oct. 1, 1915—NO. 1133 GRANT AVE,
W line bet. Pacific and Broadway.
Lucie Marchebout to Young Quong,
Fong Hong, Bo & Jeong Young as
Asia Hotel Co. 3 years. \$5220.
Sept. 30, 1915—ROOM 303 COLESON
Bldg., 212 Stockton. United Build-
ing Syndicate to D A Alberti. 5
years, \$3060, with option to renew.

NOTICE OF NONRESPONSIBILITY.

Sept. 27, 1915—E TWENTIETH AVE
225 N Anza N 25x120. Wm Buchholz
as to improvements on leased prop-
erty

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED
Sept. 25, 1915—N McKINNON AVE,
100 W Newhall, W 50xN 100. P.
Bareilles to George G. Moran....
.....Sept. 16, 1915
Sept. 25, 1915—W FIFTH AVE, 50 S
Anza, S 25xW 95. Mary B. Lillis
to Joseph C Kirby.....Sept. 17, 1915
Sept. 25, 1915—E HAMPSHIRE 175 S
22nd E 25 E 100 N 25 W 100. John
O'Hare to Edw. Grace. Aug., 1915
Sept. 25, 1915—E PRESIDIO AVE,
150 S California S 25x E 100. Elmer
Hinton to Louis J. Deibel.....
.....Sept. 22, 1915
Sept. 25, 1915—W TAYLOR, 127 N
Fibert, 27-6x90. R. Zappertini and
L. Fignone to Devenenci Bros. &
Co.Sept. 24, 1915

pt. 25, 1915—SE PINE and Baker, E 27-6x8 S 7-6. Julian H. Olcovich to whom it may concern. Sept. 25, 1915
 pt. 27, 1915—LOTS 13, 14, 15 BLK "D" Mission Terrace, being on NE Santa Ysabel Ave 175 SE San Jose Ave SE 75xNE 125. William and Francis Smith to Smith Bros. Sept. 25, 1915
 pt. 27, 1915—S NORIEGA 57-6 E 11th Ave E 25xS 100. Jennie Cavanaugh to H C Christiansen. Sept. 27, 1915
 pt. 27, 1915—E COLUMBUS AVE 59-7 1/2 long; 89-5 1/2 S Union, other frontage on W Stockton 68-9 S Union depth of Lots 88-3 1/2 on N line and 126-5 1/2 on S line. C and I C Pavilla and P A Brlica to G Moriconi and G Passerino. Sept. 27, 1915
 pt. 27, 1915—W GUERRERO 100 S Dorland S 50 W 120-8 N 50-3 to a lot 127-3 1/2 W Guerrero E 127-3 1/2 W J Dowling and John B Nuttman to Charles Coburn. Sept. 27, 1915
 pt. 27, 1915—W TENTH AVE 100 S Bathoa (B) S 25xW 120. Alice C Bollier to whom it may concern. Sept. 27, 1915
 pt. 27, 1915—SE GOUGH & PACIFIC Ave. Geo S Potter to J Harold Johnson. Sept. 1, 1915
 pt. 28, 1915—LOT 11 BLK 1, St. Francis Wood. Westgate Park Co to Mason-McDuffie Co. Sept. 18, 1915
 pt. 28, 1915—LOT 16 BLK 2 St. Francis Wood. Westgate Park Co to Mason-McDuffie Co. Sept. 18, 1915
 pt. 28, 1915—NO. 243 O'FARRELL S line bet Powell and Mason. K D Winship to California Title Contracting Co. Sept. 24, 1915
 pt. 28, 1915—CONCRETE RETAINING wall around Lake Honda in vicinity of 7th Ave and Ortega. Spring Valley Water Co to Jas H O'Brien and Geo A Bos. Sept. 27, 1915
 pt. 29, 1915—E BARTLETT 90 N 26th N 40x E 117. Jules Marty to Robt Trost. Sept. 23, 1915
 pt. 29, 1915—E TWENTY-FIRST Ave 54 S Lake S 25x E 82-6. Jeanette Yates to Wm S Yates. Sept. 22, 1915
 pt. 29, 1915—W COLLINS 90 N Geary N 25xW 123-0 1/2. Jeanette Yates to whom it may concern. Sept. 22, 1915
 pt. 29, 1915—W LUCKY 171-6 N 26th. Gaetano Sidoti to G Caranza & Bro. Sept. 25, 1915
 pt. 29, 1915—E NINTH AVE 275 S Cabrillo S 25x E 120. Rose A V and Louis Hider to W F Duffer. Sept. 28, 1915
 pt. 30, 1915—LOTS 1 TO 9 BLK 1, Paul Reserv. Hd. Ass'n being NW San Bruno Ave and Warde. N T Giacomini to R De Luca. Sept. 27, 1915
 pt. 30, 1915—S EIGHTEENTH 25 W Clover Alley W 25xS 121 ptn Lot 2 blk 2, Ploche & Robinson Sbdn San Miguel Rd. Geo W Hall to whom it may concern. Sept. 30, 1915
 pt. 30, 1915—W FIFTH AVE 75 N Cabrillo. Jens A and Annie Petersen to Harold Johnson. Sept. 29, 1915
 pt. 30, 1915—E NOE 341-6 N 17th N 25x E 100. Edward B Carr to whom it may concern. Sept. 24, 1915
 pt. 30, 1915—GOLDEN GATE PARK California Academy of Sciences to American Marble & Mosaic Co,

Sept. 25; Farrell & Reed. Sept. 27, '15
 Sept. 30, 1915—N CLEMENTINA 180 W 4th N 80xW 25. Thomas Hogan to whom it may concern. Sept. 20, 1915
 Sept. 30, 1915—LOT 14 BLK 14, Crocker Amazon Tract. Kate Dolg to whom it may concern. Sept. 30, '15

LIENS FILED

SAN FRANCISCO COUNTY.

Sept. 24, 1915—N GEARY 80-4 W Baker W 25xN 100. James H Daly vs S F Bldg Co and Geo and Amelia Ziegler\$50
 Sept. 28, 1915—LOT 2 BLK 2840 Forest Hill Court. Eudey & Eudey vs J Holmes Wade, Harriet S Wade and E W Reagh.\$188.75
 Sept. 29, 1915—NE CHURCH AND Army N 51-6x E 96. Albert Debout, \$30; Hugo Carlson, \$85.50; Jas Hatland, \$38 vs John G Trapp.\$145.75
 Sept. 30, 1915—W NINETEENTH AV 100 S Lake S 27.6xW 120. McNear Brick Agency vs S F Bldg Co and R S Holding.\$145.75
 Sept. 30, 1915—SE NINETEENTH & Lexington S 100x E 30. A Santa, J Jasekey and Fred Cordova vs Henry Sepple and Jacob Witzelberger.\$102.28

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

Sept. 27, 1915—E FIFTH AVE 155 N Lake N 45x E 120. Oscar W Thunberg to I and Lena Moss.\$25
 Sept. 27, 1915—W FOURTH AVE 75 S Anza S 25xW 95. Joseph Deasy, Jos Koberling, Pacific Hardware & Steel Co, W C Premus, Michalek & Co, Columbia Lumber Co, Hicks & Folte, L A Hufschmidt Mfg Co, Jas or James Christensen to John F Haner\$25
 Sept. 24, 1915—N WASHINGTON 47-6 W Locust N 127-8 1/2xW 50. F W Kruse to Morton L Cook, Gdn Est Carrie M Cook, incompetent.\$25
 Sept. 30, 1915—SW HOWARD AND Spear W 137-6xS 137-6. Federal Sign System Elec to Folger Est Co
 Sept. 29, 1915—S EIGHTEENTH 25 W Clover W 25xS 121. E Cox to Geo W Hall\$25
 Sept. 28, 1915—N CALIFORNIA 32 W Larkin W 27-6x87. S Ginsberg & Co, American Elec Eng Co to I R Kissel\$20
 Sept. 30, 1915—NE CHURCH & ARMY N 51-6x E 96. Arthur Len vs Jno G and Elizabeth Trapp.\$20

OAKLAND AND ALAMEDA COUNTY.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, C. J. Pfrang, 5487 Claremont avenue, Oakland. Location, corner of 58th and Dover. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Open fire place and tile or brick mantel. Hardwood floors. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.
 RESIDENCE — 1 story and base, frame, \$2,200. Oakland, Cal. Architect, none. Owner, H. Goranson, 431 48th street, Oakland. Location, south

Ygnacio east of 50th avenue. Will contain five rooms, bath and sleeping porch. Interior finish pine with white enamel and hardwood floors. Open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 1 story and base, frame, \$2,500 each. Oakland, Cal. Architect, none. Owner, Joseph T. Hinch, 1748 Broadway, Oakland. Location, west View north of Mather. Will contain five rooms each with bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire places and tile mantels. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, \$6,000. Berkeley, Alameda Co., Cal. Architect, none. Owner, B. A. Stewart, 8 Fairview avenue, Oakland. Location, north Woolsey east College. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with same white enamel. Hardwood floors, open fire places and furnace heat. Bath room finished in tile. Brick or tile mantels. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, C. J. Pfrang. Location 63rd and Dover streets. Will contain five rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Bath room finished in imitation tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,000. Berkeley, Alameda Co., Cal. Architect, Eugene K. Martin, 2192 Shattuck avenue, Berkeley. Owner, R. McDermott. Location east Santa Fe avenue near Camelia. Will contain five rooms and bath. Interior finish pine. Hardwood floors. Open fire place and tile mantel. Exterior covered with cement plaster. Plans being prepared.

RESIDENCES—2, 1 story and base, frame, \$2,500 each. Oakland, Cal. Architect, none. Owner, F. R. Jordan, 705 17th street, Oakland. Location, west Ayala south of Rose. Will contain five rooms and bath each. Interior finish pine and elm panels. Some hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, \$4,500. Alameda, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, R. Weldon. Location, Rio Vista avenue. Will contain eight rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire places and furnace heat. Bath room finished in tile. Mantels tile or brick. Automatic water heater. Ex-

terior covered with rustic and cement plaster. Plans being prepared. Work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Alameda, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, E. Kopf. Location, Waterside Terrace. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior cement plaster. Plans being prepared and work to be done by Day Labor.

RESIDENCES—5, 1 story and base, frame, \$2,400 to \$2,600 each. Alameda, Alameda Co., Cal. Architects Universal Drafting Bureau 1844 Fifth avenue, Oakland. Owner, C. C. Adams. Two of the dwellings will contain five rooms and three will contain six rooms. Interiors will be finished in pine and elm. Hardwood floors will be used in the living and dining rooms. There will be open fire places and tile or brick mantels. Bath rooms will have tile floor and wainscot. Automatic water heaters. Exteriors will be covered with cement plaster. Plans are being prepared.

RESIDENCE—2 story and base, frame, \$4,000. Berkeley, Alameda Co., Cal. Architect, E. W. Cannon, Central Bank Bldg., Oakland. Owner, W. J. Moylan. Location, corner of Northbrae and Monterey. Will contain eight rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and furnace heat. Mantel tile or brick. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

RESIDENCES—2, 1½ story and base, frame, \$2,500 each. Berkeley, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, M. P. Brash. Location, Northbrae. Will contain five rooms and bath each. Interiors finished in pine with some white enamel and elm panels. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$4,500. Berkeley, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owners, E. R. Peake Co. Location, Berkeley. Will contain nine rooms, bath and sleeping porch. Interior finish pine, white enamel and elm. Hardwood floors. Open fire place and tile mantel. Furnace heat. Automatic water heater. Bath room finished in tile. Exterior covered with rustic and cement plaster. Plans being prepared and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,500. Berkeley, Alameda Co., Cal. Architects, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owners, E. R. Peake Co. Location, Berkeley. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and furnace heat. Bath room finished in tile. Automatic water heater. Exterior covered with

cement plaster. Plans complete and work to be done by Day Labor.

COLLEGE BUILDING—Cost not stated. Berkeley, Alameda Co., Cal. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. Location, University Campus. Bids are now being taken for the exterior facing of the Benj. Ide Wheeler Hall. Two propositions are to be considered: Proposition 1, granite; and proposition 2, cement. Bids will be opened on October 25th. Plans can be secured from the secretary of the Regents at Berkeley. An official proposal appears in another column of this issue.

WAREHOUSE—3 story and base, brick and steel, \$60,000. Oakland, Cal. Architect, Walter D. Reed, Oakland Bank of Savings, Oakland. Owners, Crane Co. Location, 9th and Webster streets. Will contain large storage space. Interior finish pine. Cement floors. Metal window sash and frames, special conveyor machinery. Exterior faced with pressed brick and stone. Plans complete and figures being taken.

STREET IMPROVEMENTS—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be opened on October 13th for street work. Two separate contracts are to be let. The work includes, grading, concrete and asphalt, macadam and curbs. Plans can be secured from the City Engineer.

STORES—1 story and base, frame, \$4,000. Oakland, Cal. Architect, William Wilde, 1725 Broadway, Oakland. Owner, O. J. Mead. Location, Broadway between 29th and Orchard streets. Will contain two small stores. Patent store fronts. Interior finish pine. Exterior covered with corrugated iron. Plans complete and figures being taken.

THEATRE—1 story and base, brick, \$14,000. Oakland, Cal. Architect, Merrill Newsom, 1742 Broadway, Oakland. Owner, A. F. Werm. Location Boulevard and 35th avenue. Will contain auditorium seating 399 people. Interior finish pine and ornamental plaster. Modern ventilation. Special electric work. Exterior faced with pressed brick. Plans complete and figures being taken.

SCHOOL GYMNASIUM—1 story, frame, \$10,000. Hayward, Alameda Co., Cal. Architect, Henry C. Smith, Humboldt Bank Bldg., S. F. Owners, Hayward Union High School District. Will contain separate rooms for girls and boys. Interior finish pine. Central heating system and hot water system. Exterior covered with cement plaster. Plans complete and figures being taken. Bids close on October 16th.

Contracts Awarded.

REMOVING HILLS—\$19,688. Mission San Jose, Alameda Co., Cal. Engineer, County Surveyor, Oakland. Owners, Alameda County. Contractors, Hutchinson Co., 1500 Franklin street, Oakland. Contract price, \$19,688.

Building Contracts Awarded

Oakland

1975 PfrangPfrang2500
1976 PfrangPfrang2500

1977	Robins	Robins	2000
1978	Goranson	Goranson	2200
1980	Marshall	Bullock	3350
1981	Shredded Wheat	Vitrolite	5850
1982	Shredded Wheat	Stobbe	5000
1983	Gillman	Taylor	6000
1984	Stevens	Stevens	1000
1985	Richey	Richey	4000
1986	Coats	Brown	700
1987	Lagorio	Glaser	650
1988	Glover	Elabon	1000
1993	Melrose	Stokes	550
1994	Reisner	McCarthy	500
1996	Pacific Steel	Baccus	500
1997	Abrahamson	Maganini	1500
1998	Johnson	Johnson	1500
1999	Alkus	Saxton	6100
2000	Cumpr	Strang	1300
2001	Oakland	Faulkes	500
2002	Oakland	Faulkes	500
2003	Hinch	Hinch	2500
2004	Hinch	Hinch	2500
2005	N G W	Haas	2000
2006	Dahl	Kringle	2500
No. Owner. Contractor. Amt.			
2007	Bice	McWilliams	2850
2008	Fernandes	Fernandes	500
2009	Hammberg	Hammberg	500
2010	Hamb	Brooks	1300
2011	Lauffer	Stewart	1000
2015	Tyson	Bertelsen	1000
2017	Bernadow	Dingwell	2250
2020	Marshall	Bullock	3350
2021	Kuppler	Reck	1300
2022	Muller	Larmer	3400
2023	Jordan	Jordan	2500
2024	Marquise	Owner	1800
2025	Jordan	Jordan	2500
2026	Barrel	Brooks	2000
2028	Morgan	Rogers	3820
2030	Netken	Netken	1000
2032	Phillips	Kringle	700
2035	Ferguson	Wells	1000
2036	St Anthony Ch	Brockhouse	1500
2037	Cohen	Johnson	1500
2038	Cohen	Johnson	1500
2039	Young	Young	1800
2040	Ranlier	Ranlier	1300
2042	Seville	Allen	500
2043	Black	Knox	500

(1975) SE SIXTY-THIRD and Dover
Oakland. One-story, 5-room dwlg.
Owner.....C. J. Pfrang, 5487 Claremont, Oakland.
Architect.....None.
Day's work. COST, \$2500

(1976) SW FIFTY-EIGHTH and Dover
Oakland. One-story, 5-room dwlg.
Owner.....C. J. Pfrang, 5487 Claremont, Oakland.
Architect.....None.
Day's work. COST, \$2500

(1977) E DESMOND, 205 N 51st St.
Oakland. One-story 7-room dwlg.
Owner.....Mrs. L. E. Robins, 5117 Broadway, Oakland.
Architect.....None.
Contractor.....R. L. Robins, 5117 Broadway, Oakland.
COST, \$2000

(1978) S YGNACIO, 110 E 50th ave.
Oakland. One-story six-room dwelling.
Owner.....H. Goranson, 431 48th St. Oakland.
Architect.....None.
Day's work. COST, \$2200

(1980) W FILBERT, 125 S 8th St.
Oakland. All work for addition to one-story frame church.
Owner.....E. and Ellen Marshall, Oakland.
Architect.....None.
Contractor.....O. M. Bullock, 2215 Santa Rita, Oakland.

Filed Sept. 25, '15. Dated Sept. 20, '15.
Frame up and roof on 1/4
Brown coated 1/4
Completed and accepted 1/4
Usual 35 days 1/4
TOTAL COST, \$3350

Bond, none. Sureties, J. P. Silva and

A. J. Agrella. Forfeit, \$1. Limit, 70 days. Plans and specifications filed.

(1981) LOTS 8 TO 24, Inclusive and portions lots 4, 5, 6, and 7 and 25 to 32 Inclusive, Map R. J. McMullen's subdivision, block 576, Oakland. All work for structural glass for four-story reinforced concrete factory. Owner.....Pacific Coast Shredded Wheat Co.
Architect.....Hobart & Cheney, Crocker Bldg., S. F.
Contractor.....Vitrolite Construction Co., 1813 Telegraph, Oakland.
Filed Sept. 25, '15. Dated Sept. 20, '15.
Monthly 75%
Usual 35 days 25%
TOTAL COST, \$2650

Bond, \$1325 Sureties, Fidelity and Deposit Co. Forfeit, \$10. Limit, 90 days from Dec. 1. Specifications only filed.

(1982) ORNAMENTAL IRON WORK on above.
Contractor.....Stobbe & Romak, 418 Franklin, Oakland.
Filed Sept. 25, '15. Dated Sept. 8, '15.
Payments same as above.
TOTAL COST, \$5000

Bond, \$2500. Sureties, Southwestern Surety Insurance Co. Forfeit, \$10. Limit, 200 days from Sept. 1. Specifications only filed.

REPAIRS
(1983) NO. 1084 SEVENTY-FIRST Ave., Oakland. Fire repairs
Owner.....D. T. Gillman, Premises.
Architect...None.
Contractor.....H. W. Taylor, 1432 69th Ave., Oakland.
COST, \$500

ADDITION
(1984) NO. 2719 FOOTHILL BLVD., Oakland. Addition.
Owner.....Alfred H. Steves, 2006 25th Ave., Oakland.
Architect...None.
Day's work. COST, \$1000

DWELLING
(1985) N MEADOW 225 E 35th Ave., Oakland. One-story 3-room dwlg.
Owner.....Rosa Richey, 3532 Meadow Oakland.
Architect...None.
Contractor.....Howard Richey, 3532 Meadow, Oakland.
COST, \$400

DWELLING
(1986) N PLYMOUTH 125 E 96th Ave., Oakland. One-story 3-room dwlg.
Owner.....Mrs. Coats, 1348 68th Ave., Oakland.
Architect...None.
Contractor.....Tom Brown, 1642 89th Ave., Oakland.
COST, \$700

BRICK OVEN
(1987) NO. 939 THIRD, Oakland.
Brick oven.
Owner.....M. Lagorio & Co., Prem.
Architect...None.
Contractor.....J. P. Glaser & Co., 2076 Union, San Francisco.
COST, \$650

DWELLING
(1988) E SIXTY-FOURTH AVE 130 N Palm Drive, Oakland. One-story 4-room dwelling.

Owner.....Sarah Glover, 3360 Pallister Oakland
Architect...None.
Contractor.....C. M. Blabon, 3491 Chan-ning, Oakland.
COST, \$1000

ADDITION
(1993) NO. 1057 FIFTY-FOURTH, Oak-land. Addition.
Owner.....Charles Melrose, Premises.
Architect...None.
Contractor.....A. W. Stokes, 1096 59th, Oakland
COST, \$550

ALTERATIONS
(1994) NO. 911 GROVE, Oakland.
Alterations.
Owner.....Mrs. G. Ropheal, 2196 O'Farrell, San Francisco.
Architect...None.
Contractor.....Wm. McCarty, 1722 Tele-graph Ave., Oakland.
COST, \$500

ALTERATIONS
(1996) NO. 1226 WASHINGTON, Oak-land. Alterations.
Owner.....Pacific Steel & Hardware Co., San Francisco.
Architect...None.
Contractor.....Baccus & Kennedy, 565 16th, Oakland.
COST, \$900

REPAIRS
(1997) NO. 2533-37-43 BROADWAY, Oakland. Repairs.
Owner.....Hugo Abrahamson, SE 13th and Washington, Oakland.
Architect...F. D. Voorhees, Central Bank Bldg., Oakland.
Contractor.....J. F. Maganini, 603 36th, Oakland.
COST, \$450

DWELLING
(1998) W LINDEN 75 S 21st, Oakland. One-story 5-room dwelling.
Owner.....Oscar Johnson, Alameda.
Architect...None.
Contractor.....J. Johnson, 1610 Benton, Alameda.
COST, \$1500

DWELLING
(1999) E BROADWAY 160 N Ridge-way, Oakland. Two-story 16-room dwelling.
Owner.....Harry L. Alkus, 4220 Ter-race, Oakland.
Architect...None.
Contractor.....Erle Saxton, 4225 Terrace, Oakland.
COST, \$6100

DWELLING
(2000) N E-FIFTEENTH 8 E-17th Ave Oakland. One and one-half-story 6-room dwelling.
Owner.....G. L. Curnow, 1513 17th Ave., Oakland.
Architect...None.
Contractor.....F. N. Strang, 805 Pacific Ave., Alameda.
COST, \$2622

SCHOOL
(2001) E-SEVENTEENTH & 23RD Ave., Oakland. One-story 1-room school.
Owner.....City of Oakland.
Architect...None.
Contractor.....John R. Faulkes, 9828 E-11th, Oakland.
COST, \$560

SCHOOL
(2002) SIXTIETH AND SHATTUCK Ave., Oakland. One-story 1-room school.
Owner.....City of Oakland.
Architect...None.
Contractor.....John R. Faulkes, 9828 E-14th, Oakland.
COST, \$560

DWELLING
(2003) W VIEW 150 N Mather, Oak-land. One-story 5-room dwelling.
Owner.....Jos. T. Hinch, 1748 Broad-way, Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING
(2004) W VIEW 300 N Mather, Oak-land. One-story 5-room dwelling.
Owner.....Jos. T. Hinch, 1748 Broad-way, Oakland.
Architect...None.
Day's work. COST, \$2500

REPAIRS
(2005) MISSION SAN JOSE. All work for repairs to Mission.
Owner.....Jos. R. Knowland, Chair-man Native Sons & Native Daughters Mission San Jose Restoration Committee of Alameda County.
Architect...None.
Contractor.....John D. Haar, Hayward.

Filed Sept. 28, '15. Dated Sept. 14, '15.
Foundation work completed.... ¼
Roof 50% completed..... ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$3200
Bond, \$1600. Surety, New Amsterdam Casualty Co. Limit, 60 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING
(2006) LOTS 10 AND 11 BLK "E" Lincoln Park, Piedmont. All work for one-story frame dwelling.
Owner.....Peter Dahl, Oakland.
Architect...None.
Contractor.....John Kringling, 3201½ 13th Ave., Oakland.
Filed Sept. 28, '15. Dated Sept. 27, '15.
Frame up\$600
Plastered 600
Completed and accepted..... 600
Usual 35 days..... 600
TOTAL COST, \$2600
Bond, none. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.
NOTE:—Payments and cost as given.

DWELLING
(2007) NE EVERETT AND GALVIN. Oakland. One-story 6-room dwelling.
Owner.....Leonard N. Bice.
Architect...None.
Contractor.....R. A. McWilliams, 5845 Ayala, Oakland.
COST, \$2850

ADDITION
(2008) NO. 1465 E-THIRTY-THIRD, Oakland. Addition.
Owner.....J. M. Fernandes, Premises.
Architect...None.
Contractor.....L. Santos, 1820 17th, Okd.
COST, \$500

DWELLING
(2009) NO. 961 SIXTY THIRD (near), Oakland. One-story 1-room dwlg.

Owner.....F. Johnson, Premises.
 Architect...None.
 Contractor..A. Hammerberg, 3750 Piedmont Ave., Oakland.
 COST, \$500

STORE
 (2010) SE THIRTY-FIFTH & MARKET
 Oakland. One-story store.
 Owner.....R. M. Hamb, 830 30th, Okd.
 Architect...None.
 Contractor..O. Legault.
 COST, \$1000

ALTERATIONS
 (2011) NO. 409 E-TWELFTH, Oakland.
 Alterations.
 Owner.....F. W. Laufer, 409 12th, Oakland.
 Architect...None.
 Contractor..R. A. Stewart, 8 Fairview Ave., Oakland.
 COST, \$1000

GARAGE
 (2015) N SOTELLO AVE, Piedmont
 Acres, Oakland. One-story garage.
 Owner.....James Tyson, 9 Sea View Ave., Piedmont.
 Architect...Chas. W. McCall, Central Bank Bldg., Oakland.
 Contractor..S. J. Bertelsen, 667 39th, Oakland.
 COST, \$1000

DWELLING
 (2017) W MARSHALL 315 S Stanford Ave., Oakland. One-story 5-room dwelling.
 Owner.....J. Bernadow, Key Route Laundry, Oakland.
 Architect...None.
 Contractor..J. F. Dingwell, 2021 West, Oakland.
 COST, \$2250

ALTERATIONS
 (2020) W FILBERT 125 S Eighth, Oakland. Alter and add to church.
 Owner.....E. Marshall, 428 8th, Okd.
 Architect...None.
 Contractor..O. M. Bullock, 2215 Santa Rita, Oakland.
 COST, \$3350

DWELLING
 (2021) S MELROSE AVE 120 E 47th Ave., Oakland. One-story four-room dwelling.
 Owner.....Mrs. Sophie Kappler, 2030 47th Ave., Oakland.
 Architect...None.
 Contractor..L. N. Peck, 2200 47th Ave., Oakland.
 COST, \$1200

DWELLING
 (2022) W WARFIELD 100 N Wickson, Oakland. One-story 6-room dwelling.
 Owner.....E. Muller, Oakland.
 Architect...None.
 Contractor..Edw. Larmer, 470 Boulevard Way, Oakland.
 COST, \$3400

DWELLING
 (2023) W AYALA 120 S Rose, Oakland One-story 5-room dwelling.
 Owner.....J. R. Jordan, 705 17th, Okd.
 Architect...None.
 Day's work.
 COST, \$2500

DWELLING
 (2024) W FORTY-FIRST AVE 320 S Santa Rita, Oakland One-story 5-room dwelling.
 Owner.....E. M. Marquise, 2827 Rus-

sell, Oakland.
 Architect...None.
 Day's work.
 COST, \$1800

DWELLING
 (2025) W AYALA 80 S Rose, Oakland. One-story 5-room dwelling.
 Owner.....J. R. Jordan, 705 17th, Okd.
 Architect...None.
 Day's work.
 COST, \$2500

DWELLING
 (2026) N CALIFORNIA 560 W Maple, Oakland. One-story 5-room dwlg.
 Owner.....E. W. Barrett, 2942 Madeline, Oakland.
 Architect...None.
 Contractor..W. R. Brooks, 2900 Madeline, Oakland.
 COST, \$2000

FRAME DWELLING
 (2028) OCEAN VIEW DRIVE, Oakland. All work for two-story 9-room frame dwelling.
 Owner.....Mrs. S. A. Morgan, 2826 College Ave., Berkeley.
 Architect...None.
 Contractor..Joseph F. Rogers, 1734 Grove, Oakland.
 Filed Sept. 30, '15. Dated Sept. —, '15.
 Contract signed\$ 20
 Rafters up 950
 Brown coated 950
 Exterior finish ready for paint.. 950
 Usual 35 days..... 950
 TOTAL COST, \$3820

Bond, \$1910. Sureties, F. G. Pellerich and Mrs. C. L. Rogers. Limit, Dec. 31. Forfeit, 50c per day. Plans and specifications filed.

DWELLING
 (2036) E THIRTY-NINTH 50 N Kanning, Oakland. One-story 3-room dwelling.
 Owner.....H. Nethken, 3753 Brown Ave., Oakland.
 Architect...None.
 Day's work.
 COST, \$1000

ADDITION
 (2032) NO. 714 FIFTH AVE., Oakland. Addition.
 Owner.....Mrs. Alice Phillips, Prem.
 Architect...None.
 Contractor..John Kringlein, 3201½ 13th Ave., Oakland.
 COST, \$700

DWELLING
 (2035) SE NINETY-SIXTH AVE AND Cherry, Oakland. One-story 4-room dwelling.
 Owner.....George Ferguson, 1928 9th Ave., Oakland.
 Architect...None.
 Contractor..E. C. Wells.
 COST, \$1000

ALTERATIONS
 (2036) N E-FIFTEENTH, bet. 15th and 16th Aves., Oakland. Alter church.
 Owner.....St. Anthony's Church, Prem.
 Architect...None.
 Contractor..F. A. Brockhage, 1326 Natoma, San Francisco.
 COST, \$1200

DWELLING
 (2037) N THIRTY-SECOND 100 E Linden, Oakland. One-story five-room dwelling.

Owner.....Mrs. R. Cohen, 3203 Filbert, Oakland.
 Architect...None.
 Contractor..Walter Johnson, 3201 Filbert, Oakland.
 COST, \$1500

DWELLING
 (2038) N THIRTY-SECOND 75 E Linden, Oakland. One-story 5-room dwelling.
 Owner.....Mrs. R. Cohen, 3203 Filbert, Oakland.
 Architect...None.
 Contractor..Walter Johnson, 3201 Filbert, Oakland.
 COST, \$1500

DWELLING
 (2039) S SIXTY-THIRD 323 W Colby, Oakland. One-story 6-room dwelling.
 Owner.....W. S. Young, 533 63rd, Oakland.
 Architect...None.
 Day's work.
 COST, \$1800

DWELLING
 (2040) W MARKET 50 S 42nd, Oakland One-story 2-room dwelling.
 Owner.....D. Ranieri, 425 Market, Okd.
 Architect...None.
 Day's work.
 COST, \$400

CLASS "C" GARAGE
 (2042) NW PIEDMONT AVE 394.03 NE Broadway SW 50 NW 87.57 NW 50 SE 100.265, Oakland. All work for one-story and loft Class "C" garage.

Owner.....Frank and Avery Scoville, 747 2nd, Oakland.
 Architect...L. F. Hyde, 26th Ave, Oakland.
 Contractor..F. E. Allen, 3133 Market San Francisco.
 Filed Oct. 1, '15. Dated Sept. 30, '15.
 Brick wall up to 2nd floor level. ¼
 Roof on ¼
 Completed and accepted..... ¼
 Usual 35 days..... ¼
 TOTAL COST, \$5695

Bond, \$2847.50. Surety, Fidelity & Deposit Co. Limit, 60 days after Oct. 5. Forfeit, none. Plans and specifications filed.

CEMENT SIDEWALK
 (2043) N FIRST, bet S. P. Railway Tracks and Lizzie St., Livermore. All work for cement sidewalk.
 Owner.....W. J. Hynes, administrator Estate Mary Black, dec'd.
 Architect...None.
 Contractor..Knox & Pellegrini.
 Filed Oct. 1, '15. Dated Sept. 22, '15.
 Completed\$95
 TOTAL COST, \$95

Bond, limit, forfeit, none. Plans and specifications, none.

Building Contracts Awarded Berkeley.

No.	Owner	Contractor	Amt.
1979	Underson	Patrick	4500
1989	Hippard	Madsen	400
1990	Horstmann	Scammon	450
1991	Dodsworth	Owner	500
1992	McDermott	Owner	2000
1995	Stewart	Stewart	6000
2018	Hunt	Hunt	800
2019	Cutler	Satin	400
2027	Begley	Johanson	1773
2029	Gregory	Kidder	1200
2031	Richard	Winchester	450
2033	Beds	Kollmer	450

11 GunthorpWarren 3000
11 StandishAllen 3500

479) LOT 18, BLK 4, Martin Kellogg
property, Berkeley. All work for
two-story frame dwelling.
Owner.....Maria C. Anderson.
Architect.....James W. Plachek, Ache-
son Bldg., Berkeley.
Contractor.....O. M. and H. G. Patrick,
2001 Hopkins, Berkeley.
Filed Sept. 25, '15. Dated Sept. 16, '15.
Frame up and roof on.....\$1125
Plastered 500
Completed and accepted 1250
Usual 75 days 1125
TOTAL COST, \$4500
and, Sureties, forfeit, none. Limit,
days. Plans and specifications filed.

ARAGE
989) CRAIGMONT & REGAL ROAD,
Berkeley. Garage.
Owner.....Geo. R. Hippard, Premises.
Architect.....None.
Contractor.....Chas. Madsen, 2439 Grant,
Berkeley.

COST, \$400

WELLING
990) N VIRGINIA 135 W Arch, Ber-
keley. Two-story 9-room dwelling.
Owner.....W. J. Horstmann, 2147
Blake, Berkeley.
Architect.....J. Newton Holden, 2241 9th
Ave., Berkeley.
Contractor.....C. F. Scammon, 1816 Addi-
son, Berkeley.

COST, \$4500

ALTERATIONS
991) N EMERSON opp. Tremont,
Berkeley. Alterations.
Owner.....W. T. Dodsworth, 1623
Stuart, Berkeley.
Architect.....None.
Day's work.

COST, \$500

WELLING
992) S SANTA FE AVE opp Camalia,
Berkeley. One-story 5-room dwlg.
Owner.....R. McDermott, 1357 Santa
Fe Ave., Berkeley.
Architect.....Eugene K. Martin, 2192
Shattuck Ave., Berkeley.
Day's work.

COST, \$2000

WELLING
995) N WOOLSEY 350 E College,
Berkeley. Two-story 7-room dwlg.
Owner.....B. A. Stewart, 5 Fairview
Ave., Oakland.
Architect.....None.
Day's work.

COST, \$6000

ALTERATIONS
2018) NO. 1115 ARCH, Berkeley.
Alterations and repairs.
Owner.....Charlotte Hunt, Premises.
Architect.....None.
Contractor.....P. M. Hunt, Premises.

COST, \$800

ALTERATIONS
2019) W SIXTH bet Grayson and
Snyder, Berkeley. Alterations.
Owner.....Cutter Laboratory, Prem.
Architect.....None.
Contractor.....H. J. F. Sattin, 2536 Chil-
ton Way, Berkeley.

COST, \$400

WELLING
2021) E GRANT 40 S Rose S 30xE
100, Berkeley. All work for one-

story five-room dwelling.
Owner.....Annie C. and Johanna
Begley, Berkeley.
Architect.....None.
Contractor.....Gustaf Johanson, 1511
Rose, Berkeley.
Filed Sept. 30, '15. Dated Sept. 29, '15.
Frame up 1/4
Brown coated 1/4
Completed and accepted 1/4
Usual 35 days..... 1/4

TOTAL COST, \$1773

Bond, \$900. Sureties, Elmer E. Nichols
and Ralph R. Eltse. Limit, 70 days.
Forfeit, \$1. Plans and specifications
filed.

ALTERATIONS
(2029) GREENWOOD TERRACE AND
Rose, Berkeley. Alterations and addi-
tion.
Owner.....Warren Gregory, Premises.
Architect.....John Galen Howard, 604
Mission, San Francisco.
Contractor.....Kidder & McCullough, 2075
Addison, Berkeley.

COST, \$1200

ADDITION
(2031) S BANCROFT 150 E College,
Berkeley. Addition.
Owner.....Mrs. Alice Richard, 2722
Bancroft Way, Berkeley.
Architect.....None.
Contractor.....C. A. Winchester, 2924
Shattuck Ave., Berkeley.

COST, \$450

ALTERATIONS
(2033) NO. 178 ALVARADO ROAD,
Berkeley. Alterations.
Owner.....P. Beds, Premises.
Architect.....None.
Contractor.....Jacob Kollmer, 2813 Stuart
Berkeley.

COST, \$450

DWELLING
(2034) N CEDAR 74 E Euclid, Ber-
keley. Two-story 6-room dwelling.
Owner.....Miss Pauline Gunthorp.
Architect.....James W. Plachek, Ache-
son Bldg., Berkeley.
Contractor.....E. H. Warren, 2200 Ather-
ton Ave., Berkeley.

COST, \$3000

ADDITION
(2041) W WARRING 150 S Bancroft,
Berkeley. Add to two-story dwelling
Owner.....Miles Standish, 430 King-
sley Ave., Palo Alto.
Architect.....None.
Contractor.....F. E. Allen, 468 34th, Okd.

COST, \$3500

Building Contracts Awarded

Alameda.

2012	Lubben	Lubben	450
2013	Lassen	Young	400
2014	Pacific G & E	Owner	400
2016	de la Montanya	Delaney	1150

REPAIRS

(2012) NO. 1701 WEBSTER, Alameda.
Repairs.
Owner.....J. G. Lubben, Premises.
Architect.....None.
Day's work.

COST, \$450

ALTERATIONS

(2013) NO. 1627 Foley, Alameda.
Alterations.

Owner.....H. C. Lassen, Premises.
Architect.....None.
Contractor.....E. Young, 2415 Webb Ave.,
Alameda.

COST, \$400

ALTERATIONS

(2014) FOOT UNION, Alameda. Alter.
Owner.....Pacific Gas & Electric Co.,
13th and Clay, Oakland.
Architect.....None.
Day's work.

COST, \$400

REPAIRS

(2016) NO. 2322 SANTA CLARA AVE.,
Alameda. Repairs.
Owner.....Mrs. S. J. de la Montanya,
1760 Pacific Ave., S. F.
Architect.....None.
Contractor.....Delaney & Randlett, 2303
Central Ave., Alameda.

COST, \$1150

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED AMOUNT

Sept. 20, 1915—LOT 35 Map Univer-
sity Hill, Bkly. E A Hersam to
Riddell Bldg Service Corporation.
.....Sept. 17, 1915
Sept. 23, 1915—LOT 102 Map Crocker
Highlands, Okd. Laura A Milton
to S J Bertelsen.....Sept. 23, 1915
Sept. 23, 1915—S 64 LOT 65 Map
Piedmont Manor, Piedmont. Walter
H Creighton to whom it may concern
.....Sept. 23, 1915
Sept. 23, 1915—S EMERSON 150 E
Shattuck Ave, Bkly. E A Senna to
D N Stange.....Sept. 13, 1915
Sept. 27, 1915—N 56 LOT 13 AND S
35 Lot 14 Blk "C" Northbrae Busi-
ness Ppty, Oakland Tp. Berkeley
Development Co to F R Peake Co
.....Sept. 24, 1915
Sept. 27, 1915—S STANFORD AVE
390.51 E San Pablo Ave E 41.14 S
128.24 W 40 N 181.31, Okd. William
O'Neill to W S Montgomery.....
.....Sept. 27, 915
Sept. 27, 1915—N THIRTEENTH 60 W
Grove W 120xN 100, Okd. Knights
of Columbus Hall Ass'n to P G Mc-
Intyre.....Sept. 2, 1915
Sept. 28, 1915—W CAROLINE 125 S
Central Ave S 50xW 100, Ala. Olive
D Crawford to E J and E R Angell
.....Sept. 27, 1915
Sept. 23, 1915—BLK DBED BY 12TH,
Union, 14th and Poplar, Oakland.
Pacific Coast Shredded Wheat Co to
J L McLaughlin.....Sept. 23, 1915
Sept. 29, 1915—W PARK BLVD about
175 N El Centro Ave, Okd. E W
Woodard to whom it may concern
.....Sept. 28, 1915
Sept. 30, 1915—LOT 98 Nova Piedmont
Piedmont. Chas E Miller Co to C
W Mason.....Sept. 30, 1915
Sept. 30, 1915—E WATKINS 80 N
Hepburn NE 175-6 NW 42-5 1/2 SW
161-6 SE 10, San Leandro. W L and
Bessie Elizabeth Duarte to Geo
PetersenSept. 24, 1915

LIENS FILED

ALAMEDA COUNTY.

Sept. 27, 1915—LOT 15 BLK 4 Brook-
dale Terrace, being N Walnut 41 E
Lilac, Okd. Herbert Hansen vs

Harry C Howland.....\$50
 Sept. 27, 1915—S SIXTY-FIRST 250 W
 Shattuck Ave W 40X8 108, Okd. J
 Longhead vs L J Moran, B H Hart-
 well, C H Busekist.....\$59.95
 Sept. 28, 1915—SW E-TWELFTH 50
 NW Seventh Ave NW 50XSW 130,
 Okd. Capitol Sheet Metal Works
 vs J F and Elizabeth Loughery,
 John Doe and Richard Doe.....\$13.65
 Sept. 29, 1915—LOT 15 BLK 6 Map
 Brookdale Terrace, Oakland. P J
 Wright vs O G Smith and Robert
 Davies.....\$35
 Sept. 30, 1915—N EIGHTH 208 E Pine
 E 30XN 130, being No. 1772 Eighth,
 Okd. Sunset Lumber Co vs Jennie
 Abrahams and Chas Rogers.....\$67.10

RELEASE OF LIENS

Sept. 29, 1915—LOT 47 except S 29.19
 Map Piedmont Manor, Piedmont.
 R W Kinney, \$119.00; John P Max-
 well, \$140.05; H L Manning, \$107.85;
 Bruce Lumbar & Mill Co, \$998.88; A
 P Bartley, \$30.45; Oakland Paving
 Co, \$104.80 to Walter H Creighton
 Sept. 21, 1915—S UNIVERSITY AVE
 105 E Grove E 35X8 100, Bkly. O
 Bernhus and J H Jones to F H
 Field and J S Jennings.....\$85.50
 Sept. 29, 1915—E CORONADO AVE
 160 N 51st E 100XN 40, Okd. Her-
 man Kerlin to Vandelief Wehe.....\$115
 Sept. 23, 1915—SE TWENTY-FIFTH
 and Grove S 60XE 90, Okd. John L
 Howard Jr, \$—; G B Castelotti,
 \$400; Atlas Mortar Co, \$564; Howard
 Co, \$1144.75; John McGuigan & Co,
 \$65; Port Costa Brick Wks, \$1481.40
 to St. George Hall Ass'n and F J
 Klenck

SAN JOSE AND THE SANTA CLARA VALLEY.

ROAD IMPROVEMENT — Cost not
 stated. San Jose, Santa Clara Co., Cal.
 Engineer, County Surveyor, San Jose.
 Owners, Santa Clara County. Plans
 and specifications prepared by the
 County Surveyor have been approved,
 the Clerk of the Supervisors has been
 directed to advertise for bids for the
 improvement of Lincoln avenue in Su-
 pervisor District No. 4. Bids close Oc-
 tober 25th at 11 a. m. Further infor-
 mation may be had from the County
 Surveyor at San Jose.

STREET IMPROVEMENT — \$66,000.
 San Bruno, San Mateo Co., Cal. En-
 gineer, City Engineer, San Bruno. Own-
 ers, Town of San Bruno. The City
 Trustees of San Bruno have awarded
 contracts for \$66,000 worth of munici-
 pal improvements. Hamlin & Webner
 of San Jose have been awarded a con-
 tract amounting to \$22,216 for sewer
 construction, and Charles J. Lindgren,
 Monadnock Bldg., S. F., has been
 awarded a \$29,959 contract for side-
 walks and a \$15,000 contract for storm
 sewers and bridges.

ROAD CONSTRUCTION — Cost not
 stated. Salinas, Monterey Co., Cal. En-
 gineer, County Surveyor Cozzens, Sa-
 linas. Owners, Monterey County. At
 the last meeting of the Supervisors
 County Surveyor II. L. Cozzens' plans
 and specifications for the improvement
 of the Carmel Valley road, from the
 Laurelos ranch house to Tassajara
 Hot Springs, were adopted and ap-
 proved by the Board. Bids for this
 work will be opened on October 11th.

Contracts Awarded.

ROAD IMPROVEMENT—\$49,497. San
 Jose, Santa Clara Co., Cal. Engineer,
 County Surveyor, San Jose. Owners,
 Santa Clara County. Contractor, John
 W McDonald, San Jose. Contract price,
 \$49,497.

ROAD CONSTRUCTION — \$5,568.34.
 Salinas, Monterey Co., Cal. Engineer,
 County Surveyor Cozzens, Salinas.
 Owners, Monterey County. Contrac-
 tors, Granite Rock Co., Salinas. Con-
 tract price, \$5,568.34.

BRIDGE—Reinforced concrete, \$2,-
 100. Salinas, Monterey Co., Cal. En-
 gineer, County Surveyor Cozzens, Sa-
 linas. Owners, Monterey County. Con-
 tractor, Lou G. Hare, Salinas. Contract
 price, \$2,100.

BUILDING CONTRACTS

SANTA CLARA COUNTY.

FRAME BUNGALOW
 OVERLOOK FARM, Los Gatos. All
 work for frame bungalow.
 Owner.....F. K. Ainsworth, S. F.
 Architect...F. W. Q. (as recorded)
 Contractor...H. Hooper Los Gatos.
 Filed Sept. 11, '15. Dated Sept. 10, '15.
 Usual 35 days.....\$4754
 TOTAL COST, \$4754
 Bond, \$2277. Sureties, S. S. Riggs and
 C. L. Nichols. Limit, 60 days. Forfeit,
 none. Plans and specifications filed.

BRICK GARAGE
 NEAR CORNER FIRST & SAN CARLOS
 San Jose. All work for one-story
 brick garage.
 Owner.....John Twohy, T. S. and S. T.
 Montgomery, 217 S-First,
 San Jose.

Architect...Wm. Binder, Rea Bldg.,
 San Jose.
 Contractor...Z. O. Field, 113 W-Santa
 Clara, San Jose.
 Filed Sept. 22, '15. Dated Sept. 20, '15.
 Between 1st & 4th of each month 75%
 Usual 35 days.....25%
 TOTAL COST, \$10,360
 Bond, \$5180. Sureties, J. A. Chase and
 F. H. Figel. Limit, 70 days. Forfeit,
 \$1.00 per day. Plans and specifications
 filed.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

STREET IMPROVEMENT—Cost as
 follows. Richmond, Contra Costa Co.,
 Cal. Engineer, City Engineer, Rich-
 mond. Owners, City of Richmond. At
 the last meeting of the City Council
 the following action was taken on
 street and sewer improvements. An es-
 timate of the cost of the proposed con-
 struction of the sewers in the Canal
 subdivision was placed at \$11,600; for
 grading the estimate was placed at
 \$71,100; for the construction of the
 sump was placed at \$4,700, a total of
 \$87,400. This estimate does not include
 the construction profit or incidental
 expenses. The improvement of Bay
 avenue from Potrero to the Southern
 Pacific was postponed indefinitely.
 Plans and specifications for the im-
 provement of the Canal subdivision
 were ordered prepared.

HOTEL AND STORES—3 story and
 base, brick and steel. Cost not stated.
 Petaluma, Sonoma Co., Cal. Architect's
 name not given. Owners, Matthies

Estate. Location, Main street. Will
 contain several stores besides hotel
 office and lobby. Upper floors designed
 for 60 rooms and several baths. In-
 terior finish pine. Steam heat, oil
 burning furnace and hot water sys-
 tem. Patent store fronts, marble and
 tile bases. Tile baths. Exterior faced
 with pressed brick. Plans complete
 and in the hands of H. C. Matthies, 180
 Jessie street, S. F. Work to be done by
 Day Labor.

HOTEL—2 story and base, frame,
 \$10,000. Martinez, Contra Costa Co.,
 Cal. Architect's name not given. Own-
 er, Mrs. Hooker, Crockett. Location,
 Alhambra Heights. Will contain 14
 rooms, dining room and kitchen. In-
 terior finish pine. Some hardwood
 floors. Furnace heat and open fire
 place. Mantel brick. Exterior cov-
 ered with rustic and cement plaster.
 Plans complete and contract to be
 awarded at once.

Contracts Awarded.

ROAD IMPROVEMENT—Cost as fol-
 lows. San Rafael, Marin Co., Cal. En-
 gineer, County Surveyor, San Rafael.
 Owners, Marin County. Contractor, S.
 P. Brownlee, County Road, Kentfield.
 Contract for new road in Chileno Val-
 ley, \$1,750, and graveling Olema road,
 \$4,600.

PAVING—Concrete, \$1,678.35. Dan-
 ville, Contra Costa Co., Cal. Engineer,
 Town Engineer, Danville. Owners,
 Town of Danville. Contractor, A. Rod-
 rigues, Danville. Contract price, \$1,-
 678.35.

STREET IMPROVEMENT—Cost not
 stated. Richmond, Contra Costa Co.,
 Cal. Engineer, City Engineer, Rich-
 mond. Owners, City of Richmond.
 Contractor, G. W. Cushing, 420 Macdon-
 ald avenue, Richmond. Contract price
 not stated.

PAVING, GRADING, SEWERS AND
 SIDEWALKS—Cost not stated. Marti-
 nez, Contra Costa Co., Cal. Engineer's
 name not given. Owners, Martinez
 Land Co. Contractor, W. H. O'Brien,
 Martinez. Contract price not stated.

BUILDING CONTRACTS.

CONTRA COSTA COUNTY.

DWELLING

PIECE OF LAND OF HAPPY VALLEY
 Road near Lafayette. All work for
 frame dwelling with cement founda-
 tion.

Owner.....A. T. Graff, Lafayette, Cal.
 Architect...None.
 Contractor...John M. Lundholm, 1717
 Wood, Alameda.

Filed Sept. 22, '15. Dated Sept. 21, '15.
 Building up and enclosed.....\$975
 Brown coated 975
 Building accepted 975
 Usual 35 days..... 975
 TOTAL COST, \$3900

Bond, none. Limit, within 90 days.
 Forfeit, none. Plans and specifications
 filed.

DWELLING

N 100 FEET LOT NO. 10 BLK 62 as
 shown on Official Map of City of
 Pittsburgh. All work for one-story
 five-room dwelling.

Owner.....C. A. Hopper & Co., 274 Los
 Medanos, Pittsburgh.
 Architect...G. E. Ashcraft, Balboa
 Bldg., San Francisco.

tractor, G. H. & Max Field, Third near G St, Antioch, Cal.
 1 Sept. 21, '15. Dated Sept. 15, '15.
 Floor joists laid.....\$588
 Roof completed..... 588
 Roof completed and accepted..... 588
 Usual 35 days..... 588
 TOTAL COST, \$2352
 1, \$1176. Sureties, J. Weigel and W. Cuspina. Limit, within 60 days. Forfeit, none. Plans and specifications filed.

HOME DWELLING
 3 BLK 100 Creed's Addition to City of Pittsburg. All work for one-story home dwelling.

Contractor.....C. A. Hooper & Co., 274 Los Medanos, Pittsburg.

Architect.....None.
 Contractor.....Geo. W. Nickell & Robt. H. Old, Pittsburg, Cal.

Dated Sept. 21, '15. Dated Sept. 18, '15.
 Floor joists laid.....\$519 75
 Roof completed..... 519 75
 Roof completed and accepted..... 519 75
 Usual 35 days..... 519 75
 TOTAL COST, \$2079 00
 Bond, \$1039.50. Sureties, M. W. Dunnigan and B. P. Lantue. Limit, within 90 days. Forfeit, none. Plans and specifications filed.

TELLING
 100 FEET LOT 10 BLK 62, as Lots were designated on Official Map of City of Pittsburg. All work for one-story live-room dwelling.

Contractor.....C. A. Hooper & Co., 274 Los Medanos, Pittsburg.
 Architect.....G. B. Ashcroft, Balboa Bldg., San Francisco.

Contractor.....G. H. & Max Field, Antioch
 Dated Sept. 21, '15. Dated Sept. 15, '15.
 Floor joists laid.....\$588
 Roof completed..... 588
 Roof completed and accepted..... 588
 Usual 35 days..... 588
 TOTAL COST, \$2352

Bond, \$1176. Sureties, J. Weigel and W. Cuspina. Limit, within 60 days. Forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS.

MARIN COUNTY.

BUNGALOW
 AN RAFAEL. All work for bungalow. Owner.....H. Reynolds.
 Architect.....None.

Contractor.....L. L. Jessup.
 Dated Sept. 27, '15. Dated Aug. 25, '15.
 Frame up.....\$500
 When plastered..... 500
 When completed..... 500
 Usual 35 days..... 500
 TOTAL COST, \$1850

Bond, limit, forfeit, none. Plans and specifications, none.

COMPLETION NOTICES

SONOMA COUNTY.

RECORDED ACCEPTED
 Sept. 18, 1915—CITY OF SONOMA.
 Pohn F Plcetti to W J Russell and E H Cutter.....Sept. 17, 1915

LIENS FILED.

SONOMA COUNTY.

RECORDED AMOUNT
 Sept. 20, 1915—FETTERS SPRINGS.
 H B Boring to Michael Bazrlik..\$80

LIENS FILED.

MARIN COUNTY.

RECORDED AMOUNT
 Sept. 27, 1915—MILL VALLEY. Louis Lambretti vs C L Mehrten....\$206.12

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

IRRIGATION WORK—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, F. C. Herrmann, Modesto. Owners, Modesto Irrigation District. At a recent meeting of the Modesto Irrigation District, plans and specifications for enlargement of the main canal of the Modesto Irrigation District between the Upper Dominici and Raiden fills, for enlargement of the canal below the intake at the La Grange dam, and for construction of five reinforced concrete drops on the lower part of the canal were adopted, and the secretary was authorized to advertise for bids to be opened October 16th. The first two pieces of work are for excavation of earth, hardpan and rock. Further information together with plans for the proposed work may be had from the engineer at Modesto.

BRIDGES—Reinforced concrete and steel. Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Bids will be opened on October 12 for the construction of four reinforced concrete bridges located as follows: Over Lower Lateral No. 2, about one and one-quarter miles south of Town of Ceres; over Lateral No. 4 on the Crows Landing road, about nine and one-half miles south of Modesto; over the Elmdale ditch near the corner common to sections 29, 30, 31 and 32, T. 2 S., R. 11 E., about two miles north of the town of Denair, and over a dry creek near the northwest corner of section 5, T. 3 S., R. 10 E., about one and one-half miles north and one and one-quarter miles east of the town of Claua.

BRIDGES AND CULVERTS—Reinforced concrete. Cost not stated. Hanford, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. Bids will soon be called for by the County Supervisors for the construction of bridges and culverts on the unit of the highway running from the east terminus of Seventh street south eight miles. Specifications for this portion of the highway are nearing completion.

JAIL LIGHTING FIXTURES—Cost not stated. Bakersfield, Kern Co., Cal. Architect, Orville L. Clark, Brower Bldg., Bakersfield. Owners, Kern County. Bids will be opened on October 9th for furnishing and installing lighting fixtures in the new County Jail Building. Plans and specifications can be secured from the architect.

LIBRARY—1 story and base, brick or concrete, \$10,000. Dinuba, Tulare Co., Cal. Architects, Bowen & Davis, McKenzie Bldg., Fresno. Owners, Town of Dinuba. Will contain reading room, librarian's office and stack rooms. Interior finish pine. Central heating system. Maple floor. Metal book stacks. Exterior faced with pressed brick or cement plaster. Plans being revised.

LIBRARY—1 story and base, brick or concrete, \$10,000. Exeter, Tulare Co., Cal. Architect, A. Merrill Bowser, Fresno. Owners, Town of Exeter. Will contain one reading room, assembly hall, office and stack room. Interior finish pine with maple floor. Central heating system and vacuum cleaning. Metal book stacks. Exterior faced with cement plaster or pressed brick. Plans being prepared.

SEWER CONSTRUCTION—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. Bids will be opened on October 11th by the City Council for the construction of three separate sewer jobs. The work requires 6, 8 and 10 inch stone pipe. Plans can be secured from the City Clerk.

BRIDGES—Reinforced concrete. Cost not stated. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. Tulare County officials are planning to bridge Cross Creek before the state highway construction crew reaches that point. While four or five bridges are required only two of them will be of concrete, the rest being corrugated pipes. These will be of 24-inch diameter and will be ample to carry off the flood waters.

BRIDGE—Reinforced concrete. Cost not stated. Madera, Madera Co., Cal. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, City of Madera. Bids will be opened on October 13th for the construction of a 270-foot bridge over the Fresno River at D street. Plans can be secured from the City Engineer at Madera on deposit of \$5.

RESIDENCES—2, 1 story, frame. Cost as follows. Fresno, Fresno Co., Cal. The following Day Labor jobs are reported as about to be started in Fresno: G. E. Powell, 3159 Iowa street, 1 story, frame dwelling, \$1,600 and F. C. Wilson, 2321 Hills street, 1 story frame dwelling, \$1,700.

BUILDING CONTRACTS.

FRESNO COUNTY.

BAKERY

NO. 737 G ST., Fresno. Bakery. Owner.....Mrs. M. Ballard.
 Architect.....None.
 Contractor.....J. C. Templeton, 327 Howard St., Fresno. COST, \$3500

DWELLING

LOT 14 BLK 21, Buena Vista Add'n., Fresno. Dwelling.
 Owner.....F. C. Wilson, 2321 Hills St., Fresno.
 Architect.....None.
 Day's work. COST, \$1700

Professional Directory

George Nelson, C. E.

Engineering	560 Mission St.
Financing	San Francisco, Cal.
Developments	503 Grant Bldg.
Construction	Los Angeles, Cal.

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Attorney-at-Law

Phone Gerfield 2856

Phelan Bldg. San Francisco

DWELLING
LOTS 15 AND 16 BLK 4, Grand Ave.
Park, Fresno. Dwelling.
Owner.....J. T. Johnson.
Architect...None.
Contractor...H. K. Blose.

COST, \$1500

DWELLING
NO. 3208 IOWA AVE., Fresno. Dwelling.
Owner.....G. E. Powell, 3159 Iowa Ave., Fresno.
Architect...None.
Day's work. COST, \$1500

SCHOOL
WEST PARK GRAMMAR SCHOOL
District, Fresno. All work for concrete, brick and frame school bldg.
Owner.....West Park Grammar School District.
Architect...E. J. Kump, 227 Rowell Bldg., Fresno.
Contractor...Thos. Pinner.
Filed Sept. 29, '15. Dated Sept. 27, '15.
On 1st of each month..... 75%
Usual 35 days.....4..... 25%
TOTAL COST, \$10,957
Bond, \$6600. Surety, New England Casualty Co. Limit, 90 days. Forfeit, none. Plans and specifications filed.

COMPLETION NOTICES.

FRESNO COUNTY.

RECORDED ACCEPTED
Sept. 29, 1915—LOTS 28, 29 E ½ LOT

30, College Add'n, Fresno. A E and Sarah M Pickford to Norris & Wallace.....Sept. 25, 1915

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA.

STREET PAVING—\$2,290.45. Stockton, San Joaquin Co., Cal. Engineer. City Engineer, Stockton. Owners, City of Stockton. At last week's meeting of the City Council specifications for the improvement of a portion of the waterfront spaces on the south side of Stockton Channel from the east curb line of Van Buren street to the east line of Lincoln street were adopted. Asphalt macadam is to be used in paving. The City Engineer's estimate is \$2,290.45. Bids on this work will be called for within the next few days.

ROAD WORK—Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Bids will be opened on October 15th at 10 a. m. for graveling of portions of Belle Mill road and Sherwood Boulevard.

RESIDENCE—1½ story and base, frame, \$4,500. Sacramento, Cal. Architect, none. Owner, A. W. Norris, 409 21st, Sacramento. Location, 3012 G street. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors and open fire places. Furnace heat. Brick mantels. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans

complete and work to be done by Day Labor.

APARTMENTS AND OFFICES — 1 story and base, brick. Cost not stated. Stockton, San Joaquin Co., Cal. Architect, Franklin Warner, San Joaquin Bldg., Stockton. Owner, Henry B. Budd. Location, east Channel between Sutter and San Joaquin streets, covering an area of 50½ feet by 75 feet. Will contain two stores and 12 suites of three and four rooms. Interior finish pine and elm panels. Some hardwood floors. Wall heds, steam heat hot water supply and oil burning furnace. Exterior faced with pressed brick. Plans complete and figures being taken.

CULVERT — Reinforced concrete. Cost not stated. Beatrice, Humboldt Co., Cal. Engineer, County Surveyor. Eureka. Owners, Humboldt County. Bids will be opened on October 13th for the construction of a reinforced concrete culvert in Road District No. 3. Plans and specifications can be secured from the County Surveyor.

TRESTLE—Timber. Cost not stated. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Bids will be opened on October 13th for the construction of a timber trestle in Road District No. 3. Plans and specifications can be secured from the County Surveyor.

PASSENGER STATIONS—4, 1 story frame. Cost not stated. Mendocino and Humboldt Counties, Cal. Engineer, Engineering Department Northwestern Pacific Co., Phelan Bldg., S. F.

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owners, Northwestern Pacific Railroad
Co. Plans are complete and figures
have been taken for nine small frame
passenger stations to be erected along
the line of the Northwestern Pacific
in the two counties above mentioned.
Awards of contract will be made
shortly.

RECLAMATION WORK LEVEES,
ETC.—\$600,000. Colusa, Colusa Co.,
Cal. Engineer's name not given. Own-
ers, Reclamation Districts 108, 479 and
87. Practically \$580,000 will be spent
on the west side levee district next
season to strengthen the Sacramento
river levees from Colusa to Knights
landing, a distance of 50 miles. The
west side district includes 107,000
acres, the greater part of which com-
prises Reclamation Districts 108, 479
and 87. The newly elected commis-
sioners of the district, J. W. Brown-

ing, E. L. Dow, J. H. Ralsdon, Alfred
Davis and W. P. Dwyer, held a meet-
ing in Sacramento recently and took
the preliminary steps towards the con-
struction work, and instructed the en-
gineers to prepare plans for the levee
for submission to the State Reclama-
tion Board for approval.

CHURCH—1 story and base, frame,
\$12,000. Jamestown, Tuolumne Co., Cal.
Architect, John J. Foley, 46 Kearny
street, S. F. Owners, Roman Catholic
Church. Design, Spanish colonial. Will
contain main auditorium seating 250
people and Sunday school rooms. In-
terior finished in pine with some or-
namental plaster. Art glass windows.
Exterior covered with cement plaster
on metal lath. Plans complete and
figures being taken.

Contracts Awarded

**STORE AND OFFICE ALTERATION
AND ADDITION**—Brick and steel,
\$20,000. Stockton, San Joaquin Co.,
Cal. Architect, Joseph Losekann, San
Joaquin Bldg., Stockton. Owner, R. E.
Wilhoit. Contractor, Thomas Lewis,
1320 South San Joaquin, Stockton. Con-
tract price, \$20,000.

BUILDING CONTRACTS

SACRAMENTO COUNTY.

REPAIR RESIDENCE

NO. 2206 L ST., on E ½ of N ½ Lot 1,
1, M, 22nd and 23rd Sts., Sacramento.
Repair residence.

Owner.....G. F. Krause, 2206 L St.,
Sacramento.

Architect...None.
Contractor...W. P. Cippa, 314 21st St.,
Sacramento.

COST, \$950

FRAME RESIDENCE

NO. 520 TWENTY-FOURTH ST., on S
½ of N ½ Lot 5 Blk E, F, 23rd and
24th Sts., Sacramento. One and one-
half-story six-room and bath frame
residence.

Owner.....E. F. Stanley, 2130 P St.,
Sacramento.

Architect...None.
Contractor...W. R. Saunders, 2810 I St.,
Sacramento.

COST, \$2400

STORES

E 40 FEET OF W 70 FEET OF LOT 7,
K, L, 6th and 9th Sts., Sacramento.
Two store building.

Owner.....J. H. Schade.
Architect...None.

Contractor...W. H. Coggershall.

Filed Sept. 21, '15. Dated Sept. 18, '15.
TOTAL COST, \$3897

Bond filed.

FRAME RESIDENCE

NO. 2012 G ST., on E ½ Lot 2 Blk G, H,
30th and 31st Sts., Sacramento. One
and one-half-story 7-room frame
residence.

Owner.....A. W. Norris, 499 21st St.,
Sacramento.

Architect...None.
Day's work. COST, \$1200

FRAME RESIDENCE

NO. 3237 T ST., on Lot 17 Mier & Sowell
High School Tract, Sacramento. All
work for one and one-half-story six
room frame residence.

Owner.....C. W. Mier, 3225 T St., Sac-
ramento.

Architect...None.
Contractor...Chatterton Bros., 3126 T
St., Sacramento.

COST, \$3300

ADDITION

MONT CLAIR AVE AND F ST., on Lot
60, Reese Villa, Sacramento. Addi-
tion to residence and shed in rear.

Owner.....C. E. Reese, 4021 E St.,
Sacramento.

Architect...None.
Day's work. COST, \$950

STORAGE TANK

NO. 629 K ST., on Lot 5 Blk J, K, 7th
and 8th Sts., Sacramento. All work
for 1500 gallon oil storage tank under
sidewalk.

Owner.....Claus & Kraus, 17th & I
Sts., Sacramento.

Architect...None.
Contractor...Latourette-Fical Co., 35th
and Sacramento Aves, Sac-
ramento.

COST, \$650

RESHINGLE RESIDENCE

NO. 509 N ST., on W ½ Lot 6 and Lot 7
Blk M, N, 5th & 6th Sts., Sacramento.
Reshingle roof of residence.

Owner.....Henry Fisher Jr., West
Curtis Oaks, Sacramento.

Architect...None.
Contractor...F. Gill, 1518 11th St., Sac-
ramento.

COST, \$400

REPAIRS

NO. 1009 FRONT ST., Lot 1 Blk J, K,
1st and 2nd Sts., Sacramento. Repair
front wall of brick building.

Owner.....J. M. Blair & Co., (Lessee),
1009 Front, Sacramento.

Architect...None.

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Contractor..Wm. Murell, 527 Oschner Bldg., Sacramento.

COST, \$400

ALTERATIONS

NO. 625 K ST., Lot 5 Bk J, K, 7th and 8th Sts., Sacramento. Re-arrange interior, making 7 new rooms and bath rooms and install new heating plant in three-story brick hotel and store building.

Owner.....Claud & Kraus, 1700 I St., Sacramento.

Architect...None.

Contractor..Siller Bros., 1614 13th St., Sacramento.

COST, \$3725

GARAGE

W 1 OF LOT 3, H, L, 16th and 17th Sts., Sacramento. One-story frame private garage.

Owner.....Thomas O'Connell, 1618 H St., Sacramento.

Architect...None.

Contractor..W. P. Cippa, 314 21st St., Sacramento.

COST, \$450

COMPLETION NOTICES

SACRAMENTO COUNTY.

RECORDED ACCEPTED

Sept. 24, 1915—LOT 69, FIRST AND Second Aves. West Curtis Oaks, Sacramento. George L. Baxter to W J Montgomery, T E Cain, John-Manville Co, Thos Scollard & Co, and H J Sniley & Son..Sept. 10, 1915
Sept. 29, 1915—NOS. 1027-1029 K ST., bet 10th and 11th Sts., Sacramento. Cherry's Inc to L G Barton and L E Hite.....Sept. 17, 1915

LIENS FILED.

SACRAMENTO COUNTY.

RECORDED AMOUNT

Sept. 28, 1915—W 30 FEET OF S ½ Lot 7, M, N, 2nd and 3rd Sts., Sacramento. W F Knox vs James A Laidlow, Karn Singh and F W Ludwig\$73.26

NOTICE OF NON-RESPONSIBILITY.

SACRAMENTO COUNTY.

RECORDED ACCEPTED

Sept. 28, 1915—N 40 FEET OF E ½ Lot 1 and N 40 feet of W 25 of W ½ Lot 6, K, L, 14th and 15th Sts., Sacramento. Minnie E Dean as to improvements on leased property...

LOS ANGELES AND SOUTHERN CALIFORNIA.

SCHOOL—1 and 2 story and base, hollow tile or reinforced concrete. Cost not stated. Calexico, Imperial Co., Cal. Architects, Allison & Allison, Hibernian Bldg., L. A. Owners, Calexico School District. Bids will be received on October 8th for the general construction with three alternates, for the plumbing and sewerage and for the heating and ventilating of Grammar School No. 1. Plans and specifications can be secured from the architect.

BANK AND OFFICES—1 story and base. Class A construction. Cost not

stated. Los Angeles, Cal. Architect, John Parkinson, Security Bldg., L. A. Owners, Security National Bank. Location Spring street, adjoining Security Building. First floor arranged for bank and upper floors for offices. Interior finish pine and hardwoods with marble bases and wainscoting. Hollow tile interior partitions, concrete floors, metal window sash and frames. Ornamental plaster and bronze in bank. Steam heat and elevator service. Exterior faced with granite. Plans complete.

HOTEL ADDITION—3 story, frame. Cost not stated. Pasadena, Los Angeles Co., Cal. Architect, Myron Hunt, Hibernian Bldg., L. A. Owners, Maryland Hotel Co. Will cover an area of 44 by 130 feet and contain 40 rooms and 23 baths. Interior finish pine. Bath rooms finished in tile. Steam heat, hot water system and vacuum cleaning. Exterior covered with cement plaster on metal lath. Plans being figured.

HOSPITAL—2 and 3 story and base, brick. Cost not stated. San Pedro, Los Angeles Co., Cal. Architect, Charles F. Durr Co., 523 South Beacon street, San Pedro. Owners, Sisters of Mercy. Will cover an area of 49 by 80 feet and contain wards for 30 patients, two operating rooms and baths. Interior finish pine with hardwood and tile floors and white enamel. Steam heat, hospital plumbing and hot water system. Vacuum cleaning. Exterior faced with cement plaster. Clay tile roof. Plans complete and figures being taken.

RESIDENCE — 2 story and base, frame. Cost not stated. Hollywood, Los Angeles Co., Cal. Architect, Arthur S. Henieman, 831 San Fernando street, L. A. Owner, Robert Fuller. Location, Camino Palmerno and Franklin avenue. Will contain 14 rooms, three baths and sleeping porch. Separate garage in rear. Interior finish, pine, white enamel and hardwood. Hardwood floors, furnace heat, hot water circulating system and vacuum cleaning. Bath rooms finished in tile. Tile and brick mantels. Exterior covered with cement plaster. Plans being prepared.

SCHOOLS—3, 1 and 2 story, brick, \$135,000. El Centro, Imperial Co., Cal. Architect, S. B. Zimmer, El Centro. Owners, Town of El Centro. Bonds are to be voted at once for three new buildings and for extensive alterations and additions to the old schools. Further mention will be made of the work when plans are prepared.

STORES AND OFFICES—2 story and base, brick. Cost not stated. Calexico, Imperial Co., Cal. Architect, Ralph Swearingen, Calexico. Owners, Imperial Valley Hardware Co. Will cover an area of 112 by 152 feet. First floor will be arranged for a large store and upper floor will contain 30 modern offices. Interior finish pine and hardwood. Modern plumbing. Patent store fronts. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

BRIDGE PAVING—\$1,150. Ventura, Ventura Co., Cal. Engineer, City Engineer, Ventura. Owners, City of Ventura. Contractor, Conrad Scherrer, L. A. Contract price, \$1,150.

PORTLAND AND OREGON.

THEATRE—2 story and base, brick, \$25,000. Springfield, Ore. Architect, D. Yensil, Eugene. Owner, J. A. Sevey. Will cover an area of 40 by 11 feet. Interior finish pine and ornamental plaster. Steam heat and special electric work. Exterior faced with pressed brick. Plans being prepared and figures to be called for shortly.

LODGE HALL—2 story and base, brick, \$15,000. Heppner, Ore. Architect, C. C. Robbins, Ainsworth Bldg., Portland. Owners, Heppner Mason Temple Association. Will cover an area of 40 by 100 feet. First floor arranged for stores. Upper floor will contain lodge rooms and offices. Interior finish pine and hardwood with hardwood floors. Central heating system. Patent store fronts. Exterior faced with pressed brick. Plans complete and figures being taken.

Contracts Awarded.

GRAIN ELEVATOR — Reinforced concrete, \$22,668. Astoria, Ore. Engineer, Port of Astoria Commission, Astoria. Owners, City of Astoria. Contractor, H. E. Doering, Portland. Contract price, \$22,668.

SEATTLE AND WASHINGTON

HOME ECONOMICS—2 story and base, reinforced concrete, \$150,000. Seattle, Wash. Architects, Charles Bell and Carl Gould, Denny Bldg., Seattle. Owner, University of Washington. Although plans and specifications are not complete the date for opening bids on the proposed two-story fireproof home economics building for the University of Washington, has been set for October 29th.

EXHIBIT OF AMERICAN MANUFACTURES IN SALVADOR.

[Charge d'Affaires Henry F. Tenar, American Legation, San Salvador, July 29.]

This office has received a letter from the publisher of the Diario del Salvador, which is one of the most important newspapers in Central America and issued by a company incorporated in the State of New York. The letter outlines briefly a plan for the establishment in the capital city of San Salvador of an "American bazaar," the primary purpose of which would be to constitute a permanent exhibition of samples of American manufactured goods, for which the writer believes that there should be a good demand in the country.

With regard to the project in general, the writer says:

"My company can, through its paper, render valuable service to the interests of the manufacturers who decide to furnish me with samples of the products, and who give me, at the same time, instructions with regard to conditions and terms of sale, and a other information which would be required by merchants, manufacturers and farmers desiring to obtain goods which are needed in our market, now even more than ever before on account of the almost complete interruption of business relations with Europe. I am now giving you the plan only

outline, but you will easily appreciate the many advantages which it offers to the manufacturing interests of the United States."

As a means of carrying out his plan the writer desires to get in touch with manufacturing houses in this country which may be interested. He was himself at the time of writing (the end of July) preparing to leave for a trip to New York, Philadelphia, and Washington, his time to be devoted to this phase of the matter.

Many Floats For Builders' Week.

October 21st Will Be Parade Day and All Leading Firms are Preparing to Enter Beautiful Floats.

The work of the Parade Committee for American Builders' Week, October 18-23 has crystallized rapidly during the last ten days. Already the progress shown promises that the occasion will be the most spectacular from an educational point of view that has ever been formed and will make even the builders themselves marvel.

Thursday will be Parade Day and will be the peak point of the week's festivities. It will be American Builders' Day at the Exposition. All those who are interested in construction or in building materials and furnishings are invited to participate. Already fully three score floats have been designed and are under construction.

The parade has been divided into 26 divisions, each division being led by a Marshall and his aids. Many divisions are arranging for their own bands.

It is the purpose of Chairman Brandon and his parade committee to show the progress of a modern, up-to-date city like San Francisco. The evolution of the Builders' art will be exemplified, beginning with primitive methods and finishing with the most modern methods and features. It will all be interesting, instructive and impressive.

What Some of the Floats Will Be.

A mammoth log symbolizing the giant tree industry of California and its timber branches.

The Hoo Hoo Brotherhood will probably indulge in an enormous Black Cat high as the trolley wires, directed and guided by the Grand Snark of the Universe.

The largest brick that ever came to any city will be a contribution from the Brick Manufacturers.

O. C. Sorsli, the eminent artist and sculptor and dealer in garden furniture, will bring forth from his famous studios rare works of art to decorate a float or floats for this parade.

The Baer Furniture Company will enter two elegant floats.

Henry Cowell & Co. will exhibit the largest sack of cement ever drawn by a four horse team.

Woods-Huddart & Co. have their corps of engineers working on two or more floats showing the massive contour of structural iron beams and columns.

W. P. Fuller & Co. will enter two floats showing how their best paints are made.

Mr. Lynch has designed a novel float

showing the old and the new methods in lath construction.

Marshall & Stearns will exemplify the "Wall Bed" feature of modern house and apartment construction.

The Montague forces will show us something new and interesting in a float of "Mantels and Tiles."

"The Architect and Engineer" has promised "Something Very Special."

Mr. Elbert E. Mitchell, representing Insurance, has promised a float that will cover every feature of the Builders' industry.

W. H. Malott will have a float that will show how the modern house is covered by the best paper roofing process.

George Chambers is working out a float for Gladding McBean & Co. that will be a picture in Pressed Brick and Terra Cotta.

Guido Blenio Fireproofing Company will have a float showing how building materials and furnishings are made immune to the ravages of fire.

The Guilfoyle Metal Works' float will be an exposition of their industry.

Mr. Anderson of the Pacific States Electric Company is arranging for a mammoth display by the Electrical People of this city.

Among many others who have also signified their intention of entering floats are:

The Pacific Gas & Electric Co.

The Pioneer Paper Co.

The Plumbers' Association.

Mr. Chas. E. Spencer of the California Steel Co., Marshal of the "House-smiths" Division.

James Cantley & Co.

Mr. John L. E. Firman, Secretary Masters Plumbers Ass'n. and Marshal of the Plumbers' Division.

The Firestone & Roofing Co.

The Stockton and Enamel Brick Co.

The Fordeur Cornice Works.

The J. A. Korell & Co. Sheet Metal Works.

Mr. A. H. Bergstrom.

The Paraffine Paint Co.

Dreusike of the United Sheet Metal Works.

The Pioneer Paper Co.

The Holloway Expanded Metal Lath Company.

C. F. Pratt, representing Rock, Gravel and Sand.

S. F. Lumbermens' Club.

J. P. McGilvray.

The Contracting Lathers.

Many firms that are going to enter floats are keeping secret their designs hoping to surprise the public as well as their competitors. For this reason only a few names of the many who will participate are obtainable.

Geo. L. Hutchin, the experienced Director of Parades and Pageants, is lining up the different interests as rapidly as the entrants indicate their willingness to participate. He is furnishing free designs and suggestions to all those wishing such help.

COMMERCIAL ORGANIZATIONS OF THE UNITED STATES.

Facts about all sorts of organizations which bear a vital relation to the business activities of the country are presented in compact form in the directory of "Commercial Organizations of the United States," a new edition of

which has been issued by the Bureau of Foreign and Domestic Commerce. The previous volume was prepared in 1912, and all the data embraced in that publication were made to contribute toward the breadth and completeness of the new directory, which, nevertheless, has been compiled from actual returns received from various authentic sources within the reach of the bureau. Dependence was not placed entirely on the information given by trade organizations in response to circulars sent out from Washington, but valuable assistance was afforded by the Post Office Department, through the postmasters, who reported upon commercial organizations in their respective sections.

The result is the most complete list of organizations directly related to the commercial life of the country that has ever been issued. The first edition was widely circulated in the United States and copies were also in use in foreign countries in all parts of the world. With a complete revision, the book is expected to be still more valuable to business men and to those who wish to reach business men in the larger groups that are here represented.

In the compilation the organizations have been divided into three classes—interstate, national, and international in one; State and territorial in the second; strictly local associations in the third; the others are grouped according to the States in which they are located.

In addition to data relating to dues, income, number of members, and date of annual meeting, the field of service and special activities of the respective local organizations are shown as far as practicable by the use of symbols.

Copies of the publication may be obtained at 15 cents each from the Superintendent of Documents, Washington, D. C., or from the branch offices of the Bureau of Foreign and Domestic Commerce.

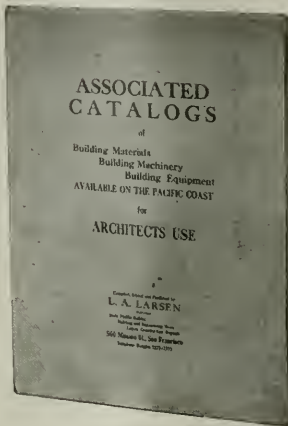
A NEW ALUMINUM SOLDER.

Under the trade name Kaylon there is being introduced in Great Britain a new solder for aluminium, which is reported to have given excellent satisfaction. When soldering two aluminium surfaces with Kaylon, it is necessary to scrape away gently the thin oxidized skin on the outside of the metal, either with a knife or a fine rasp. The metal is then warmed in a flame, and the stick of Kaylon gently rubbed over the spot to be soldered. The metal should just be warm enough to melt the stick, but not hot enough to render it liquid. After the Kaylon is rubbed on, the surface is brushed with a stiff wire brush, making the solder combine well with the metal surface. The two pieces of metal are then held together and heat is applied until the solder forms a connecting skin. The chief advantage of Kaylon is said to be its permanency, due to its absolute indifference to influences of the atmosphere. The soldered joint will not oxidize, as nearly every other aluminium solder does. Its application in the automobile industry, because of the growing use of aluminium, renders this method of soldering of special interest to Americans. Scientific American.

Associated Catalogues.



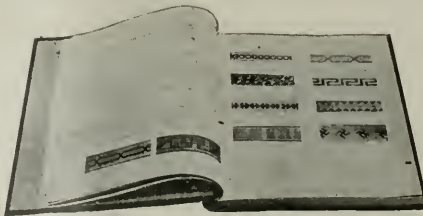
Here is where the Architect usually files the circulars, catalogues, announcements, etc., that come to his office. He can't take care of them. There are too many of them.



the Remedy:

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560 Mission St.

San Francisco Cal., October 13, 1915

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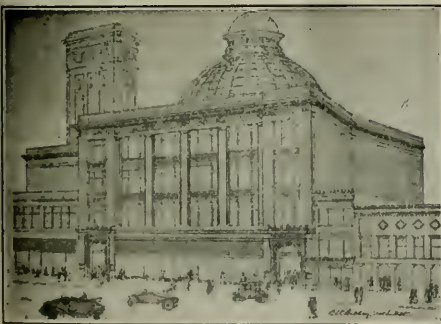
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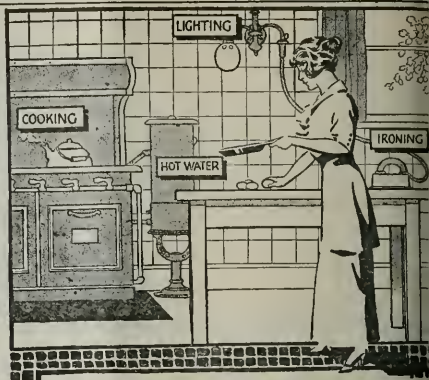
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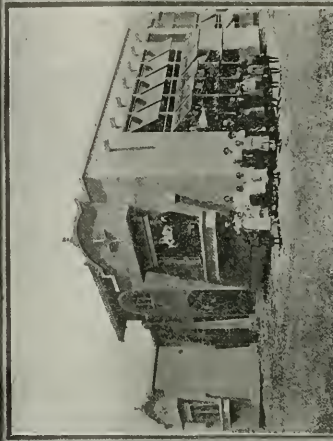
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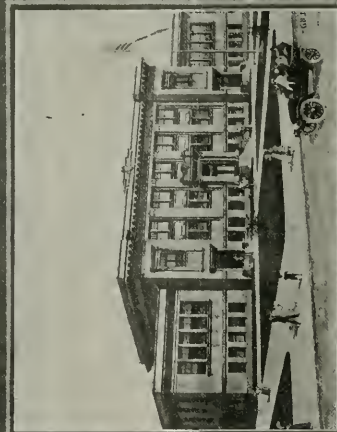
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Issued Weekly, \$3.00 per year

San Francisco, October 13, 1915

Fifteenth Year, No 41

International Engineering Congress, 1915.

W. A. CATTELL, Mem. Am. Soc. C. E., Secretary.

OUTLINE HISTORY OF THE ORGANIZATION AND DEVELOPMENT OF THE INTERNATIONAL CONGRESS, 1915.

The movement which resulted in the International Engineering Congress, 1915, began to take definite shape at a meeting of representatives of the American Societies of Civil and Mechanical Engineers, which was held on October 24, 1911.

There were present at this meeting Messrs. A. L. Adams, C. Derleth, Jr., G. W. Dickie, C. E. Grunsky, E. C. Jones and T. W. Ransom. Mr. Derleth acted as chairman and Mr. Ransom as secretary.

At this meeting it was determined that an Engineering Congress should be held in San Francisco in 1915, and invitations were extended to all Engineering and Technical Societies represented by local organizations in San Francisco to be represented by delegates at a meeting to be held November 2, 1911 to discuss "ways and means" for holding an Engineering Congress.

At this meeting of November 2nd, eight Engineering and Technical Societies were represented as follows:

- (1) Am. Soc. C. E. by C. Derleth, Jr., and C. E. Grunsky.
- (2) Am. Soc. Mec. Eng. by G. W. Dickie, E. C. Jones and T. W. Ransom.
- (3) Pacific Coast Gas Ass'n. by E. C. Jones.
- (4) Am. Inst. Elec. Engrs. by H. A. Lardner.
- (5) Mining and Metallurgy Soc. of Am. by F. W. Bradley and S. B. Christy.
- (6) Am. Inst. Min. Eng. by W. W. Ralston and E. T. Blake.
- (7) Am. Chemical Soc. by F. T. Green and B. S. Drake.
- (8) Tech. Soc. of the Pac. Coast by M. Manson and O. von Geldern.

At this meeting a resolution was adopted that each society should send three delegates to a conference to be held on January 15, 1912, for the purpose of formulating plans for holding an International Engineering Congress in conjunction with the Panama-Pacific Exposition in San Francisco during the year 1915.

At the conference of January 15th, the various societies were represented by the following delegates:

American Society of Civil Engineers: A. D. Foote, Prof. C. D. Marx, W. D. Cattell.

American Society of Mechanical Engineers: Calvin W. Rice, Prof. W. F. Durand, E. C. Jones.

Pacific Coast Gas Association: John A. Britton, C. O. G. Miller, Frank A. Leach, Jr.

American Society for Testing Materials: Prof. C. B. Wing, Loren E. Hunt, C. F. Wieland.

Society of Naval Architects and Marine Engineers: Prof. E. F. Durand, F. W. Hibbs, Geo. W. Dickie.

Mining and Metallurgical Society of America: F. W. Bradley, C. W. Merrill, Ed. N. Benjamin.

American Institute of Mining Engineers: W. C. Ralston, Edwin Blake, Prof. S. B. Christy.

American Society of Electrical Engineers: H. A. Lardner, S. J. Lishberger, Geo. R. Murphy.

Technical Society of Pacific Coast: Otto von Geldern, Marsden Manson, Col. W. H. Heuer.

The meeting was called to order by Prof. Charles Derleth, Jr., T. W. Ransom acting as secretary. Prof. W. F. Durand was elected chairman and Mr. Otto von Geldern, secretary of the conference. Messrs Derleth, Grunsky and Ransom were elected delegates at large.

A committee was appointed, consisting of Messrs. Marks, Christy, Durand, Lardner, Dickie, Wing and Bradley, to formulate a definite plan of organization for the congress.

After several meetings of the conference, it was finally determined that the Congress should be held under the auspices of five National Engineering Societies, namely: American Society of Civil Engineers, American Institute of Mining Engineers, the American Society of Mechanical Engineers, American Institute of Electrical Engineers, The Society of Naval Architects and Marine Engineers; and that it should be managed by a committee, consisting of the presidents and secretaries of each of the five societies and four other members of each society to be appointed by their respective governing bodies.

This plan was submitted to and received the approval of each of the five

societies, and on March 6, 1913, the local members of the committee of management appointed by the five societies, met in the board room of the Mechanic's Institute for the purpose of perfecting a permanent organization.

There were present at this meeting Messrs. A. L. Adams, H. F. Bain, W. A. Cattell, W. G. Dodd, W. F. Durand, A. M. Hunt, C. D. Marks and C. R. Weymouth. The meeting was called to order by Prof. W. F. Durand, acting as chairman of the conference of January 15, 1912. Prof. Durand was elected temporary chairman, and W. A. Cattell, temporary secretary of the permanent organization. A committee was appointed consisting of Chairman W. F. Durand, ex-officio; E. H. Benjamin, W. A. Cattell, W. G. Dodd, A. M. Hunt and T. W. Ransom; the last five representing respectively the American Institute of Mining Engineers, the American Society of Civil Engineers, the Society of Naval Architects and Marine Engineers, the American Institute of Electrical Engineers and the American Society of Mechanical Engineers; to formulate a definite plan for the permanent organization of the committee, to nominate permanent officers and report at a meeting to be held on March 14, 1913.

In order to secure the support of the five national societies, it became necessary for the Engineers of the Pacific Coast to show their faith in the project of holding the Congress, by subscribing to a guarantee fund of \$10,000. This was accordingly done, and when the official representatives of the five societies assembled on March 6th, the \$10,000 had been fully subscribed and became an important factor in developing the final plans for the Congress.

At the meeting of March 14th, the plan of organization, together with the constitution and by-laws for the government of the committee which was submitted by the committee appointed at the previous meeting, was adopted. Prof. W. F. Durand was elected permanent chairman, and W. A. Cattell permanent secretary-treasurer of the committee.

Following close upon the meeting of March 14th at which the permanent or-

ganization was perfected, the actual work of preparing for the Congress was assigned to several sub-committees, and the services of Mr. E. J. Dupuy were secured as executive secretary.

The constitution of the committee of management of the Congress is as follows: Each of the five societies is represented by six members, the president and secretary of each and four other members of the committee of management, consisting of the five presidents and five secretaries in New York, constitute a committee of participation. All executive and editorial work is handled by the local members of the committee in San Francisco.

The fund guaranteeing the expenses of the Congress was underwritten as follows:

Engineers of the Pacific Coast...	\$10,000
Amer. Soc. of Civil Engineers...	3,000
Amer. Inst. of Mining Engineers	5,000
The Amer. Soc. of Mech. Eng....	5,000
Amer. Inst. of Elec. Eng.....	5,000
The Soc. of Naval Architects and Marine Engineers	2,000

The amounts underwritten by the five societies are proportionate to their respective membership.

OFFICERS OF THE CONGRESS.

Honorary President of the Congress.

Major General Geo. W. Goethals.

Honorary Vice-Presidents.

Prof. Richard Beck, Sir J. H. Biles, Otto T. Blathy, Commander Christian Blom, Prof. Andre Blondel, Dr. C. E. L. Brown, Dr. Emil A. Budde, Henry Le Chatelier, Prof. Hermann Hullmann, Wm. Henry Hunter, Prof. Luigi Luiggi, Rear Admiral Yoshihiko Mizutani, W. M. Morday, Sir Charles Parsons, Jean L. de Pulligny, V. E. Timonoff, R. P. J. Tutein-Melthenius, R. H. Vaughn, Sir Wm. Willcocks.

Committee of Management.

Dr. William F. Durand, chairman; W. A. Cattell, Secretary-Treasurer.

American Society of Civil Engineers.

Chas. D. Marx, President; Chas. Warren Hunt, Secretary; W. A. Cattell, C. Berleth, Jr., Edwin Duryea, Jr., C. E. Grunsky, members.

American Institute of Mining Engineers.

W. L. Saunders, President; Bradley Stoughton, Secretary; Newton Cleveland, R. E. Cranston, Wm. S. Noyes, Thos. D. Read, members.

American Society of Mechanical Engineers.

J. A. Brashear, President; Calvin W. Rice, Secretary; Chas. T. Hutchinson, Thos. Morrin, T. W. Ransom, C. R. Weymouth, members.

American Institute of Electrical Engineers.

John J. Carly, President; F. L. Hutchinson, Secretary; A. H. Babcock, H. A. Lardne, H. J. Ryan, J. T. Whittlesey, members.

The Society of Naval Architects and Marine Engineers.

Robert M. Thompson, President, Daniel H. Cox, Secretary; Geo. W. Dickie, W. G. Dodd, W. F. Durand, H. P. Frear, members.

E. L. Dupuy, Executive Secretary.

PERMANENT SUB-COMMITTEES.

Participation.

Chas. D. Marx, Wm. L. Saunders, J. A. Brashear, John J. Carly, Robert M. Thompson, Chas. Warren Hunt, Bradley Stoughton, Calvin W. Rice, F. L. Hutchinson, Daniel H. Cox.

Executive.

W. F. Durand, Chairman; W. A. Cattell, R. E. Cranston, Thomas Morrin, H. J. Ryan, W. G. Dodd.

Panance.

W. G. Dodd, Chairman; N. Cleaveland.

Papers.

G. W. Dickie, Chairman; Edwin Duryea, Jr., C. E. Grunsky; C. R. Weymouth, T. T. Read, J. T. Whittlesey.

Publicity.

W. A. Cattell, Chairman; C. Derleth, Jr., T. W. Ransom, W. S. Noyes.

Local Affairs.

Thomas Morrin, Chairman; A. H. Babcock, R. E. Cranston, H. P. Frear, C. T. Hutchinson, H. A. Lardner.

Spectal Sub-Committees.

Program, E. Duryea, Jr.; Reception, E. E. Bunsted; Banquet, W. W. Briggs; Excursions, A. H. Babcock; Registration, G. M. Brill; Halls and Meetings, J. S. Hess.

Ladies Entertainment.

Mrs. C. E. Grunsky, Chairman; N. A. Eckart, G. I. Gay.

SCHEDULE OF EVENTS.

Monday, September 20.

10:00 A. M. Opening general session in Main Hall of Auditorium Building, Civic Center; Hayes, Larkin and Market streets, San Francisco. 2:00 P. M. General session: The Panama Canal. In Main Hall of Auditorium. 8:30 P. M. Reception to visiting members at Palace Hotel.

Tuesday, September 21.

9:00 A. M. Mount Tamalpais trip. 10:00 A. M. and 2:00 P. M. Section sessions in various halls of the Auditorium.

Wednesday, September 22.

10:00 A. M. Section sessions in various halls of the Auditorium. 2:00 P. M. Visit to Exposition, grounds and palaces.

Thursday, September 23.

10:00 A. M. and 2:00 P. M. Section sessions in various halls of the Auditorium. 2:30 P. M. Lawn party on the grounds of the University of California.

Friday, September 24.

10:00 A. M. and 2:00 P. M. Section sessions in various halls of the Auditorium. 10:00 A. M. Automobile ride for ladies. 7:30 P. M. Banquet at Palace Hotel.

Saturday, September 25.

10:00 A. M. Closing general session in Main Hall, Auditorium. 2:00 P. M. Cruise about San Francisco Harbor.

Papers of the Congress in the order and at the time and place at which they were presented.

Monday, September 26.

10:00 A. M. Opening general session. Address of welcome by the Mayor of San Francisco. Addresses by Maj. General Goethals, Honorary President of the Congress, honorary vice-presidents and by distinguished delegates.

THE PANAMA CANAL.

2:00 P. M. Introductory paper, Maj. General G. W. Goethals, Commercial and Trade Aspects of the Panama Canal, Emory L. Johnson. The Working Force of the Panama Canal, Major

R. E. Wood. Purchase of Supplies for the Panama Canal, F. C. Boggs. Outline of Canal Zone Geology, Donald F. Macdonald. Climatology and Hydrology of the Panama Canal, F. D. Wilson, Sanal Zone, Panama.

SECTION SESSIONS.

The publication of the papers by volumes will be approximately as listed for presentation with exceptions as follows:

(1) All Panama Canal papers will be published together forming Vol. I.

(2) Due to the large amount of material in Mechanical Engineering, certain of the papers presented in this section will be published in Vol. VII with the papers on Electrical Engineering.

WATERWAYS.

Tuesday, September 21.

10:00 A. M. Dry Excavation (Panama Canal), Maj. General Geo. W. Goethals, Dredging in the Panama Canal, W. G. Comber. Construction of Gatun Locks, Dam and Spillway, Brig. General W. L. Sibert. Method of Construction of the Locks, Dams and Regulating Works in the Pacific Division of the Panama Canal, S. B. Williamson. Lock Gates, Chain Fenders and Lock Entrance Caissons, Henry Goldmark. 2:00 P. M. The General Design of the Locks, Dams and Regulating Works of the Panama Canal, Brig. General H. F. Hodges. Design of the Lock Walls and Valves of the Panama Canal, L. D. Cornish. The Design of the Spillways of the Panama Canal, E. C. Sherman. Emergency Dams above Locks of the Panama Canal, T. B. Monniche. Hydraulics of the Locking Operations of the Panama Canal, R. H. Whitehead.

Wednesday, September 22.

10:00 A. M. The Province of Waterways in the Internal Commerce and Development of a Country, Brig. General W. H. Bixby. Artificial Waterways which form Cut-offs on Marine Routes, and Waterways consisting of Natural Channels and Bodies of Water linked by Artificial Channels, constituting Inside Routes, C. S. Riche. The Waterway from the German Rhine through the Netherlands to the North Sea along the Rivers Rhine, Waal and Nieuwe Maas, C. A. Jolles, c. i. Natural Waterways in the United States, Lt. Col. W. W. Harts.

Thursday, September 23.

10:00 A. M. Flood Control, Brig. General H. M. Chittenden. Flood Control in China, Charles Davis Jameson. Works for the Improvement of Navigable Estuaries, Prof. Dr. Luigi Luiggi. River Improvement Works in Japan, Taduo Okino, Vice-President Civil Engineers Society, Japan.

IRRIGATION.

Thursday, September 23.

2:00 P. M. Irrigation Enterprise in the United States, C. E. Grunsky. Economic Advisability of Irrigation, F. H. Newell. Distribution Systems, Methods and Appliances in Irrigation, J. S. Dennis; H. B. Muckleston; Robert S. Stockton. Italian Irrigation, Prof. Luigi Luiggi. Irrigation in Lybi (Italian Colony), Prof. Luigi Luiggi.

(Continued in next issue.)

The Sewerage System of Los Angeles.

by
W. T. Knowlton, Engineer of Sewers.
(Continued from Oct. 6th.)

1909 and 1910 the annexation of Colegrove and East Hollywood sections and the consolidation of Hollywood Los Angeles added 24 square miles to Los Angeles. These last additions caused a careful study to be made of a sewerage system for this area and as a result it was planned to use the Hollywood Main Sewer as an intercepting sewer for the Colegrove and East Hollywood sections. To provide an outlet into the outfall sewer the Hollywood sewer was begun at the intersection of Arlington avenue and Exposition Boulevard, and was thence northerly and northwestward around the West Adams District, along Crenshaw Boulevard between Main street and Country Club Boulevard. This sewer was laid in a tunnel, and this portion, together with the line between this portion and the main sewer, was built of concrete pipe, 42 inches in diameter. Its upper portions were smaller in size and built of vitrified brick. The total length of the Hollywood Main Sewer was 11.7 miles, and it was completed in 1913. As a tributary to this trunk sewer was in much need of sewers its own systems have, since its completion, been laid to such an extent that on June 30, 1915, over 90 miles of sewer lines were in place, the population thus benefited amounting to 25,000.

Harbor Districts.

In 1909 the consolidation of the City of Wilmington and San Pedro Los Angeles added about 15 square miles to Los Angeles, and made it necessary that considerable time and expense be given to the matter of designing and building sewerage systems for these new sections. San Pedro had, prior to consolidation, a system of about 15 miles of vitrified pipe sewers, but Wilmington had no sewers whatever. In San Pedro it was not so difficult to plan for extensions.

Wilmington, however, the level of the ground for almost a mile north of the water front at the foot of Canal street, was not many feet above tide level. To plan for sewers was, accordingly, not so easy a matter. After much deliberation, however, it was decided to raise the level of that part of Wilmington, which was south of Canal street, by dredging from the harbor portions of the Inner Harbor, and by deepening the latter and making an average fill of 7 to 8 feet over the portion of Wilmington lying northerly of Sixth street, which comprises the main business section of Wilmington, and which extends from Canal street westward to E street. The fill was made with sediments laid down in the cross streets intersecting the main streets, so that the expense of placing these sediments was much less than it would otherwise

have been if the fill had been placed first.

When sewers were first laid in Wilmington their outlet was into the channel of the East Basin of the Inner Harbor.

As, however, the State law adopted in 1912 provided that all new sewerage systems discharging into any of the salt waters within the jurisdiction of the State shall be so planned and constructed that the discharge of sewage thereinto shall not cause any contamination or pollution that will endanger the lives or health of human beings, or become a menace to public health, it was planned that the system built for the East Wilmington section should be provided with means for sewage treatment to comply with the State law.

Wilmington Sewerage Plant.

The East Wilmington system was designed to permit of all sewage in Wilmington north of 1st street and east of G street being intercepted and conveyed to a treatment plant to be built at the foot of McFarland street. At the present time, the collection system for this East Wilmington section has been laid and the construction of the sewage treatment plant is approaching completion. As the topography of this section is flat and but a few feet above tide level, the lower end of its collection system is seven feet below mean low tide, and it consequently is necessary that the sewage be pumped before treatment.

In order to permit of the proper allowance for this pumping, a sump chamber eight feet in diameter was constructed, the inside bottom of which was placed at a depth of twelve feet below mean low tide. From the sump the sewage will be pumped up into an Imhoff tank. The design of the pumping plant was made so that a flow of 200 gallons of sewage per minute into the settling tank is to be as regular and even as possible, thereby permitting the tank to perform its work of separating solid from liquid matter in the same way that it would do if no pumping had been required. Two 2-inch vertical centrifugal pumps directly connected to 3 H. P. electric motors are to be used, and to help make a continuous flow, a controlling chamber has been placed in front of the inlet to the tank. A sludge bed, properly underdrained, has been built which will enable the plant to care for the sewage of the East Wilmington section. The effluent from the plant will discharge into the East Basin of the Inner Harbor, and measurements taken of the tidal flow have indicated that the velocity of the harbor waters at this outlet is sufficient to remove and dilute the clarified effluent to such an extent that the oxidation thus obtained will complete the process of treatment. It is thought that the sludge, when dried, can be either sold or used for filling low land.

San Pedro Sewerage Treatment.

At San Pedro plans are being considered for the construction of an intercepting sewer which will collect the sewage now being discharged along the water front at three different places, and convey it to a point adjoining the U. S. Government breakwater near Point Fermin, where it is planned to construct a number of Imhoff tanks sufficient to treat the entire sewage of San Pedro. It is then planned to discharge the effluent into the outfall sewer to be laid near and adjoining the breakwater, the outlet end of this sewer to terminate at a point in the Outer Harbor. Measurements taken of the flow of the water in the vicinity have indicated that the clarified sewage would then be taken oceanward, and the depth of the outlet would be so great that the diffusion thus obtained will be sufficient to oxidize the effluent. It is planned to dispose of the sludge in a manner similar to that above mentioned for the East Wilmington plant. It may be further mentioned that chemical and bacteriological tests of the harbor waters near the outlet of both existing and proposed sewer outfalls have been made in order to have a record of the percentage of saturation of dissolved oxygen at these points.

Present System—Length and Extent.

As a result of the construction at different times of the main sewer and outfall sewers, as have been noted in the foregoing, the City of Los Angeles on June 30, 1915, had a total length of 787.80 miles of public sewers. Of this total length it is estimated that 95 per cent is vitrified pipe, and that the 8-inch size comprises about 78 per cent of the total length of vitrified pipe. In giving these estimates it should be remembered that in addition to the city proper, which may be considered as all of the area north of Manchester avenue, excepting the recent Palms and Fernando annexations, the harbor sections of Wilmington and San Pedro, are included. These sections add about 10 miles and 22 miles respectively as their share of the total mileage above mentioned.

It is further estimated that these sewers benefit a population of about 440,000 out of a total population of about 510,000. The sewered area, however, is estimated at but 43.1 square miles out of a total of 228.1 square miles. This is explained when it is remembered that the Palms, San Fernando, and Baldwin annexations have but recently added a total area of 180.6 square miles, none of which is sewered. It is considered that with few exceptions, every street in the middle part of the city proper is now provided with sewers, also much of the city between Slauson avenue and Temple street, and between Arlington avenue and the east boundary line of the city. It is estimated that in the sewered area of the city the average population per acre

is 16, and the amount of sewage is 67 gallons per capita.

North Outfall Sewer.

It is anticipated that, due to the rapid growth of the city, Los Angeles will soon be obliged to build a new outfall sewer. This will be required to serve as an outlet for the Palms section and other areas situated north and south of this section which may be annexed within a few years. These sections cannot be sewered by gravity into the present outfall sewer, and consequently plans are being prepared for a new outfall sewer, which from its location has been called the North Outfall Sewer. It is intended that the size, elevation and capacity of the North Outfall Sewer shall be sufficient to allow the discharge of a certain amount of sewage from the present outfall sewer, thereby enabling the latter to be of sufficient capacity for many years to come. In this connection it may be mentioned that a gauging station was installed over four years ago on the line of the present outfall sewer which automatically registers the flow of sewage, and thereby enables the city to have an estimate of how soon the increase of flow will require a diversion of some of the sewage from the outfall sewer now in use.

Hyperion.

The disposal of the sewage at Hyperion from the outfall sewer is a matter that has caused more or less comment at different times during the past three years. The discharge of crude sewage into the ocean at this place has been clearly recognized as not a desirable condition. The average daily discharge in 1910 was about 15 million gallons, and at the present time this discharge has doubled in amount. Preliminary studies were made in 1912 for the treatment of this sewage, and estimates of cost for the installation of a plant which would eliminate the discharge of crude sewage into the ocean, were prepared in the spring of 1913, in order that if feasible, construction work might later be started. Owing to the lack of funds, however, construction of a sewage treatment plant has not been made possible thus far, although at the present time it seems as though a bond issue for this work may be submitted to the people for their vote before another year has gone by.

Maintenance.

The sewerage system of Los Angeles having always been planned to care for sanitary sewage only, storm water being prohibited by ordinance, the main expense in the maintenance of the system is for the water used in flushing. There are today in use about 2,800 flush tanks and about 630 flushing manholes, the latter being filled about twice a month by the Maintenance Department, consisting of eight men. The average cost of the water used for flushing one mile of sewer per day is 11 cents. It is estimated that there are about two gallons of water used per capita per day, the total amount of water for flushing sewers being between 2 and 3 per cent of the total flow.

Occasionally stoppages occur in the sewers, but the amount of damage caused thereby has been slight. The entire system is regularly inspected.

As a rule the sewers are built on the

center line of the streets, the line being offset where railroad tracks or other structures interfere. In the residential district the depth varies from 7 to 10 feet, but in the business sections the sewers are from 10 to 25 feet in depth. Single strength vitrified clay pipe is used for sizes between 6 inches and 16 inches in diameter, and double strength vitrified pipe for sizes between 18 inches and 24 inches. One ring brick arches are used for diameters between 27 inches and 36 inches, and two-ring brick arches between 39 inches and 72 inches. The grades are sufficient to give a minimum velocity of 2 feet per second, the sewer one-half full.

The manholes, which are usually four feet inside diameter, are spaced between 250 and 350 feet apart. At the present time there are about 10,000 constructed. "Y" pipes are laid on an average of about 50 feet apart on each side of the sewer. If the sewer depth is over 15 feet, chimney pipes are constructed which bring the available depths for the system up to a point about 8 feet below the surface. House connections are usually laid for each lot, from the street sewer to the curb line, thereby avoiding the necessity of tearing up the paving when the latter improvement follows the sewer work. At the present time it is estimated that there are about 55,000 connections in the city proper, and 1,500 at the harbor.

Allowing for depreciation in the older sewers, it is estimated that the value of the sewerage system on June 30, 1915, was about \$6,100,000.

The accompanying map shows the present area and shape of the City of Los Angeles and outlined thereon in white lines are indicated the location of the outfall sewer and its main tributaries, also the main outfall sewers of the harbor district. Office records are kept of the location of all sewer work constructed, and special attention is given to a careful recording of all Y's placed in the sewers. Copies of records of completed sewers are given to the Building and Health Departments, and the latter enforce the work of making connections with the system as soon as public sewers are laid in front of buildings, which previous thereto were not so connected.

Most of the sewer work is laid in accordance with the provisions of the Vrooman Act, and it is estimated that the average cost of sewers per 50-foot lot is between 75c and \$1.00 per front foot, the house connections costing about 30c per lineal foot.

MAGNESITE MINE TO HAVE RAILROAD OUTLET.

The improved demand for manganese, magnesite, magnesite and quicksilver caused by the war has brought about the formation of the Patterson and Western Railroad Company, to give a rail outlet to the big deposits in Stanislaus and Santa Clara counties. H. G. Ginaca, president of the new road, returned to San Francisco yesterday from Patterson, Stanislaus county, and told of plans just set in motion.

The Western Magnesite Development Company's deposit around Red Mountain, reputed to be the largest in the world, is being called upon to supply

the deficiency caused by the cutting of the Austrian supply, on which the United States has depended to a extent. Between June 30, 1913, the corresponding date in 1914, 10 tons were imported from Austria.

With this supply interrupted, attention was turned to the home product and ore has been hauled to the road by automobile trucks all summer. Winter weather, however, will interfere with this movement or, it is the plan to rush the railroad completion to meet the situation.

The ore is being burned at the mill now, but it is probable that a replacement will be built at Patterson, the railroad is finished, as fuel of has to be hauled into the mill truck. Patterson is on pipe which would cheapen the cost of mining.

The quicksilver mines belonging to the Hayward estate in the same tract have just been reopened, with prospect of using the new railroad shipments.

The survey for the new road is being carried on by C. S. Compton, engineer of the Patterson and Western. The road will be standard gauge and will be 22 miles long.

The officers of the railroad are G. Ginaca, president; W. T. Jones, president; R. J. Pratt, secretary-treasurer. All are San Francisco men. Capitalization is for \$150,000.

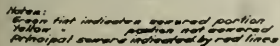
According to a story given by the Sacramento Pitney Association confirmed by the Ford agency in city, the Pacific Gas and Electric company, which owns the Main street lines in that city, has negotiated purchase of several cars, and will begin soon the operation of the busses in opposition to about five independent drivers now in field.

Assurances on the part of River county highway commissioners have been given the people of Crella valley to the effect that the road to connect Palm Springs and Indio will be rushed to completion, survey is to be completed and specifications for the road for the new highway just as so provisions are made for protecting work from the waters of White wash.

When this news was received by Coachella valley during the past a meeting was held and by a vote of 22 to 2 the Indio levee district of trustees decided to begin work.

The new road, which will form direct connection between Palm Springs and Indio, is said to be virtually of the Ocean-to-Ocean highway one of the most important steps in good roads movement of the Coachella valley.

Here is a suggestion that comes from Minnesota to prevent accidents curves. Dividing the road into parts is the simple method. The effect of the split road, states John Len, deputy state engineer, is to prevent possible accidents due to the tendency of drivers to hug the inside curve regardless of the direction in which they are going.



"GOOD ROADS"

Simon Benson, Oregon's good roads advocate, was recently honored by President Moore and the Board of Directors of the Panama-Pacific Exposition with a special day as Oregon's most distinguished and worthy citizen.

Benson was selected for this notable honor chiefly for his untiring energy in the opening of the magnificent Columbia River highway.

This automobile highway, reaching from the ocean up through the Columbia River gorge into Eastern Oregon, a distance of 215 miles, is conceded to be one of the notable highway engineering feats of the decade.

From Portland to Hood River Valley the scenery is probably unequaled on any highway in America. In this stretch of sixty-eight miles, twenty-four water falls are passed, none less than 100 feet in height, and with Multnomah Falls, 925 feet high, here climbs hills and mountains, bores its way by tunnels through the solid rock, passes through virgin forests and around the edge of gigantic cliffs, hundreds of feet above the Columbia River. It is twenty-four feet wide throughout its length, with no grade over 5 per cent and no curve with a radius of less than one hundred feet. At Mitchell's Point, six miles west of Hood River, is encountered a 400-foot tunnel, costing over \$50,000 to construct. There are only two other tunnels in the world of this nature, and both are in Switzerland.

In seeking out the route for this highway the engineers sought at all times to reach the beauty spots, or those points where the most beautiful things along the line might be seen to the best advantage. From Chanticleer Tavern, 1,000 feet above the river, it was desired to reach Latourelle Falls, three miles distant and at an elevation of 150 feet. For almost half a mile the road is cut out of solid rock and is like the cornice on a tall building.

The road fits the top of this rock like the brim of a hat and traverses 225 degrees of a circle on a radius of 110 feet, 900 feet straight up in the air. The total length of the railing and sidewalk is 560 feet.

At many places along the route the highway hangs on the steep sides of the mountain, where it is literally notched out of the solid rock, but to a width of twenty-four feet. At all danger points there have been erected substantial railings similar to those along the shores of Lake Lucerne in Switzerland. These walls are of rock, laid in cement, the top being finished with a coping of ten inches deep and twenty-four inches wide.

The concrete bridges along the highway are one of its chief attractions, the most beautiful being the one at Sheppards Dell. This bridge is 150 feet long, with an arch of 100 feet, at a height of 135 feet above the stream.

The most attractive of all, however,

is Multnomah falls, with the combination of the highway bridge at the bottom and the Benson sightseeing bridge just over the junction of the upper and lower falls. On either side of Multnomah Falls are two long concrete viaducts, one 880 feet and the other 400 feet. Both of these are of original types of construction and built to harmonize with the landscape.

Just beyond is a long stretch of dry masonry wall, 26 feet at the greatest height, and over a thousand feet long. At Omeonta Gorge the road passes over an 80-foot concrete bridge and immediately plunges into a well lighted tunnel, 125 feet long.

The road is to be hard surfaced throughout with a bitulithic pavement, Multnomah County having bonded for a million dollars to pave its portion of the highway.

At present Benson is behind the project to bond the State of Oregon for ten million dollars to complete the Pacific highway through Oregon, and to build a parallel highway through Central Oregon from the California line to the Columbia River highway at Hood River.

That the far-off Philippines are forging ahead in the matter of public improvements, is indicated by the fact that the total appropriation for the Bureau of Public Works for this year is \$3,577,000, and this does not include improvements in several of the departments paid for out of provisional funds.

Of this fund \$750,000 has been set aside for general road and bridge work throughout the islands, and \$177,500 for special projects, among which may be mentioned the maintenance of the Calamba-Bigaa road, \$40,000; the maintenance of the San Fernando-South road, \$25,000, and the Victoria-Manapla road, \$25,000.

It is thus evident that the Philippine government is recognizing the need for trunk line highways, which must receive special attention at the hands of the central government.

This is in line with the present policy pursued by most of the states in the building of state roads.

A map set showing the transcontinental route from Kansas City to Los Angeles has been completed by the drafting department of the Automobile Club of Southern California, which is considered by motorists to be one of the most remarkable guides for travel ever made.

Not only are sections of the National Oil Trails road completely worked out and shown, but a tributary is included which brings motorists into Southern California from Denver and the Big Springs territory. In this part of the tour there are ten strip maps, showing each turn of the road.

At the present time the Automobile club, which has charge of the work, is completing the sign-posting of this

entire route, and the final post to be set in the near future, according to a report received from Douglas Mitchell, in charge of the big trip.

In the transcontinental set of maps there are 57 sections, traversing states. These states are California, Arizona, New Mexico, Colorado, Kansas to its eastern boundary, this way Southern California is directly linked to the great Middle West. Motorists are pouring into the state over this route in a steady stream, according to an Auto club report, and traffic will materially increase next month.

A side tour is shown in Arizona which takes the motorists from Flagstaff up to the Grand Canyon. This has also been marked with signs by the club. This section is shown in two complete strip maps. In the state of Arizona nine sections of map have been drawn.

In California the strips guide the motorist from Needles westward.

The United States, through state Federal aid, is approaching an era of road building which, within the next ten years, it is predicted, will give this country the best system of highways in the world. Progress has been slow because of opposition in many states by the farmers to loans and fear on the part of the voters that the system would fall into the hands of politicians. Most of the states, Pennsylvania being the notable exception, have built improved highways by bonds. Where this system has been employed the greatest progress has been made. Pennsylvania is better off than some of the other states in public development.

The problem of road transportation is one of the chief questions before this country, says J. E. Penney, chief of the division of road economics of the Department of Agriculture. It costs the farmer 23 cents a ton-mile to haul his product to the railroad or to the consumer, where the rates are unimproved. More than 350,000 tons are hauled over these roads each year and the bill for hauling is \$1,000,000. The cost per ton mile of hauling on hard surfaced roads does not exceed 13 cents.

The automobilist is paying largely for the building of the good roads. Forty-two states have established highway departments for educational or administrative work, and of thirty have made appropriations for road construction or maintenance. In all, \$208,000,000 has been appropriated from state funds between January 1, 1915, for construction and educational road work, and a total of about 31,000 miles of improved roads is the result. These roads were for the most part as a joint state and local undertaking, so that a large outlay not included in the state budget was involved.

PUBLIC WORKS IN JAPAN.

by

Bureau of Public Works Ministry of Home Affairs, Tokyo.

Public Works Organization.

The system of public works which existed in Japan in older times had fallen into confusion in the Tokugawa Shogunate prior to the Restoration of Meiji owing to the action of the feudal lords carrying out such works not for the public convenience but for the safety of their own provinces. In the event of attack by their neighbors. Consequently, roads for example while constructed, were narrow and tortuous, especially in the mountains which marked natural divisions of territory, while such river works as were carried out were solely for local convenience and without any thought for other districts.

After the Restoration, however, two Dutch engineers and advisers, Mr. Fandoin and Mr. Sondon, were engaged and a special staff was formed, not only to organize and supervise works, but to train engineers. This was chiefly carried out during 1872-1879, and considerable progress was made in road construction and the improvement works of rivers and harbors, all such works being brought directly under Government control. As time progressed the official machinery for dealing with duties of this nature was improved, and in 1871 a proper general survey of necessary works by special inspectors was ordered. Following this, an engineering section was added to the Ministry of Home Affairs, its functions relating chiefly to roads and rivers. Owing to the increase in work, it was decided in 1877 to transform the Section into a Bureau, and in 1886 the whole country was divided into six districts. In 1905, however, these offices were abolished and the inspectors' duties retransformed to the Bureau in order to secure central control, while branch offices were established chiefly for the investigation and execution of the works.

Rivers.

Japan is a long narrow country which extends from northeast to southwest, and is traversed from end to end by a long chain of mountain ranges with numerous branches. No vast tracts of land are, for this reason, left to feed rivers of great magnitude. The gradients are very steep in mountainous parts and the streams there can be freely used for electric generation. But on low lands they slowly flow in broad and deep current, draining large areas of surrounding lands and in the main are capable of being used for irrigation, while many of them are navigable for some distance. Most of the mountainous parts through which rivers run, however, belong to volcanic chains and consequently the fragile earth frequently falls into the rivers, and as the rainfall in Japan is heavy it causes often of inundation. Of all the rivers of the country 365 are comparatively large, and 65 of them have drainage basins of over sixty square miles.

The Law of Waters.

In older times, there was no systematic legislation regarding rivers, the management of them generally being put in the charge of local governments, and the maintenance and repairs of them were executed with their own money by one or more of such municipalities or water corporations as had previously been designated by such governments in accordance with the sphere of the interested region. Any municipalities may at their own discretion grant subsidies to lower class bodies for the expenses involved in such works of maintenance or repairs. But for all this, the Central Government decided on a general scheme of improvement of the most important rivers, which was put into practice as opportunity needed. With the progress of time, however, the demand of a systematic regulation was pressingly felt and in 1896 the present law relating to rivers was promulgated in which all necessary provisions, such as the execution of river works, defrayment of such expenses, superintendence of police affairs, etc., were first regulated, and thus a new epoch was opened in the history of our river administration. The application of the law is limited exclusively to those rivers which are deemed by the Minister of Home Affairs to be of great public interest. The law prescribes that rivers are all under the control of the interested local governments which shall, as a rule, bear all expenses incurred for their maintenance, repairs and improvement, provided that the river does affect the interest of more than one prefecture. A river, affects two or more prefectures, shall be administered or maintained by the Minister himself, instead of local governors, and the expenses defrayed out of the national treasury, on condition that the Minister may, in certain cases, order such prefectures as have interest in the river to subscribe a portion of the expenditure. As to improvement works, they are performed directly by the Minister, their expenses being defrayed out of the national treasury with a proportional subscription from prefectures, if the work is a very difficult one or affects two or more prefectures, or the expenses are too great to be paid by a prefecture, or the work is one to be executed as one part of a general scheme which the government has previously decided upon. To minor rivers some articles of the law are to be applied so that they may be well attended to, supervised and controlled.

General State of Floods.

In spite of all the strenuous efforts of the government, both local as well as central for the improvement, maintenance and repairs at great expenses the difficulty of our river engineering is always to be found in the magnitude of the frequent floods. For, under the influence of the natural features of our country, a rainfall which is character-

istically great, causes overflow every year from summer to autumn, causing considerable damage to surrounding districts. The flood in 1896, which is said to be the most violent in the last era, caused a vast amount of loss, estimated at nearly \$70,000,000, and the damage extended as widely as six prefectures, 16 cities and 20,964 towns and villages, the total flooded area being about 1,030,000 acres. Next to this is the inundation of 1910, which caused damage estimated at nearly \$20,000,000. The total amounts of damage, repair expenses and state subsidies respectively for the last ten years (1902-1912) are as follows:

Total amount of damage..	\$167,718,052
Total expenses for repairs..	58,557,301
Total grant out of national	

treasury	7,231,605
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Improvement Works by the State.

The improvement works by the state were executed for the first time on the river Yodo and then commenced on the following rivers: The Tone, the Shinano, the Fuji, the Kiso, the Kitakami, the Sho, the Abukuma, the Agano, the Mogami, the Yoshino, the Chikugo, the Oi, the Tenryu, etc. At first, efforts were mostly directed to the observation of the water level and volume, or other fundamental investigations and designs, and no actual work on the whole line of a river was put into practice, although on those parts where the channel was much damaged the work was carried out in a small scale. Later, in 1886, the general scheme of improvement of rivers was decided upon, and in the following year the sum to be disbursed each year was settled, while on the other hand the government made its plans in accordance with the general scheme mentioned above, solely with its own money. After the enforcement of the law of rivers in 1896, the government resolved to order prefectures concerned to subscribe some portion of the expenditure, and the Kuzuryu, the Onaga, the Tagahashi and the Watarase were added to the list of rivers to be executed by the government.

Radical Plan of River Improvement.

But the fact that a great deal of property falls every year a victim to inundations, and, no less, the money spent in repairs, made the government fully convinced of the necessity of establishing a radical scheme for river improvement. In order to frame the fundamental scheme, the temporary committee for the investigation of river improvement, consisting of high officials in the Ministries of Home Affairs, Finance, Agriculture and Commerce, members of Parliament and experienced specialists in hydraulic engineering and dendrology, was organized. After profound deliberation

(1) 65 most important rivers were selected, on which the government starts improvement work.

(To be continued.)

Technical Societies.

SAN FRANCISCO ASSOCIATION OF MEMBERS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.

Organized April 28, 1905.

This association which this summer rounded out its tenth year of existence has grown steadily since its inception, and now numbers some 200 members.

For the benefit of our readers we give here some extracts from the by-laws and the last annual report.

The object of this association is the advancement of engineering knowledge and practice, the maintenance of a high professional standing among its members, and the furtherance of the general welfare of the American Society of Civil Engineers.

Among the means employed for this purpose are meetings for the presentation and discussion of professional papers, particularly those issued by the American Society of Civil Engineers, and the encouragement of engineers who are not members to attend and take part in the professional and social features of such meetings.

The membership of this Association is restricted to persons who are members of the American Society of Civil Engineers in any grade. All such may become members of this Association without payment of entrance fee, but should the membership in the American Society of Civil Engineers of any person cease from any cause, he shall at the same time cease to be a member of this Association.

The annual dues payable by all members are \$5.00, payable annually in advance on the first day of January, and any member whose dues are more than one year in arrears shall cease to be a member of this Association.

The officers of this Association are a president, two vice-presidents, a secretary and a treasurer, who, with the two latest living past presidents, constitute a board of directors, in which the government of the Association is vested.

The officers are elected at the annual meetings of the Association.

The annual meeting of the Association is held on the third Friday of December in each year.

Regular meetings are held bi-monthly at such time and place as may be appointed by the board of directors. The established custom is to meet on the third Fridays of February, April, June, August, October and December. At these meetings the business of the Association is transacted and the discussion of, professional papers published by the American Society of Civil Engineers, or specially arranged for the occasion is in order. Such discussions may be furnished to the Secretary of the American Society of Civil Engineers for publication, subject to

the approval of the publication committee of that Society.

Weekly luncheons in College Room, Hoffbrau Cafe, Wednesdays at 12:30. Engineers welcome; informal; no program.

Past Presidents.

Wm. W. Harts	1905
Edwin Duryea, Jr.	1906
Arthur L. Adams*	1907
Chas. D. Marx	1908
Luther Wagoner	1909
Franklin Riffle	1910
C. Derleth, Jr.	1911
C. E. Grunsky	1912
Charles B. Wing	1913
C. H. Snyder	1914
Two hundred members.	

*Deceased

Officers for 1915.

President—A. M. Hunt.
Vice-Presidents—H. L. Haehl, M. C. Couchot.

Secretary—E. T. Thurston, Jr.

Treasurer—P. E. Harroun.

Board of Directors—M. C. Couchot, H. L. Haehl, A. M. Hunt, P. E. Harroun, E. T. Thurston, Jr., C. H. Snyder, C. B. Wing.

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233 Post Street.

President.....W. B. Faville
Sec.-Treas.....Sylvain Schnaittacher

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Regular meetings second Tuesday evening each month. Address all communications to A. R. Walker, Acting Secretary, 1403 Hibernian Bldg.

PERSONAL.

The Norman B. Livermore Company, Merchants' National Bank Building, San Francisco, has taken the agency for the full line of logging equipment made by the Lidgerwood Mfg. Company. T. L. Williams, lately with the Seattle office of the Lidgerwood Company, and C. A. Bechtold, engineer of the same company, are now with the Livermore Company. It has also taken the agency for Knox tractors, Made at Springfield, Mass.

Following his appointment as a member of the new United States naval advisory board, Andrew Murray Hunt, a San Francisco civil engineer, has gone to New York to begin active work on the new systems that are being developed for the defense of America against hostile powers.

Andrew Murray Hunt, who is to represent the West on the new board, is a graduate of the United States Naval Academy. His work as a consulting engineer has covered a wide field of engineering activities, including hydro-electric developments, irrigation, steam power plants, gas plants, oil refineries, cement manufacturing plants, and heavy acid plants. The American Society of Civil Engineers recommended that he be given place on the board. Hunt will remain in the East at least one year.

J. E. Ludy of Blythe, Cal., who is Chief Engineer of the California Farm and Irrigation Company, has been consulting with Pierre Zucco Engineering Company of this city during the past few weeks. Mr. Zucco is the consulting engineer of the Company. Several meetings have been held among the officers of the company, directors, and also the financiers. The principal engineering problems have been worked out. The financial end of the Company was also attended to and is in every way intact. The Company is actively at work solving the problem of irrigating the Palo Verda Mesa Lands. From the financial end of view work will soon be under way on the project when the 27,000 acres of land will be signed up by the entrymen.

ADVANCE CONSTRUCTION NEWS.

Classified According to Character of Work.



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APARTMENT HOUSES.

SAN FRANCISCO—Apartment house, 3 story and base, frame. Cost not stated. Architect, none. Owner, J. H. Kruse, 23rd and Shotwell streets, S. F. Location, southwest corner 23rd and Howard streets. Will contain 52 suites of two and three rooms. Interior finish pine and elm panels. Some hardwood floors. Steam heat, oil burning furnace and hot water system. Wall beds. Imitation tile in bath rooms. Exterior covered with shiplap and cement plaster. Plans being prepared. Work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$15,000. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. Location, Dolores street. Will contain 12 suites of two and three rooms. Interior finish pine with some elm panels. Hardwood floors, wall beds and steam heat. Bath rooms finished in tile. Exterior covered with cement plaster. Plans being prepared.

SAN FRANCISCO—Apartment house, 4 story and base, brick and steel, \$40,000. Architect, E. H. Denke, 1317 Hyde street, S. F. Owners, Dora and Max Kolander. Location, south Bush west of Jones, covering an area of 55 by 100 feet. Will contain 16 suites of four and five rooms. Interior finish mahogany, white enamel and pine. Hardwood floors, steam heat, hot water system, oil burning plant and vacuum cleaning. Wall beds and private baths. Bath rooms finished in tile. Exterior faced with pressed brick. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house, 7 story and base, brick and steel, \$100,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Gerard Investment Co. Location, southeast corner of Geary and Leavenworth streets. Will contain over 200 rooms arranged in suites of two and three rooms, office, lobby and amusement rooms. Interior finish pine, hardwood and white enamel. Hardwood floors. Steam heat, oil burning furnace, hot water system and vacuum cleaning. Wall beds. Marble and tile wainscot. Bath rooms finished in tile. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

OAKLAND, CAL.—Apartment house, 3 story and base, frame. Cost not stated. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. Location, corner of Miles and College avenue. Will contain two and three room suites with wall beds and private baths. Interior finish pine and hardwood. Hardwood floors and tile baths. Steam heat and a hot water system. Exterior covered with cement plaster on metal lath. Plans being prepared. Ready for figures about November 1st.

OAKLAND, CAL.—Apartment house, 3 story and base, frame, \$20,000. Ar-

chitect, none. Owner, John A. Blachoff, 6045 Harwood street, Oakland. Location, corner of 30th and Grove streets. Will contain three and four rooms suites with wall beds and private bath rooms. Interior finish pine with some elm panels and hardwood floors. Steam heat and a hot water system. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Apartment houses, 1, 3 story and base, frame. Cost not stated. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Clyde Improvement Co. Location, northwest corner of 3rd avenue and East 15th street. Each will contain two and three room suites. Interiors finished in pine and hardwood with some white enamel. Hardwood floors. Steam heat, hot water system, oil burning furnace and vacuum cleaning. Wall beds and private baths. Tile wainscot and floors in bath rooms. Exterior covered with cement plaster. Plans ready for figures about November 1st. This will complete a group of nine similar buildings erected on this property by the Clyde Improvement Co.

Contracts Awarded

LOS ANGELES, CAL. — Apartment house, 7 story and base, reinforced concrete, \$57,000. Architect, John Parkinson, Security Bldg., L. A. Owner, Dr. James H. Edmonds. Contractors, Atlas Planing Mill Co., 330 McGarry street, L. A. Contract price, \$87,000.

BONDS

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—The proposed bond issue for \$100,000 for the erection of new schools failed to carry by a small majority. Another election will be called.

SACRAMENTO, CAL.—Recommendation has been made by the City Board of Education that the Sacramento School District vote \$2,650,000 for additional schools and sites. The recommendation calls for the erection of thirteen schools. E. J. Carragher is chairman of the Board of Education.

BAKERSFIELD, KERN CO., CAL.—The Mount Whitney road petitions have been presented to the County Supervisors and it is probable that an election will be called in the immediate future to vote bonds for the construction of the proposed highway, which will be 160 miles in length from Bakersfield to Tulare County line. The Automobile Club of Southern California is interested in the proposed work.

KELSEYVILLE, LAKE CO., CAL.—John V. Davis of Lake County is advocating the movement to have the Supervisors call a bond election to secure funds for the improvement of the roads leading into Lake County. Petitions for the proposed issue are now in circulation.

SANTA CRUZ, SANTA CRUZ CO., CAL.—The bonds of the Santa Cruz School District have been sold. The bonds were for \$10,000.

CORCORAN, KINGS CO., CAL.—The Board of Trustees have called an election to vote bonds of \$30,000 to secure a water works system.

MEDFORD, ORE.—The Oregon-Utah Sugar Company, capitalized at \$100,000, with a bond issue of \$500,000, has been incorporated at Salt Lake, the object being to construct a sugar beet factory in the Rogue River Valley in time for the 1916 crop. George E. Sanders, head of the Rogue River Public Service Corporation is named as president and Alexander Nibley of Portland as secretary.

SANTA CRUZ, SANTA CRUZ CO., CAL.—The City Council has passed an ordinance which calls for a special election to vote on November 6th the purchase of the F. A. Hihn Company water system.

AUBURN, PLACER CO., CAL.—November 16th is the date set for the voting of bonds to install a septic tank, extend the sewer system, the purchase of three fire trucks and the installation of a fire alarm system.

SANTA CLARA, SANTA CLARA CO., CAL.—At the last meeting of the Town Trustees a petition was presented asking that a bond election be called to vote bonds of \$55,000 for the paving of the main streets in Santa Clara. The matter has been laid over for one week.

TURLOCK, STANISLAUS CO., CAL.—W. F. Herman of Denair is discussing with Vernon Campbell, general manager of the California Growers Association, and secretary of the Board of Trade Webber, the proposition of erecting a new cannery in Turlock. The proposed building will cost \$20,000.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—The bonds of \$40,000 of the Paso Robles School District have been sold. The Supervisors have also sold the bonds of \$20,000 for the Santa Margarita School District. Plans for the buildings to be erected from the proceeds of the sales will be ordered prepared immediately.

FRESNO, FRESNO CO., CAL.—The City Engineer has been instructed to prepare plans for a new storm and sanitary sewer system, the work of which will cost about \$150,000. A bond issue will be called to raise funds to cover the cost of the work.

VENTURA, VENTURA CO., CAL.—The Board of Supervisors has sold \$500,000 of the \$1,000,000 bond issue for the construction of a county highway system. Eleven bids were received for the bonds and a premium of \$16,055 was obtained. Construction work on the highway system will be started as soon as the money is available.

ESCONDIDO, SAN DIEGO CO., CAL.—The Board of Trustees has passed a resolution calling a special election for the purpose of voting bonds in the sum of \$50,000 for acquiring a gas plant and electric light and power generating plant. The present private plant will probably be purchased and extensions and additions made, allowing the water to rush out to the bay.

LA CANADA, LOS ANGELES CO., CAL.—The Board of School Trustees has called a special bond election for October 26, for the purpose of voting \$25,000 in bonds for the erection of a new school building. Plans have been submitted by a number of architects, but no selection will be made until the bonds are voted.

BAKERSFIELD, KERN CO., CAL.—The \$50,000 bond issue of the Taft School District and the \$15,000 bond issue of the Maricopa School District have been declared illegal and new elections will have to be held to correct the technicalities.

VENTURA, VENTURA CO., CAL.—The Chamber of Commerce and Merchants' Association are promoting a movement to secure the erection of a bath house in this city. It is proposed to have the city vote bonds and construct the building on municipal property.

LOWELL, CAL.—The \$25,000 bond issue of the Lowell Joint Union High School District, which was recently sold to the State Board of Control, has been found invalid by the Attorney General.

BRIDGES AND DAMS

SAN FRANCISCO—Pier construction, \$283,230. Engineer, Assistant State Engineer, Ferry Bldg., S. T. Owners, State of California. Bids were received by the State Board of Harbor Commissioners for the construction of Pier No. 29 Clinton Construction Co., S. F. presented the low bid at \$283,230. No award was made. A complete list of the bids appears under the heading of San Francisco in this issue.

HANFORD, KINGS CO., CAL.—Culverts, reinforced concrete. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. Bids will be received by the Board of Supervisors up to 2 p. m. of October 16, 1915, for constructing bridges and culverts on highway No. 3 in accordance with plans and specifications prepared by the highway commission. The work will involve 89.4 cubic yards of Class A concrete, 90.1 cubic yards of Class B concrete, 354 lineal feet corrugated iron pipe and 5,763 pounds of reinforcing steel.

RICHMOND, CONTRA COSTA CO., CAL.—Viaduct, steel and concrete. Cost not stated. Engineer, City Engineer H. D. Chapman, Richmond. Owners, City of Richmond. City Engineer H. D. Chapman has been instructed to prepare plans and specifications for an opening through the Oakland branch of the Santa Fe at 16th street, which is to be spanned with a steel viaduct, of sufficient width to allow the passing of vehicles and pedestrians in either direction.

MARTINEZ, CONTRA COSTA CO., CAL.—Flood gate. Cost not stated. Engineer, City Engineer Elam C. Brown, Martinez. Owners, City of Martinez. A movement for the improvement of the conditions prevailing in Alhambra Creek north of Main street has been taken up by the development board committee. The desired end, it is believed, can be brought about by the building of a flood gate, the impounding of the flood tide waters, and at low tide opening the gates and al-

REDDING, SHASTA CO., CAL.—Bridges and culverts, reinforced concrete. Cost not stated. Engineer, County Surveyor, Redding. Owners, Shasta County. After adopting the plans and specifications for bridges and culverts on highway No. 3 of the county improved system, the Board of Supervisors instructed County Clerk Pickerrill to advertise for bids for the construction of the culverts and bridges. The bids will be opened on October 16th at 2 p. m.

MARYSVILLE, YUBA CO., CAL.—Bridge construction and extension, reinforced concrete, \$1,863. Engineer, County Surveyor, Marysville. Owners, Yuba County. L. J. Bryan, Marysville, submitted the lowest bid for construction of the Timbuctoo bridge and will probably be awarded the contract.

RED BLUFF, TEHAMA CO., CAL.—Creek fill. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. All bids received by the County Supervisors for the fill on the Salt Creek bridge were rejected, as it was thought the work could be done cheaper by Day Labor, and Supervisor Schafer was authorized to have the work done in that manner.

CHICO, BUTTE CO., CAL.—Bridge construction, timber and concrete. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. The County Supervisors have voted to erect a new cut-over for Forbes Creek on the Hencut-Bangor road in Supervisor Whipple's district. The structure is to cost in the neighborhood of \$400, and was ordered built under the emergency act. It was also decided to rebuild bridge Nos. 5 and 7 on the Oroville road. Further information relative to this work may be had from the County Engineer at Oroville.

SACRAMENTO, CAL.—Bridge, reinforced concrete and steel, \$4,000. Engineer, County Surveyor, Sacramento. Owners, Sacramento County. The County Supervisors have appropriated \$2,000 for the construction of the bridge across the P. G. & E. Co.'s canal on the road leading out of Folsom to Orangevale. The P. G. & E. Co. will pay the other \$2,000. Bids on the work will soon be called for.

REDWOOD CITY, SAN MATEO CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The plans and specifications prepared by the County Surveyor for the construction of a concrete culvert at the foot of Millbrae Hill were adopted and the Clerk of the Board was directed to advertise for bids on the work.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Bridge, steel and concrete. Cost not stated. Engineers, County Surveyors, Hollister and Santa Cruz. Owners, San Benito and Santa Cruz Counties. Plans and specifications for the Chiltenden bridge to be constructed by Santa Cruz and San Benito Counties have been adopted by the Supervisors and bids will be received up to October 15th. Further information may be had from the County Surveyor at Santa Cruz.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor.

SAN JOSE. Owners, Santa Clara County. Plans and specifications for a reinforced concrete bridge on New avenue in Santa Clara County have been adopted by the Supervisors, and bids will be received up to 11 a. m. October 15th.

MYERS CREEK, IMPERIAL CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be received on November 1st by the State Highway Commission for the construction of this bridge. It will be about 300 feet long with a main span of 170 feet. Plans can be secured from the office of the State Highway Commission. An official proposal appears in another column of this issue.

VENTURA, VENTURA CO., CAL.—Bridges, 3, reinforced concrete. Cost not stated. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be received by the Board of Supervisors up to 11 a. m. of October 18, 1915, for the construction of three reinforced concrete bridges. They are designated as the Fairview bridge, the ridge across Calleguas Creek and the ridge on Los Angeles avenue. Simi. B. McClosky is the County Clerk.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridges, steel and concrete, \$13,500 and \$11,000 each. Engineer, E. T. Flaherty, L. A. Owners, Santa Barbara County. The Supervisors have ordered bids advertised for in the construction of State Highway bridges over Eagle Canyon Creek and Dos Pueblos Creek. Plans show the Eagle Canyon bridge to be 50 feet long, concrete girder, single span with abut approaches and cement retaining walls to cost about \$13,500. The plans and specifications for the Dos Pueblos bridge show a 100-foot steel bridge, with a concrete deck and two 20-foot concrete approaches to cost \$11,000.

VENTURA, VENTURA CO., CAL.—Bridge, steel. Cost not stated. Engineer, County Surveyor Pettit, Ventura. Owners, Ventura County. County Surveyor Pettit has completed plans for a new bridge to be constructed on the jai road. It will be of steel construction and will consist of one 150-foot span, 19 feet above the creek bed.

Contracts Awarded

OROVILLE, BUTTE CO., CAL.—Bridges, 2, reinforced concrete, \$2,560. Engineer, County Surveyor, Oroville. Owners, Butte County. Contractors, J. A. Mery Co., Chico. Contract price, \$2,560.

RED BLUFF, TEHAMA CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors, Ross Construction Co., Forum Bldg., Sacramento. Contract price not stated.

HANFORD, KINGS CO., CAL.—Bridge, reinforced concrete, \$2,042. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractor, Henry E. Walker, L. A. Contract price, \$2,042 and \$8.50 per cubic yard for paving approaches.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete, \$1,798. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, William Martin, San Jose. Contract price, \$1,798.

CHURCHES

TURLOCK, STANISLAUS CO., CAL.—Church, 1 story and base, frame, \$10,000. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owners Church of Christ, Rev. Brooke, pastor. Will contain main auditorium, Sunday school rooms and pastor's study. Interior finish pine and ornamental plaster. Gas steam radiators. Exterior covered with cement plaster on metal lath. Clay tile roof. Plans being prepared.

SANTA CLARA, SANTA CLARA CO., CAL.—Convent, 2 story and base, reinforced concrete, \$100,000. Architect, John J. Foley, 16 Kearny street, S. F. Owners, Carmelite Sisters. Revised figures for this work are now in the hands of the architect and a general contract will be awarded this week.

COURT HOUSES.

SAN FRANCISCO—City Hall shades. Cost not stated. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owners, City and County of San Francisco. Bids will be received by the Board of Public Works, Temporary City Hall until October 29th for furnishing and installing shades in the new City Hall.

WOODLAND, YOLO CO., CAL.—Court house, 3 story and base. Class A construction, \$200,000. Architect, W. H. Weeks, 75 Post street, S. F. Owners, County of Yolo. W. H. Weeks has been officially appointed as the architect to design the new county court house. Other than the fact that the building will be of fireproof construction no details are yet available. Construction will not be undertaken until next year. Further mention will be made of the work.

FACTORIES AND WAREHOUSES.

CROCKETT, CONTRA COSTA CO., CAL.—Warehouse, 2 story and base, reinforced concrete. Cost not stated. Architect's name not given. Owners, California-Hawaii Sugar Refinery. Work has been started on the new concrete warehouse at Crockett for the California-Hawaii Sugar Refinery Co. The new structure will be 720 feet in length and will provide storage space for several thousand tons of sugar.

SAN PEDRO, LOS ANGELES CO., CAL.—Warehouse, 6 story and base, reinforced concrete, \$300,000. Engineer, Harbor Commission, San Pedro. Owners, Town of San Pedro. Bids will be received by the Board of Harbor Commissioners up to 10:30 a. m. of October 27th, for furnishing all labor and equipment for the erection of a warehouse on Municipal Dock No. 1. The foundation is now under construction. The city will furnish all cement, sand, rock, steel, artificial stone, etc. The building will be 152 by 180 feet. The work to be done under this contract will require the placing of 27,000 cubic yards of concrete, placing 1,250 tons of reinforcing steel, setting 75 tons of structural steel, finishing 175,000 square feet of floor and about 2,000,000 feet of form lumber.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$7,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner's name withheld. Location, Baker between Union and Filbert. Will contain two modern six-room flats. Interior finished in pine and southern gum. Hardwood floors. Open fire places, tile mantels and tile wainscot in bath and bedrooms. Automatic water heaters. Exterior covered with cement plaster. Plans being prepared.

SAN FRANCISCO—Flats, 2 story and base, frame, \$2,600. Architect, none. Owner, Frank Indelicato, 348 Union street, S. F. Location, north Brazil west of London. Will contain two small flats. Interior finish pine with some hardwood floors. Open fire places and tile mantels. Exterior covered with rustic and shiplap. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 3, 2 story and base, frame, \$2,500 each. Architect, none. Owner, W. G. McDiarmid, 294 Fair Oaks, S. F. Locations, north 26th east of Dolores and northeast Dolores and 26th streets. Each will contain two flats of five and six rooms. Interiors finished with pine and redwood. Some hardwood floors. Open fire places and tile or brick mantels. Imitation tile in bath rooms. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats and store, 2 story and base, frame, \$7,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. Location 14th avenue and J street. Will contain one store on first floor and two five-room flats above. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Imitation tile in bath rooms. Automatic water heaters and patent store fronts. Exterior covered with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, none. Owner, R. W. Hoffman, 1734 Turk street, S. F. Location, south 17th east of Dolores. Will contain four modern flats. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FIRE REPORT

CHICO, BUTTE CO., CAL.—Causing a loss of \$20,000 the warehouse building of the California Fruit Cannery Association was destroyed by fire on October 4th. The loss is partially covered by insurance.

STOCKTON, SAN JOAQUIN CO., CAL.—The bams of the River Express Company, owned by E. S. Van Pelt, were destroyed by fire last week, causing a loss of \$12,000. The carpet cleaning plant of Manthey Bros. was slightly damaged.

LOS ANGELES, CAL.—At a loss of \$60,000, the Whiting-Mead Commercial Company's yards at East Ninth were destroyed by fire.

CONCORD, CONTRA COSTA CO., CAL.—The bunk houses and stables of the Cowell Lime and Cement Company, near here, were burned to the ground last week. The loss is estimated at \$12,000.

SACRAMENTO, CAL.—Fire broke out in the Oriental quarter of Walnut Grove and done damage to the extent of \$100,000.

BRENTWOOD, CONTRA COSTA CO., CAL.—Crossed wires caused a disastrous fire in this town. Many structures in the business district were destroyed. The buildings owned by P. Olsen, Hercules Logan, Frank Golden and Tremley Brothers, were completely destroyed. The loss is estimated at between \$15,000 and \$20,000, partially covered by insurance.

SAN FRANCISCO—Fire of unknown origin destroyed the lumber yards, mill and dry kiln of the Home Planing Mill Company at Sixth and Hooper streets, last week. The loss is placed at \$25,000.

GOVERNMENT WORK & SUPPLIES

Hanford, Cal., Post Office.

Nonconducting pipe coverings manufactured by the National Magnesia Mfg. Co. will be used in the construction of the above named post office in lieu of those previously approved.

Puget Sound, Building.

Under bids opened September 11 at the bureau of yards and docks the contract for the construction of shell-house at the naval magazine, Puget Sound, Wash., has been awarded to Booker, Kiehl & Whipple, Central Building, Seattle, Wash., at \$35,074.

Puget Sound, Wash, Stable.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for the construction of a stable at the naval hospital, navy yard, Puget Sound, Wash.:

Item 1, work complete, except plumbing and electric wiring; 2, add for plumbing; 3, add for electric wiring.

N. T. Barnes, Kent, Wash., item 1, \$1,311; 2, \$104.50; 3, \$55.

J. L. Murphy & Sons, Tacoma, Wash., item 1, \$1,919.43; 2, \$175; 3, \$42.50.

M. A. Benbenick, Bremerton, Wash., item 1, \$1,464; 2, \$1,624; 3, \$1,499.

Harry A. Cotton Co., Puget Sound, Wash., item 1, \$1,718; 2, \$200; 3, \$50.

Andre Lofthus, Bremerton, Wash., item 1, \$1,483; 2, \$200; 3, \$24.

Pierson Construction Co., Seattle, Wash., item 1, \$2,397; 2, \$195; 3, \$57.

Burt Ward, Seattle, Wash., item 1, \$1,440; 2, \$130; 3, \$25.

Martin & Dugan, Seattle, Wash., item 1, \$1,875; 2, \$150; 3, \$60.

Uncompahgre Irrigation Project.

The Reclamation Service is asking for proposals for the construction of about 11 miles of the Ironstone Canal, Uncompahgre Irrigation project, Colo. The work involves the excavation of about 295,600 cubic yards of material in open cut. It is located in the vicinity of Olathe. The bids will be opened at the office of the Reclamation Service at Montrose, Colo., on October 20.

Nelson River South Canal.

The U. S. Reclamation Service has executed contracts for earthwork on the Nelson reservoir south canal, Milk River irrigation project, Mont., as follows: With Winston Bros. Co., Minneapolis, Minn., schedules 1 and 2, involving the excavation of 296,100 cubic yards of material and 25,000 cubic yards of overhaul, estimated contract price, \$41,930; with Nelson Bros. of Glasgow, Mont., for schedule 3, involving 60,550 cubic yards of excavation and 5,000 cubic yards of overhaul, estimated contract price \$7,490.

St. Laramie Canal.

The Reclamation Service has executed contracts for the construction of the first division, St. Laramie Canal, North Platte irrigation project, Wyo., as follows: With Winston Bros. Co., Minneapolis, Minn., schedules 1 and 2, involving the excavation of 750,000 cubic yards of material and 79,600 cubic yards of overhaul, estimated price, \$121,347. 60; with Fred N. Crane Co., Omaha, Neb., schedules 3 and 4, involving 559,700 cubic yards of excavation and 35,300 cubic yards overhaul, estimated price \$77,960.

MADE ISLAND, CAL., MARINE BARRACKS.

The following complete list of bids received September 25th by the Bureau of Yards and Docks at Washington, D. C., is published in addition to the former brief telegraphic bids received on September 25th. The work involved is the construction of a three-story and basement reinforced concrete barracks building.

Item 1, price for work complete; 2, deduct from item 1 if asbestos shingles specified be omitted and asbestos shingles 1/2-in thick by 8 by 16 ins or 9 by 18 ins be used therefor; 3, deduct from item 1 if slate roof covering be used in place of the asbestos shingles specified; 4, deduct from item 1 if basement excavation, areas, floors, windows, and doors (except for kitchen extension) be omitted; 5, add to item 1 if counter-balanced sliding steel sash be used in place of the double-hung wood sash indicated; 6, amount per sq ft to be added to or deducted from price under item 1 or item 3 if composition flooring be substituted for wood flooring (a) price per sq ft for quantity up to 3,500 sq ft, (b) price per sq ft for quantity over 3,500 sq ft up to 7,500 sq ft, quantities given are approximate, (c) price per lin ft for 6-in high base 1 in thick, case shall have a 2-in cove at floor, price shall include plinth blocks, amount per sq ft to be added to net price under item 1 or 3 if composition flooring be substituted for granolithic floor finish, (d) price per sq ft for quantity up to 2,800 sq ft, (e) price per sq ft for quantity over 2,800 sq ft up to 7,500 sq ft, (f) price per sq ft over 7,500 sq ft, (d) price per sq ft over 7,500 sq ft in thick, base shall have 2-in cove at floor, price shall include plinth blocks; 8, add to item 1 or 3 if a wainscot 6 ft high be painted in green paint; 9, add under item 1 if lighting in dormitories be indirect in place of the direct indicated on the drawings.

Foster & Vogt Co., San Francisco, Cal., item 1, \$142,387; 2, \$100; 3, \$550; 4, \$3,502; 5, \$4,647; 6, a, 20c; b, 18c; c, 16c; 7, a, 20c; b, 26c; c, 23c; 8, \$450; 9, \$525.

Clinton Construction Co., San Francisco, Cal., item 1, \$164,000; 2, \$1,300; 3, \$4,900; 4, \$900; 5, \$2,350; 6, a, 17c; b, 12c; c, 20c; 7, a, 18c; b, 13c; c, 10c; 8, \$275; 9, \$495.

Collman & Collman, San Francisco, Cal., item 1, \$197,940; 2, \$1,210; 3, \$4,900; 4, \$8,200; 5, \$6,600; 6, a, 24c; b, 22c; c, 20c; 7, a, 28c; b, 26c; c, 24c; d, 16c; 8, \$1,050; 9, \$400.

C. Christensen, Oakland, Cal., item 1,

\$168,000; 2, \$1,280; 3, \$5,400; 4, \$10,400; 5, a, 10c; b, 9c; c, 17c; 7, a, 15c; b, 12c; c, 11c; d, 12c; 8, \$450; 9, \$500.

Teichert & Ambrose, Sacramento, Cal., item 1, \$161,500; 2, \$1,210; 3, \$4,937; 4, \$12,000; 5, \$4,500; 6, a, 20c; 15c; c, 20c; 7, a, 18c; b, 14c; c, 12c; 9c; 8, \$2,600; 9, \$510.

Wm. A. Newsum, San Francisco, Cal., item 1, \$143,477; 2, \$1,225; 3, \$5,300; \$8,739; 5, \$4,112; 6, a, 17c; b, 16c; c, 10c; 7, a, 18c; b, 15c; c, 14c; d, 22c; 8, \$300; 9, \$400.

Welsh Bros. & Hannaman, Oakland, Cal., item 1, \$152,774; 2, \$1,500; 3, \$5,000; 4, \$9,000; 5, \$3,700; 6, a, 17c; b, 12c; c, 12c; 7, a, 18c; b, 13c; c, 11c; d, 5c; \$624.

MacRae & Layaz, San Francisco, Cal., item 1, \$173,655; 2, \$1,165; 3, \$4,000; \$8,000; 5, \$4,300; 6, a, 10c; b, 5c; c, 20c; 7, a, 18c; b, 13c; c, 11c; w, 5c; 8, \$900; 9, \$500.

W. N. Concanon Co., San Francisco, Cal., item 1, \$174,277; 2, \$1,627; 3, \$1,890; 4, \$4,028; 5, \$800; 6, a, 22c; b, 17c; c, 7c; 7, a, 20c; b, 15c; c, 18c; d, 10c; 8, \$200; 9, \$500.

Pringle, Dunn & Co., San Francisco, Cal., item 1, \$137,542; 2, \$1,902; 3, \$5,144; 4, \$6,313; 5, \$4,720; 6, a, 20c; b, 15c; 14c; 4, \$6,313; 5, \$4,720; 6, a, 16c; 15c; c, 15c; 7, a, 20c; b, 19c; c, 18c; 13c; 8, \$200; 9, \$370.

Lange & Bergstrom, San Francisco, Cal., item 1, \$142,337; 2, \$1,00; 3, \$3,526; 4, \$3,055; 5, \$2,979; 6, a, 12c; b, 7c; 17c; 7, a, 12c; b, 15c; c, 13c; d, 15c; \$458; 9, \$175.

Van Sant-Houghton Co., San Francisco, Cal., item 1, \$142,000; 2, \$1,300; \$4,372; 4, \$8,189; 5, \$4,350; 6, a, 23c; 18c; c, 25c; 7, a, 25c; b, 20c; c, 18c; 25c; 8, \$1,550; 9, \$200.

McLaren & Peterson, San Francisco, Cal., item 1, \$16,531; 2, \$1,537; 3, \$3,000; 4, \$7,500; 5, \$3,750; 6, a, 20c; b, 15c; c, 20c; 7, a, 20c; b, 15c; c, 13c; d, 5c; \$150; 9, \$195.

P. A. Palmer, San Francisco, Cal., item 1, \$149,400; 2, \$1,090; 3, \$4,300; \$7,500; 5, \$4,100; 6, a, 16c; b, 13c; c, 25c; 7, a, 21c; b, 18c; c, 17c; d, 18c; 8, \$1,050; 9, \$600.

John Monk, San Francisco, Cal., item 1, \$168,755; 2, \$1,050; 3, \$1,152; 4, \$1,500; 5, \$2,070; 6, a, 11c; b, 6c; c, 23c; 7, a, 22c; b, 17c; c, 15c; d, 28c; 8, \$490; 9, \$550.

B. T. Ouslev, San Francisco, Cal., item 1, \$106,992; 2, \$1,300; 3, \$4,300; 5, \$3,832; 5, \$2,073; 6, a, 10c; b, 5c; c, 20c; 7, a, 21c; b, 16c; c, 14c; d, 5c; 8, \$450; 9, \$365.

Dan Guttleson, San Francisco, Cal., item 1, \$164,855; 2, \$1,300; 3, \$5,127; 4, \$10,000; 5, \$2,000; 6, a, 18c; b, 12c; 20c; 7, a, 20c; b, 15c; c, 13c; d, 10c; \$290; 9, \$495.

San Francisco Circular No. 47.

The following bids were received at awards made by the depot quartermaster, San Francisco, Cal., under official circular No. 47, opened September 1

1. Bid 1, Pacific States Electric Co., Mission street, San Francisco, Cal.

2. Simpson & Fisher, 118 How street, San Francisco, Cal.

3. General Machinery & Supply Co, 29 Stevenson street, San Francisco, Cal.

4. W. H. Supply, 101 Monador Building, San Francisco, Cal.

5. Plant Rubber & Supply Co., Beale street, San Francisco, Cal.

6. Judson Mfg. Co., 119 Folso street, San Francisco, Cal.

7. G. J. Josselyn & Co., 56 Sacramento street, San Francisco, Cal.

8. California Steam and Plumber Supply Co., 671 5th street, San Francisco, Cal.

9. Emerson Mfg. Co., 121 2nd street San Francisco, Cal.

10. R. E. Allen, 220 Market street San Francisco, Cal.

11. Johnson & Joseph Co., 34 Sacramento street, San Francisco, Cal.

12. Sherwin-Williams Co., 454 2d street, San Francisco, Cal.

13. W. P. Fuller & Co., 301 Mission street, San Francisco, Cal.

14. California Hydraulic Engineer & Supply Co., 70 Fremont street, San Francisco, Cal.

15. Dunham, Carrigan & Hayde Co., 140 Kansas street, San Francisco, Cal.

16. Holbrook, Merrill & Stetson, 6 and Bloome streets, San Francisco, Cal.

Dalziel-Moller Co., 556 Mission street, San Francisco, Cal.
 C. J. Hendry Co., 46 Clay street, San Francisco, Cal.
 U. S. Steel Products Co., (Italy) Building, San Francisco, Cal.
 J. Yates & Co., 762 Folsom street, San Francisco, Cal.
 Ames-Harris-Neville Co., 100 Potrero avenue, San Francisco, Cal.
 Marshall-Newell Supply Co., 142 Hart street, San Francisco, Cal.
 Wolverine Brass Works, 211 Napa street, San Francisco, Cal.
 Universal Trading Co., 171 Broadway, New York City.
 J. Whittier-Cohurn Co., Howard and E streets, San Francisco, Cal.
 J. Larkin Asphalt Co., 4876 15th street, San Francisco, Cal.
 Henry R. Worthington, Sharon Building, San Francisco, Cal.
 J. & R. Wilson, 127 Stewart street, San Francisco, Cal.
 J. Lewis West, Co., 6 California street, San Francisco, Cal.
 Paul Brant, 67 Main street, San Francisco, Cal.
 M. Greenberg's Sons Co., 223 Levee street, San Francisco, Cal.
 B. C. Goodrich Rubber Co., 401 Mission street, San Francisco, Cal.
 W. J. Garratt & Co., 299 Folsom street, San Francisco, Cal.
 George E. Butler, 356 California street, San Francisco, Cal.
 Marine Electric Co., 350 Howard street, San Francisco, Cal.
 Independent Pneumatic Tool Co., Fremont street, San Francisco, Cal.
 National Lead Co. Merchants' Exchange Building, San Francisco, Cal.
 Baker & Hamilton, 1th and Brannan streets, San Francisco, Cal.
 Crane Co., 2nd and Brannan streets, San Francisco, Cal.
 Western Laundry Co., 301 Western Laundry Machinery Co., Fremont street, San Francisco, Cal.
 Pacific Fire Extinguisher Co., 507 Montgomery street, San Francisco, Cal.
 Bass-Hueter Paint Co., 516 Mission street, San Francisco, Cal.
 Eccles & Smith, 71 1st street, San Francisco, Cal.
 Mark-Lally Co., 235 2nd street, San Francisco, Cal.
 U. S. Rubber Co., of California, Fremont street, San Francisco, Cal.
 J. T. Blackaller, Sansome and Levee streets, San Francisco, Cal.
 J. A. Meyer Co., Monadnock Building, San Francisco, Cal.
 Patton Paint Co., Newark, N. J.
 R. E. Dietz, New York City.
 Pacific Hardware and Steel Co., 2 Townsend streets, San Francisco, Cal.
 30,000 yds hurlap, 36-in wide Bid 21, 64c yd, accepted for 15,000; 45, 64c, accepted for 15,000 yds; 75, 64c.
 300 burners, street lamp—Bid 15, 20c ea, accepted; 49, 20c ea.
 300 yds canvas, cotton duck—Bid 86c yd, accepted.
 18 extinguishers, fire, 3-gal—Bid 17, \$1 ea; 20, \$2.25, accepted.
 50 fittings, electric sockets—Bid 1, 50c ea, accepted; 15, 23.2c; 35, 19.1c.
 300 glasses, gauge—Bid 3, 99c doz; \$1.15, 15, 91c; 29, 79c; 28, \$1.29; 50, \$1.29; 20, no award yet.
 18 hooks, cabin door—Bid 11, 46c ea; 15c; 18, 43c; 22, 60c; 24, 32.9c, accepted; 31, 65c; 33, 75c.
 20 gals paint, aluminum—Bid 12, 74 gal; 20, \$2.65; 24, \$3.39; 25, 19.1b; 26, 19.1b; 27, 19.1b; 28, 19.1b; 29, 19.1b; 30, 19.1b; 31, 19.1b; 32, 19.1b; 33, 19.1b; 34, 19.1b; 35, 19.1b; 36, 19.1b; 37, 19.1b; 38, 19.1b; 39, 19.1b; 40, 19.1b; 41, 19.1b; 42, 19.1b; 43, 19.1b; 44, 19.1b; 45, 19.1b; 46, 19.1b; 47, 19.1b; 48, 19.1b; 49, 19.1b; 50, 19.1b; 51, 19.1b; 52, 19.1b; 53, 19.1b; 54, 19.1b; 55, 19.1b; 56, 19.1b; 57, 19.1b; 58, 19.1b; 59, 19.1b; 60, 19.1b; 61, 19.1b; 62, 19.1b; 63, 19.1b; 64, 19.1b; 65, 19.1b; 66, 19.1b; 67, 19.1b; 68, 19.1b; 69, 19.1b; 70, 19.1b; 71, 19.1b; 72, 19.1b; 73, 19.1b; 74, 19.1b; 75, 19.1b; 76, 19.1b; 77, 19.1b; 78, 19.1b; 79, 19.1b; 80, 19.1b; 81, 19.1b; 82, 19.1b; 83, 19.1b; 84, 19.1b; 85, 19.1b; 86, 19.1b; 87, 19.1b; 88, 19.1b; 89, 19.1b; 90, 19.1b; 91, 19.1b; 92, 19.1b; 93, 19.1b; 94, 19.1b; 95, 19.1b; 96, 19.1b; 97, 19.1b; 98, 19.1b; 99, 19.1b; 100, 19.1b; 101, 19.1b; 102, 19.1b; 103, 19.1b; 104, 19.1b; 105, 19.1b; 106, 19.1b; 107, 19.1b; 108, 19.1b; 109, 19.1b; 110, 19.1b; 111, 19.1b; 112, 19.1b; 113, 19.1b; 114, 19.1b; 115, 19.1b; 116, 19.1b; 117, 19.1b; 118, 19.1b; 119, 19.1b; 120, 19.1b; 121, 19.1b; 122, 19.1b; 123, 19.1b; 124, 19.1b; 125, 19.1b; 126, 19.1b; 127, 19.1b; 128, 19.1b; 129, 19.1b; 130, 19.1b; 131, 19.1b; 132, 19.1b; 133, 19.1b; 134, 19.1b; 135, 19.1b; 136, 19.1b; 137, 19.1b; 138, 19.1b; 139, 19.1b; 140, 19.1b; 141, 19.1b; 142, 19.1b; 143, 19.1b; 144, 19.1b; 145, 19.1b; 146, 19.1b; 147, 19.1b; 148, 19.1b; 149, 19.1b; 150, 19.1b; 151, 19.1b; 152, 19.1b; 153, 19.1b; 154, 19.1b; 155, 19.1b; 156, 19.1b; 157, 19.1b; 158, 19.1b; 159, 19.1b; 160, 19.1b; 161, 19.1b; 162, 19.1b; 163, 19.1b; 164, 19.1b; 165, 19.1b; 166, 19.1b; 167, 19.1b; 168, 19.1b; 169, 19.1b; 170, 19.1b; 171, 19.1b; 172, 19.1b; 173, 19.1b; 174, 19.1b; 175, 19.1b; 176, 19.1b; 177, 19.1b; 178, 19.1b; 179, 19.1b; 180, 19.1b; 181, 19.1b; 182, 19.1b; 183, 19.1b; 184, 19.1b; 185, 19.1b; 186, 19.1b; 187, 19.1b; 188, 19.1b; 189, 19.1b; 190, 19.1b; 191, 19.1b; 192, 19.1b; 193, 19.1b; 194, 19.1b; 195, 19.1b; 196, 19.1b; 197, 19.1b; 198, 19.1b; 199, 19.1b; 200, 19.1b; 201, 19.1b; 202, 19.1b; 203, 19.1b; 204, 19.1b; 205, 19.1b; 206, 19.1b; 207, 19.1b; 208, 19.1b; 209, 19.1b; 210, 19.1b; 211, 19.1b; 212, 19.1b; 213, 19.1b; 214, 19.1b; 215, 19.1b; 216, 19.1b; 217, 19.1b; 218, 19.1b; 219, 19.1b; 220, 19.1b; 221, 19.1b; 222, 19.1b; 223, 19.1b; 224, 19.1b; 225, 19.1b; 226, 19.1b; 227, 19.1b; 228, 19.1b; 229, 19.1b; 230, 19.1b; 231, 19.1b; 232, 19.1b; 233, 19.1b; 234, 19.1b; 235, 19.1b; 236, 19.1b; 237, 19.1b; 238, 19.1b; 239, 19.1b; 240, 19.1b; 241, 19.1b; 242, 19.1b; 243, 19.1b; 244, 19.1b; 245, 19.1b; 246, 19.1b; 247, 19.1b; 248, 19.1b; 249, 19.1b; 250, 19.1b; 251, 19.1b; 252, 19.1b; 253, 19.1b; 254, 19.1b; 255, 19.1b; 256, 19.1b; 257, 19.1b; 258, 19.1b; 259, 19.1b; 260, 19.1b; 261, 19.1b; 262, 19.1b; 263, 19.1b; 264, 19.1b; 265, 19.1b; 266, 19.1b; 267, 19.1b; 268, 19.1b; 269, 19.1b; 270, 19.1b; 271, 19.1b; 272, 19.1b; 273, 19.1b; 274, 19.1b; 275, 19.1b; 276, 19.1b; 277, 19.1b; 278, 19.1b; 279, 19.1b; 280, 19.1b; 281, 19.1b; 282, 19.1b; 283, 19.1b; 284, 19.1b; 285, 19.1b; 286, 19.1b; 287, 19.1b; 288, 19.1b; 289, 19.1b; 290, 19.1b; 291, 19.1b; 292, 19.1b; 293, 19.1b; 294, 19.1b; 295, 19.1b; 296, 19.1b; 297, 19.1b; 298, 19.1b; 299, 19.1b; 300, 19.1b; 301, 19.1b; 302, 19.1b; 303, 19.1b; 304, 19.1b; 305, 19.1b; 306, 19.1b; 307, 19.1b; 308, 19.1b; 309, 19.1b; 310, 19.1b; 311, 19.1b; 312, 19.1b; 313, 19.1b; 314, 19.1b; 315, 19.1b; 316, 19.1b; 317, 19.1b; 318, 19.1b; 319, 19.1b; 320, 19.1b; 321, 19.1b; 322, 19.1b; 323, 19.1b; 324, 19.1b; 325, 19.1b; 326, 19.1b; 327, 19.1b; 328, 19.1b; 329, 19.1b; 330, 19.1b; 331, 19.1b; 332, 19.1b; 333, 19.1b; 334, 19.1b; 335, 19.1b; 336, 19.1b; 337, 19.1b; 338, 19.1b; 339, 19.1b; 340, 19.1b; 341, 19.1b; 342, 19.1b; 343, 19.1b; 344, 19.1b; 345, 19.1b; 346, 19.1b; 347, 19.1b; 348, 19.1b; 349, 19.1b; 350, 19.1b; 351, 19.1b; 352, 19.1b; 353, 19.1b; 354, 19.1b; 355, 19.1b; 356, 19.1b; 357, 19.1b; 358, 19.1b; 359, 19.1b; 360, 19.1b; 361, 19.1b; 362, 19.1b; 363, 19.1b; 364, 19.1b; 365, 19.1b; 366, 19.1b; 367, 19.1b; 368, 19.1b; 369, 19.1b; 370, 19.1b; 371, 19.1b; 372, 19.1b; 373, 19.1b; 374, 19.1b; 375, 19.1b; 376, 19.1b; 377, 19.1b; 378, 19.1b; 379, 19.1b; 380, 19.1b; 381, 19.1b; 382, 19.1b; 383, 19.1b; 384, 19.1b; 385, 19.1b; 386, 19.1b; 387, 19.1b; 388, 19.1b; 389, 19.1b; 390, 19.1b; 391, 19.1b; 392, 19.1b; 393, 19.1b; 394, 19.1b; 395, 19.1b; 396, 19.1b; 397, 19.1b; 398, 19.1b; 399, 19.1b; 400, 19.1b; 401, 19.1b; 402, 19.1b; 403, 19.1b; 404, 19.1b; 405, 19.1b; 406, 19.1b; 407, 19.1b; 408, 19.1b; 409, 19.1b; 410, 19.1b; 411, 19.1b; 412, 19.1b; 413, 19.1b; 414, 19.1b; 415, 19.1b; 416, 19.1b; 417, 19.1b; 418, 19.1b; 419, 19.1b; 420, 19.1b; 421, 19.1b; 422, 19.1b; 423, 19.1b; 424, 19.1b; 425, 19.1b; 426, 19.1b; 427, 19.1b; 428, 19.1b; 429, 19.1b; 430, 19.1b; 431, 19.1b; 432, 19.1b; 433, 19.1b; 434, 19.1b; 435, 19.1b; 436, 19.1b; 437, 19.1b; 438, 19.1b; 439, 19.1b; 440, 19.1b; 441, 19.1b; 442, 19.1b; 443, 19.1b; 444, 19.1b; 445, 19.1b; 446, 19.1b; 447, 19.1b; 448, 19.1b; 449, 19.1b; 450, 19.1b; 451, 19.1b; 452, 19.1b; 453, 19.1b; 454, 19.1b; 455, 19.1b; 456, 19.1b; 457, 19.1b; 458, 19.1b; 459, 19.1b; 460, 19.1b; 461, 19.1b; 462, 19.1b; 463, 19.1b; 464, 19.1b; 465, 19.1b; 466, 19.1b; 467, 19.1b; 468, 19.1b; 469, 19.1b; 470, 19.1b; 471, 19.1b; 472, 19.1b; 473, 19.1b; 474, 19.1b; 475, 19.1b; 476, 19.1b; 477, 19.1b; 478, 19.1b; 479, 19.1b; 480, 19.1b; 481, 19.1b; 482, 19.1b; 483, 19.1b; 484, 19.1b; 485, 19.1b; 486, 19.1b; 487, 19.1b; 488, 19.1b; 489, 19.1b; 490, 19.1b; 491, 19.1b; 492, 19.1b; 493, 19.1b; 494, 19.1b; 495, 19.1b; 496, 19.1b; 497, 19.1b; 498, 19.1b; 499, 19.1b; 500, 19.1b; 501, 19.1b; 502, 19.1b; 503, 19.1b; 504, 19.1b; 505, 19.1b; 506, 19.1b; 507, 19.1b; 508, 19.1b; 509, 19.1b; 510, 19.1b; 511, 19.1b; 512, 19.1b; 513, 19.1b; 514, 19.1b; 515, 19.1b; 516, 19.1b; 517, 19.1b; 518, 19.1b; 519, 19.1b; 520, 19.1b; 521, 19.1b; 522, 19.1b; 523, 19.1b; 524, 19.1b; 525, 19.1b; 526, 19.1b; 527, 19.1b; 528, 19.1b; 529, 19.1b; 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950, 19.1b; 951, 19.1b; 952, 19.1b;

Morrell, Odd Fellows Bldg., Stockton. Owners, San Joaquin County. Bids are now being taken for the construction of a hay and cow barn on the County Farm. Plans can be secured from the architect.

STOCKTON, SAN JOAQUIN CO., CAL.—Hay, storage and feed barn, frame construction. Cost not stated. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be opened on November 8th at 2 P. M. for the construction of a hay, storage and feed barn at the Stockton State Hospital. Plans can be secured from the State Department of Engineering. An official proposal appears in another column of this issue.

OAKLAND, CAL.—Hog house, 1 story reinforced concrete, \$3,375. Architect's name not given. Owners, Alameda County. Frank Robinson submitted the low figure for the construction of a hog house at the Alameda County Infirmary and will probably be awarded the contract. A complete list of the bids received will be found under the heading of Oakland and Alameda County in this issue.

IRRIGATION PROJECTS

TURLOCK, STANISLAUS CO., CAL.—Irrigation project, \$200,000. Engineer, R. V. Meikle, Turlock. Owners, Turlock Irrigation District. Engineer R. V. Meikle of the Turlock Irrigation District has started work on the proposed irrigation improvements recently authorized by a bond issue for \$200,000. It is thought the work will be completed about January 1st.

LIBRARIES.

SAN FRANCISCO—Library, 2 story and base. Class A construction. Cost not stated. Architect, John Reid, Jr., First National Bank Bldg., S. F. Owners, City and County of San Francisco. Bids were opened at last Monday's meeting of the Library Trustees for the construction of the Noe Valley Branch Library. Segregated figures were taken. A complete list of the bids received will be found under the heading of San Francisco in this issue. No award of contract was made.

OAKLAND, CAL.—Library, 2 story and base, brick and concrete, \$35,000. Architect, W. H. Weeks, 73 Post street, S. F. Owners, City of Oakland. Bids were received at the last meeting of the Oakland Library Trustees for the construction of the branch library at the corner of 54th and Boulevard avenue. A complete list of the segregated figures will be found under the heading of Oakland and Alameda County in this issue. No award of contract was made.

Contracts Awarded.

SAN FRANCISCO—Library, 4 story and base. Class A construction, \$1,200,000. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Contractors, Lindgren & Co., Monadnock Bldg., S. F., general construction only, \$414,000.

RAILROAD CONSTRUCTION AND EQUIPMENT.

SAN RAFAEL, MARIN CO., CAL.—Railroad construction, \$275,000. Engineer's name not given. Owners, Northwestern Pacific. The proposition of having the Corte Madera tunnel double tracked is now being considered by the Central Marin Chamber of Commerce. The cost is estimated at \$275,000. Engineers say the work could be completed in three months and would not interfere with the running of the system. Further information will be given on this work when further progress is made.

PORTERVILLE, TULARE CO., CAL.—Railroad extension. Cost not stated. Engineer, Engineering Department Southern Pacific Co., Flood Bldg., S. F. Owners, Southern Pacific Co. Surveys are being completed by the Southern Pacific Company for a branch line of railroad to run from Adobe station on the line of the Porterville Northeastern to the base of Rocky Hill, where are located the granite quarries now in process of development, and then continuing to the base of Magnesite Hill, where the Porterville Magnesite company is doing extensive work.

PATTERSON, STANISLAUS CO., CAL.—Railroad construction. Cost not stated. Engineer's name not given. Owners, Patterson & Western Railroad Co., Patterson. The Patterson & Western Railroad Company has filed articles of incorporation. Among the incorporators are Oscar Engblom, E. R. Leedy, Olseen and T. J. Moe. The capital stock will be \$150,000, of which \$25,000 has been subscribed by Honolulu investors and the balance will be subscribed by the directors. The Hawaiian investors are connected with the Mineral Products Company, owners of the magnesite mines west of this city, to which point it is intended to build a line for the purpose of bringing the ore from the mines to the main line of the Southern Pacific.

Contracts Awarded.

MENDOCINO AND HUMBOLDT COUNTIES, CAL.—Railroad stations, frame, \$10,000. Architect, Engineering Dept. Northwestern Pacific, Phelan Bldg., S. F. Owners, Northwestern Pacific Co. Contractors, Mercer-Fraser Co., Eureka. Contract price, \$10,000.

RESIDENCES.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,300. Architect, none. Owner, Hugh Galway, 420 Pierce street, S. F. Location, east 15th avenue north of Judah. Will contain seven rooms, bath and sleeping porch. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, A. V. Anderson, 1604 10th avenue, S. F. Location, west 9th avenue south of Kirkham. Will contain six rooms and bath. Interior finish pine throughout. Some hard-

wood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$5,000 each. Architects, Conservative Building and Investment Co. Location, south Alton avenue east 9th avenue. Each will contain seven rooms, bath and basement garage. Interiors finished in pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$3,000 each. Architect, none. Owners, Nelson Bros., 515 Dolores street, S. F. Location, east 19th avenue, north of Balboa. Will contain six rooms, bath and sleeping porches. Interior finish pine with some elm panels. Hardwood floors, open fire places and tile or brick mantels. Bath rooms finished in imitation tile. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, R. H. Osborn, 709 5th avenue. Location, east Naples south of Munich. Will contain six rooms, bath and sleeping porch. Interior finish pine and elm panels. Hardwood floor and open fire place. Mantel tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architect, A. W. Richardson, 937 Church street, S. F. Owner, J. J. Barry, 59 Prospect avenue. Location, east Cole-ridge south Lizzie. Will contain six rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 3 story and base, frame, \$5,000. Architect, none. Owners, S. A. Born Building Co., 660 Market street, S. F. Location, Ashbury Terrace. Will contain eight rooms, three baths and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile or brick. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster and brick veneer. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, none. Owners, Oscar Heyman & Bro., 742 Market street, S. F. Location, west 6th avenue south of Geary. Will contain five rooms and bath. Interior finish pine and elm panels. Hardwood floors and open fire place. Mantel tile or brick. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 4, 2

story and base, frame, \$2,500 each. Architect, none. Owner, J. Anderson, 123 16th avenue, S. F. Location, east 17th avenue south of Geary. Each will contain five rooms and bath. Interiors finished in pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence alterations, frame, \$3,000. Architect, Julia Morgan, Merchants' Exchange Bldg., S. F. Owner, David Atkins. Location, 655 Green street, S. F. Work will consist of plumbing, interior trim, hardwood and white enamel, hardwood floors, painting and open fire places. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,000. Architect, none. Owner, W. W. Rednall, 2500 Filbert street, S. F. Location, south Filbert west of Baker. Will contain eight rooms, two baths, sleeping porch and garage. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors, open fire place and furnace heat. Automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$12,000. Architect, John H. Powers, 649 Montgomery street, S. F. Owner, R. A. Sparboro. Location, northwest corner of Green and Devisadero. Will contain ten rooms, three baths and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors, tile bath rooms and hot water system. Exterior covered with cement plaster on metal lath. Plans being prepared.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$5,000 each. Architect, D. C. Coleman, Merchants' National Bank Bldg., S. F. Owner, M. Fisher, 683 Mission street. Location, Claremont Court. Will contain seven rooms, bath and sleeping porches. Garage separate. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, C. E. Wordlow, 812 Park street, Oakland. Location, northwest corner of 23rd avenue and East 25th street. Will contain five rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, J. F. Chambers, Plaza Bldg., Oakland. Location, east View street north of Mather. Will contain five rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile or brick mantel. Im-

itation tile in bath. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, Walter H. Packard, Syndicate Bldg., Oakland. Location, west 168th avenue north of Bancroft. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, R. E. Stubble, 1209 East 19th street, Oakland. Location, west Thomas north Napa. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors and open fire place. Mantel tile or brick. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, H. B. Monges, Hobart Bldg., S. F. Owner, Walton Van Winkle. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors and furnace heat. Open fire places and tile or brick mantel. Bath room finished in tile. Exterior covered with cement plaster. Plans complete and figures being taken.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$5,000. Architect, Olin S. Grove, 2911 Telegraph avenue, Berkeley. Owner, M. Jose. Location, Piedmont Manor. Will contain seven rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, E. W. Cannon, Central Bank Bldg., Oakland. Owner, W. J. Moylan. Location, Northbrae. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and revised figures being taken.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Tony Corey, 1612 Dana way, Sacramento. Will contain five rooms and bath. Interior finish pine. Open fire place and tile mantel. Exterior rustic and cement plaster. Plans complete and work to be done by Day Labor.

PACIFIC GROVE, MONTEREY CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owner, Mr. Watterson. Will contain six rooms, bath and sleeping porch. Interior finish pine and redwood with some

white enamel. Hardwood floors. Open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and figures being taken.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, C. Samuelson, 367 Jensen street, Fresno. Location, Forthcamp Addition. Will contain seven rooms, bath and sleeping porch. Separate garage. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL.—Residence, 2 story and base, brick veneer. Cost not stated. Architects, Plummer & Fell, Story Bldg., L. A. Owner, Henry Boos. Location, Lafayette Square. Will contain 12 rooms, 3 baths and sleeping porch. Interior finish pine and hardwood with white enamel in bed rooms. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heater. Exterior faced with pressed brick veneer. Plans being prepared.

Contracts Awarded

LOS ANGELES, CAL.—Residence, 2 story and base, hollow tile. Cost not stated. Architect, E. B. Rust, Title Insurance Bldg., L. A. Owner, Frank A. Keith. Contractor, John F. Andrews, Hollingsworth Bldg., L. A. Contract price not stated.

PASADENA, LOS ANGELES CO., CAL.—Residence, 2 story and base, brick, \$60,000. Architect, Bertram G. Goodhue, New York, represented by C. W. Winslow, U. S. Grant Bldg., San Diego. Contractor, Thomas C. Marlowe, Story Bldg., L. A. Contract awarded on a percentage basis.

BAKERSFIELD, KERN CO., CAL.—Residence, 2 story and base, frame, \$3,987. Architect, none. Owner, Paul Fetchner. Contractor, Charles Scott, Bakersfield. Contract price, \$3,987.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$7,000. Architect, Eugene Mathewson, Forsythe Bldg., Fresno. Owner, D. S. Ewing, Fresno. Contractor, Frank Rehorn, Fresno. Contract price, \$7,000.

PIEDMONT, ALAMEDA CO., CAL.—Residences, 3, 1 story and base, frame, \$2,000 each. Architect, Alvin J. Stern, 306 14th street, Oakland. Owner, C. B. Coit. Contractor, Roger Coit, 306 14th street, Oakland. Contract price, \$2,000 each.

SCHOOLS.

LOS ANGELES, CAL.—School, 1 story and base, brick or hollow tile, \$25,000. Architects, Train & Williams, Exchange Bldg., L. A. Owners, City of Los Angeles. Location, west Los Angeles south of Pico. Will contain six rooms and an auditorium. Interior finish pine with maple floors. Central heating system and program clocks. Modern school plumbing and electric work. Exterior faced with cement plaster. Plans being prepared.

Contracts Awarded.

PETALUMA, SONOMA CO., CAL.—School lockers, metal, \$900. Architect's name not given. Owners, City of Petaluma. Contractors, Ralston Iron Works, S. F. Contract price, \$300.

FLORIN SCHOOL DISTRICT, SACRAMENTO CO., CAL.—School, 1 story, frame, \$7,960. Architect, George C. Sellon, 1005 K street, Sacramento. Owners, Florin School District. Contractor, E. E. Etherton, Monadnock Bldg., S. F. Contract price, \$7,960.

SEWERS, STREET WORK & WATER SYSTEMS.

SAN FRANCISCO—Beach esplanade. Cost not stated. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Bids will close on October 20th for the construction of the first section of the Beach Boulevard. Plans can be secured from the Engineer's office. An official proposal appears in another column of this issue.

PALO ALTO, SANTA CLARA CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Palo Alto. Owners, City of Palo Alto. The Palo Alto Board of Public Works took the initial step toward an extensive campaign of street paving to be done during the year 1916 at its last regular meeting. It was recommended by the City Council that proceedings be started at once for paving the following streets: Homer avenue for its entire length, Webster avenue for its entire length, Byron avenue from Lytton avenue to the creek, Scott street from Channing avenue to Madison avenue, Gilman street from Hamilton avenue to Forest, Kipling street from avenue to Channing, Everett street from Middlefield road to creek, Emerson street from Channing avenue to Embarcadero road, Middlefield road from Melville avenue to Embarcadero road, Lincoln avenue from Alma street to Middlefield road, Addison avenue from Alma street to Middlefield road.

SACRAMENTO, CAL.—Sewer construction, \$60,000. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Bids received for the construction of the new bond sewer through the southern part of the city indicate that the Contra Costa Construction Co., S. F., and the Ross Construction Co., of Sacramento are the two low bidders. Further mention will be made of the work when contracts are awarded.

SACRAMENTO, CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The City Commission has adopted a resolution calling for the laying of a sewer along Freeport road, between Burnside and El Dorado avenue.

REDDING, SHASTA CO., CAL.—Street lighting system. Cost not stated. Engineer's name not given. Owners, City of Redding. The proposition of installing a new lighting system in this city is under discussion by the Board of Trustees. The matter will be taken up with the Railroad Commission next month. Business men on Yuba street, between Market and the railroad tracks are now completing arrangements to finance the construction

and maintenance of the proposed system. Further information on this work will be given when final arrangements have been started.

CHICO, BUTTE CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. In response to a petition to the County Supervisors a new road will be built in district No. 14, from Honecut road to the Palermo road and thence to the Lone Tree road. Plans for the work have already been ordered prepared.

SACRAMENTO, CAL.—Street paving. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Resolutions providing for the improvements of alleys in the lower section of the city have been passed by the City Commission. The alleys to be improved are in the blocks bounded by Front and Second, W to X; and W and X, 4th to 6th; N and O, 10th to 11th, and Oak avenue, 5th to 7th.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction, \$23,042.35. Engineer, City Engineer, Stockton. Owners, City of Stockton. E. Bishop, Stockton, submitted the lowest bid at \$16,419.25 for the construction of sewers in South street, McKinley avenue and Edison street. The City Engineer's estimate was \$23,042.35. No award has been made.

FRESNO, FRESNO CO., CAL.—Storm water sewer, \$150,000. Engineer, City Engineer B. E. Cronkite, Fresno. Owners, City of Fresno. The City Engineer has been instructed to prepare plans for a complete storm water sewer system. This work will require between three and four months. Further mention will be made when bids are called.

BAKERSFIELD, KERN CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Plans and specifications having been approved, the County Supervisors have advertised for bids to be received October 19th for the construction of the Caliente-Kernville road. Further information may be had from the County Engineer at Bakersfield.

FRESNO, FRESNO CO., CAL.—Street paving, \$45,000. Engineer, City Engineer B. E. Cronkite, Fresno. Owners, City of Fresno. The paving of Santa Fe avenue, a distance of nine blocks is now being considered by the City Council. The Santa Fe Railroad Company owns all of the property along this thoroughfare, and it is understood that they are willing to have the paving laid.

KINGSBURG, FRESNO CO., CAL.—Street paving and improvement. Cost not stated. Engineer, City Engineer, Kingsburg. Owners, City of Kingsburg. Kingsburg is planning to improve the streets of the city. At the last meeting of the city trustees, the matter was discussed with the city engineer and city attorney, and approval given to the plans and specifications for Simpson street. The plans for the other street improvements have not yet been completed. Bids will soon be called for.

SAN ANSELMO, MARIN CO., CAL.—Street improvements. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. A resolution was adopted at the last

meeting of the Trustees providing for street work on Willow avenue, and the clerk has been instructed to advertise for bids on the work. Further information may be had from the Clerk of the Trustees at San Anselmo.

NAPA, NAPA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Napa. Owners, City of Napa. Plans and specifications have been completed and approved and the City Council has passed a resolution of intention providing for the laying of an ironstone sewer pipe 8 inches in diameter with 8 Y branches in Nursery street, 245 feet north of Vallejo street, running to a manhole at the intersection of Nursery and Vallejo streets. The resolution also provides for one flushing hole to be constructed of ironstone pipe 8 inches in diameter with iron cap and cover at the north end of the sewer at Nursery street, also that an 8 inch ironstone pipe with eleven branches be laid in Vallejo street, and a cement concrete catch-basin. Bids on this work will soon be called for.

VALLEJO, SOLANO CO., CAL.—Street improvement, \$8,275.40. Engineer, City Engineer Kilkenney, Vallejo. Owners, City of Vallejo. Plans have been prepared for the improvement of the alleys in blocks 265, 266, 267, 268 and 269 between Sonoma and Monterey and Georgia and York.

RIVERSIDE, RIVERSIDE CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Riverside. Owners, Riverside County. The County Highway Commission has ordered bids received for the construction of the Moreno-Beaumont and Palm Springs highways. The route from Moreno to Beaumont is 10 miles through the Moreno hills. The route from Palm Springs to Indio is 25 miles and terminates at Gard's store in Indio. Further information may be had from the County Engineer at Riverside.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. A resolution of intention providing for the paving of Valerio street from Garden to Canal has been adopted by the City Council. Bids will soon be called for on the work.

RIVERSIDE, RIVERSIDE CO., CAL.—Sewer construction, \$15,000. Engineer, City Engineer, Riverside. Owners, City of Riverside. Preliminary steps have been taken by the City Council towards the construction of the Arlington sewer. The Riverside Council agrees to pay \$5,000 towards the cost of the proposed outfall sewer. The Supervisors have agreed to pay \$3,000 in order that the county hospital and detention home may be included in the sewer district.

RIVERSIDE, RIVERSIDE CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Riverside. Owners, Riverside County. Bids will be opened on October 19th at 3 P. M. for constructing 56½ miles of roads, more or less, and for furnishing 110,000 tons, more or less, of crushed rock, and for furnishing 5,000 barrels, more or less, of asphaltic oil for the Indio permanent road division. Further information may be had from the Clerk of the County Supervisors.

Contracts Awarded.

SALINAS, MONTEREY CO., CAL.—Road construction and river protection. Cost not stated. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, Granite Rock Co., Salinas, Salinas-Watsonville road. Contract price not stated. Lou G. Hare, Salinas, river protection work. Contract price, \$19,800.

VISALIA, TULARE CO., CAL.—Sewer extension system, \$40,500. Engineer, City Engineer, Visalia. Owners, City of Visalia. Contractor, Michael Murphy, S. F. Contract price, \$40,500.

BAKERSFIELD, KERN CO., CAL.—Highway construction. Cost as follows. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractor, Worswick Street Paving Co., Union National Bank, Fresno, Weed Patch loop. Contract price, \$31,460.40. M. T. Kean, Bakersfield, bridges and culverts on McKittick road. Contract price, \$12,350.78, and the Shattuck & Nimmo Warehouse Co., Bakersfield, paving McKittick-Bakersfield road. Contract price, \$28,802.95.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Sewer construction, \$20,300. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractor, Samuel Kurely, L. A. Contract price, \$20,300.

STORES AND OFFICES.

SAN FRANCISCO—Stores and offices, 10 or 12 story and base Class A construction. Cost not stated. Architect, Willis Polk & Co., Hobart Bldg., S. F. Owners, McCreery Estate, leased to Western Union Telegraph Co. Location, northeast corner of Montgomery and Pine streets, covering an area of 73½ by 77 feet. Will contain departments of the Western Union and a large number of offices. Interior finish pine, hardwood and metal trim. Complete steel frame, hollow tile interior partitions and concrete floors. Marble and tile wainscot, ornamental plaster, patent store fronts and metal window sash and frames. Steam heat, elevator service and vacuum cleaning. Exterior faced with pressed brick and terra cotta. Plans being prepared.

SAN FRANCISCO—Stores, 1 story and base, frame, \$5,000. Architect, Ernest M. Essmann, 24th and Church streets, S. F. Owners, Messrs. J. and Fred Braun, 730 Guerrero street, S. F. Location, west Valencia north of 17th street, covering an area of 60 by 84 feet. Will contain three stores. Interiors finished in pine. Patent store fronts and marble bases. Exterior covered with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Store and office alteration, steel and frame. Cost not stated. Architect, O. R. Thayer, 20 Montgomery street, S. F. Owner, Thomas Phiby. Location, north O'Farrell west of Grant avenue. Work will consist of strengthening trusses and floors on third and fourth floors of commercial building. Plans complete and work to be done by Day Labor.

SAN JOSE, SANTA CLARA CO., CAL.—Store and office alteration, \$20,000. Architect, F. D. Wolfe, First National Bank Bldg., San Jose. Owners, San Jose Building and Loan Association. Location, north Santa Clara east of

Market. Work will consist of interior and exterior alterations and will include new interior trim, hardwood and ornamental plaster, lighting fixtures, electric work and painting. Exterior of the building will be faced with cement plaster or pressed brick. Plans are being completed.

Contracts Awarded.

PORTLAND, ORE.—Repair fire damage Class C construction, \$50,000. Architect, W. W. Lucius, Lewis Bldg., Portland. Owners Allsky Building. Contractor, George Langford, Portland. Contract price, \$50,000.

THEATRES.

SAN FRANCISCO—Theatre, 1 story and base, reinforced concrete, \$30,000. Architect, Mathew O'Brien, Foxcroft Bldg., S. F. Owner, M. L. Josey. Location, south Geary street west of Powell covering an area of 37½ by 137½ feet. Construction fireproof with reinforced concrete walls, floors and roof slabs. Interior finish pine and ornamental plaster. Interior partitions hollow tile, metal window sash and frames. Special electric work. Exterior faced with cement plaster. Plans being prepared.

CALEXICO, IMPERIAL CO., CAL.—Theatre and stores, 2 story and base, brick, \$25,000. Architects, Allison & Allison, Hibernian Bldg., L. A. Owner, P. E. Carr. Will cover an area of 50 by 140 feet. There will be several stores besides the theatre on the first floor. Interior finish will be of pine and ornamental plaster. Patent store fronts are specified. Exterior will be faced with pressed brick. Plans are being prepared and the work will be done by Day Labor.

ARGENTINA TO BUILD GRAIN ELEVATORS.

The President and Minister of Agriculture of Argentina, after considering proposals from syndicates in foreign countries for the establishment of grain elevators in the agricultural zone of the country, have decided to formulate a law providing for the construction of such elevators, and to call for bids, both in Argentina and in foreign countries. United States Consul General W. Henry Robertson, at Buenos Aires, transmits a copy of La Prensa, dated August 9, in which the attitude of the Argentine officials is set forth. The projected installation of an extensive system of elevators in Argentina, with terminal stations at Buenos Aires, Rosario, and Bahia Blanca, was the subject of an article published in Commerce Reports for August 24, 1915.

COST OF LIVING.

LOS ANGELES—The item of rent, which plays an important part in the cost of living, has suffered a heavy decline in Los Angeles during the past year and all classes of dwellings can be secured to day at figures from 10 to 30 per cent lower than the same property brought in 1914. There is an over-supply of bungalows, flats and apartments in the city, and even with the great influx of tourists this year owners have been compelled to lower their rents in order to obtain tenants. —Fresno Daily Real Estate Report.

SOUTH AMERICAN ORDERS.

An American business firm informs the Bureau of Foreign and Domestic Commerce that it has recently received two orders from a Latin-American country, obtained through the information furnished by an American consul in that country, which was published in "Commerce Reports." The firm adds that it will doubtless obtain other orders in the field thus opened.

UNSIGNED LETTERS DETRIMENTAL TO TRADE.

[Consul General L. J. Keena, Valparaiso, Chile, July 22.]

Unsigned business letters from American firms which have been received here are criticized by the Chilean recipients, and their criticisms have been confirmed by the increasing proportion of letters coming to this consulate general without signatures.

The comments that have been heard apply to three classes—letters asking for information, letters of acknowledgment, and those making business offers. It is unlikely that a letter of the third class, unsigned, would inspire much confidence here, as the conclusion would naturally be drawn that it had received purely perfunctory attention on the part of the writer, or had been written by some one who had no authority to sign it.

An unsigned offer of sale creates an impression similar to that which was produced several years ago, when numerous letters were sent out by business houses in the United States conspicuously stamped; "Dictated, but not reread."

Similar complaint regarding the sending of trade letters from the United States without signatures was received from the consulate at Hankow, China, in a communication published in Commerce Reports for June 11, 1915. It was then stated that the practice was invariably construed by foreign merchants as a sign that the American houses involved lacked any real interest in the possible sale of their goods abroad.

PHILIPPINES.

[Manila Daily Bulletin, July 27.]
Plans for the New Sugar Centrals.

The Government Central Sugar Board announces that it has definitely decided that, with the \$1,000,000 available, at least one central will be erected and put into operation in time to handle the 1916-17 crop, and that if satisfactory banking arrangements can be made the erection of two mills will be proceeded with. The secretary of the board announced that representatives of sugar-machinery manufacturers were invited to accompany the board to visit the Maao, Isabela, Silay, and Capiz projects in order to secure information to enable them to file bids for supplying machinery and other materials for the central.

FRESNO BUILDING ACTIVE.

FRESNO, Fresno Co., Cal.—During the month of September the City Building Inspector issued building permits to the valuation of \$12,777.

OFFICIAL PROPOSALS.

NOTICE TO BIDDERS.

PETALUMA, Sonoma Co., Cal.—BIDS will be received by the Board of Education of Petaluma, until **October 15th, 8:30 P. M.**, for furnishing and installing 550 yards (more or less) of First Quality Battleship or Cork Linoleum, Wild's make or equal, and 634 opera chairs (more or less).

Further information may be had from A. B. Way, Secretary of the Board of Education, Petaluma City School District. (This is not an official proposal.) (6)

PROPOSAL FOR BIDS.

SEALED BIDS will be received at the office of Lewis P. Hobart, Crocker Building, San Francisco, Cal., at or before **2:00 P. M., October 25, 1915**, for the elevators, electric wiring, plumbing, heating and ventilating, power plant and refrigerating plant for the building for the University Hospital at Fourth and Parnassus Aves., San Francisco, Cal., as per plans and specifications on file and obtainable after 9:00 A. M., October 12, 1915, at the Cashier's window in the Comptroller's Office of the University of California, Berkeley, Cal.

Adesposit of \$50.00 will be required for each set of plans and specifications taken out, which deposit will be refunded upon return of said plans and specifications, accompanied by a regular bid for the work. No bids will be received unless accompanied by a cashed check or bond in favor of the undersigned, equal to 10% of the bid, to secure execution of the contract by the successful bidder.

The right is reserved to reject any or all bids.
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA. (6)

PROPOSALS FOR PAINTING.

PAINTING—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be received at this office until **3 p. m., October 23, 1915**, and then opened, for painting the plastered walls and ceilings in the United States post office at Denver, Colo. Copies of the specification may be obtained at this office and drawings of the building may be seen at the office of the architects, Messrs. Tracy, Swartwout & Litchfield, No. 24 Fifth avenue, New York City; the superintendent's office, Denver, Colo., the office of the supervising superintendent, J. W. Roberts, No. 943 Post Office and Court House, San Francisco, Cal., or at the supervising architect's office, JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 974—Proposals for Flumes and Covers for Flooding and Sluice Valves, Circular Steel Stairways, Crane Runways, Ladders and other ladders for Dredge, Switchpoints, Frames, Cast Iron Pore and Floor Plates, Lathe, Upright Drill, Switchboards, Valves, Steel Cable, Barbed Wire, Steel or Iron Pipe, Copper Tubing, Groove Wire Cloth, Wire Staples, Raps, and Hinges, Chisels, Blacksmith's Tools, Files, Blacksmith's Punches, Hammers, Hatchets, Saws, Saw Blades, Saw Plates, Timmer's Shears, Taps, Reamers, Stocks and Dies, Drills, Bits, Vis s, Carpenter's Braces, Portable Forges, Wrenches, Snaths, Oars, Carlocks, Rakes, Fusible Plugs, Marine Locks, Steam Gauges, Water Gages

Steam Whistles, Automobile Bells, Marine Lights, Steam Gauge Lamps, Oil Cans, Grease Cups, Window Glass, Water Coolers, Chinaware, Agate Cups and Pitchers, Glass Pitchers, Drinking Glasses, Cake Griddles, Soup Spoons, Door Mats, Towels, Corkboard, Leather Fillets, Asbestos Cement, Rubber Bands, Paper Clips, Pencils, Bond Paper and Lumber.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m., October 18, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 974) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; P. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR GATE OPERATING MACHINERY.

GATE-OPERATING MACHINERY—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the U. S. Reclamation Service, Washington, D. C., until **2 o'clock p. m., October 20, 1915**, for furnishing the operating mechanism for two cylinder gates of 12-foot diameter for Shermans reservoir, Milk River project, Montana, and a duplicate set for Keechelus reservoir, Yakima project, Washington. For particulars address the U. S. Reclamation Service, Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR CHAIN SHAFTS.

CHAIN SHAFTS—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the U. S. Reclamation Service, Washington, D. C., until **2 o'clock p. m., November 8, 1915**, for furnishing chain shafts and chains for the rolling crest of Grand River diversion dam, Grand Valley project, Colorado, consisting of one safety chain, one chain shaft, one operating chain, and one guard chain, all for the 60-foot roller, and of six safety chains, six chain shafts, six operating chains and six guard chains for the six 70-foot rollers. For particulars address the U. S. Reclamation Service, Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 976—Proposals for Pneumatic Hoists, Hydraulic Jacks, Magnetic Chucks, Spring Steel, Pig Iron, Pig Lead, Malleable Iron Castings, Bronze Bars, Nails, Twist Drills, Reamers, Pipe Wrenches and Parts, Gongs, Water Closets, Building Brick, Fire Brick, Fire Clay, Foundry Clay, Silica Grit, Silica Sand, Thumb Tacks, Mullage, Wrapping Paper, Blueprint Paper, Putty, Sal Soda, Coal Tar, Sal Monoxide, Carbon Bisulphide, Fish Oil, Alcohol, Varnish, Linseed Oil, Japan Drier, Shellac, White Zinc, Red Lead, White Lead, Lampblack and Paints.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m., October 20, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 976)

may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC Works of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of **2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 20th day of October, 1915**, for doing the following work:

Electric clock system and mail chutes for the City Hall.

Said work must be done in accordance with the specifications on file in the office of the Board of Public Works, to which reference is hereby made, and must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works and completed within one hundred (100) calendar days thereafter.

The amount of bond for faithful performance of contract has been fixed as follows:

Proposition No. 1.....\$1,750.00
Proposition No. 2.....1,500.00
Proposition No. 3.....750.00

All proposals offered must be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the aggregate of the proposal.

Printed proposal forms will be furnished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works.
F. J. CHURCHILL,
Secretary.

STATE OF CALIFORNIA. DEPARTMENT OF ENGINEERING. CALIFORNIA HIGHWAY COMMISSION.

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until **2 o'clock P. M., on November 1, 1915**, at which time they will be publicly opened and construction in accordance with the specifications therefor, to which special reference is made, portions of State Highway as follows:

Imperial County across Myers Creek, (VII-imp.-12-A) a reinforced concrete bridge about 500 feet long with one three hinged arch span of 170 feet.

Plans may be seen, and forms of proposals, bonds, contracts and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers' Offices are located at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.
CHAILES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES E. STERN,
California Highway Commission.
AUSTIN B. FLETCHER,
Highway Engineer.
CHARLES C. CARLETON,
Acting Secretary.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock noon, Monday, November 8, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of a building to be known as "Hay, Storage and Feed Barn," Stockton State Hospital Farm, near Stockton, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Said bids must be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for 'Hay, Storage and Feed Barn,' Stockton State Hospital Farm, near Stockton, California."
(SIGNED) W. F. McCLURE,
State Engineer.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC WORKS of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 20th day of October, 1915, for doing the following work:

Furnishing and installing Window Shades in the City Hall.

Said work must be done in accordance with the specifications on file in the office of the Board of Public Works, to which reference is hereby made, and must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works and completed within ninety (90) calendar days thereafter. The amount of bond for faithful performance of contract has been fixed at \$5000.

All proposals offered must be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the estimate of the proposal.

Proposed proposal forms will be furnished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

For order of the Board of Public Works, J. L. CHURCHILL,
Secretary.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock noon, Monday, November 15, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and

labor, and doing the work required for the complete construction and erection of a building to be known as "Hay, Storage and Feed Barn," Stockton State Hospital Farm, near Stockton, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on the plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for 'Hay, Storage and Feed Barn,' Stockton State Hospital Farm, near Stockton, California."
(SIGNED) W. F. McCLURE,
State Engineer. (*)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock noon, Wednesday, November 16, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete "Painting and Staining" of the Buildings at the California Institution for Deaf and Blind, Berkeley, California, in accordance with the specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Five (\$5.00) Dollars will be required on the specifications, the deposit to be returned immediately on the return of the specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for 'Painting and Staining' of the Buildings at the California Institution for the Deaf and Blind, Berkeley, California."
(SIGNED) W. F. McCLURE,
State Engineer. (*)

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ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

RESIDENCE—2 story and base, frame, \$3,300. San Francisco. Architect, none. Owner, Hugh Galway, 420 Pierce street, S. F. Location, east 15th avenue north of Judah. Will contain seven rooms, bath and sleeping porch. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, A. V. Anderson, 1604 10th avenue, S. F. Location, west 9th avenue south of Kirkham. Will contain six rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$5,000 each. San Francisco. Architects, Conservative Building and Investment Co., Phelan Bldg., S. F. Owners, Conservative Building and Investment Co. Location, south Alton avenue east 9th avenue. Each will contain seven rooms, bath and basement garage. Interior finished in pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$3,000 each. San Francisco. Architect, none. Owners, Nelson Bros., 515 Dolores street, S. F. Location, east 19th avenue north of Balboa. Will contain six rooms, bath and sleeping porches. Interior finish pine with some elm panels. Hardwood floors, open fire places and tile or brick mantels. Bath rooms finished in imitation tile. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, R. H. Osborn, 799 5th avenue. Location, east Naples south of Munich. Will contain six rooms, bath and sleeping porch. Interior finish pine and elm panels. Hardwood floor and open fire place. Mantel tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,000. San Francisco. Architect, A. W. Richardson, 937 Church street, S. F. Owner, J. J. Barry, 59 Prospect avenue. Location, east Cole-

ridge south Lizzie. Will contain six rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—3 story and base, frame, \$5,000. San Francisco. Architect, none. Owners, S. A. Born Building Co., 660 Market street, S. F. Location, Ashbury Terrace. Will contain eight rooms, three baths and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile or brick. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster and brick veneer. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owners, Oscar Heyman & Bro., 742 Market street, S. F. Location, west 6th avenue south of Geary. Will contain five rooms and bath. Interior finish pine and elm panels. Hardwood floors and open fire place. Mantel tile or brick. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—4, 2 story and base, frame, \$2,500 each. San Francisco. Architect, none. Owner, J. Anderson, 423 16th avenue, S. F. Location, east 17th avenue south of Geary. Each will contain five rooms and bath. Interiors finished in pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE ALTERATION—Frame, \$3,000. San Francisco. Architect, Julia Morgan, Merchants' Exchange Bldg., S. F. Owner, David Atkins. Location, 1055 Green street, S. F. Work will consist of plumbing, interior trim, hardwood and white enamel, hardwood floors, painting and open fire places. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, W. W. Rednall, 2500 Filbert street, S. F. Location, south Filbert west of Baker. Will contain eight rooms, two baths, sleeping porch and garage. Interior will be finished in pine and hardwood with some white enamel. Hardwood floors, open fire place and furnace heat. Automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$12,000. San Francisco. Architect, John H. Powers, 640 Montgomery

street, S. F. Owner, R. A. Sparboro. Location, northwest corner of Green and Devisadero. Will contain ten rooms, three baths and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors, tile bath rooms and hot water system. Exterior covered with cement plaster on metal lath. Plans being prepared.

RESIDENCES—2, 2 story and base, frame, \$5,000 each. San Francisco. Architect, D. C. Coleman, Merchants' National Bank Bldg., S. F. Owner, M. Fisher, 683 Mission street. Location, Claremont Court. Will contain seven rooms, bath and sleeping porches. Garages separate. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heaters. Exteriors covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

PIER CONSTRUCTION—\$283,230. San Francisco. Engineer, Assistant State Engineer, Ferry Bldg., S. F. Owners, State of California. Bids were received by the State Board of Harbor Commissioners for the construction of Pier No. 29. Clinton Construction Co., S. F., presented the low bid at \$283,230. No award was made. A complete list of the bids appears under the heading of San Francisco in this issue.

APARTMENT HOUSE—3 story and base, frame. Cost not stated. San Francisco. Architect, none. Owner, J. H. Kruse, 23rd and Shotwell streets, S. F. Location, southwest corner 23rd and Howard streets. Will contain 32 suites of two and three rooms. Interior finish pine and elm panels. Some hardwood floors. Steam heat, oil burning furnace and hot water system. Wall beds. Imitation tile in bath rooms. Exterior covered with shiplap and cement plaster. Plans being prepared. Work to be done by Day Labor.

APARTMENT HOUSE—3 story and base, frame, \$15,000. San Francisco. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. Location, Dolores street. Will contain 12 suites of two and three rooms. Interior finish pine with some elm panels. Hardwood floors, wall beds and steam heat. Bath rooms finished in tile. Exterior covered with cement plaster. Plans being prepared.

APARTMENT HOUSE—4 story and base, brick and steel, \$40,000 San Francisco. Architect, E. H. Denke, 1317 Hyde street, S. F. Owners, Dora and Max Kolander. Location, south Eush west of Jones, covering an area of 55 by 100 feet. Will contain 16 suites of four and five rooms. Interior finish mahogany, white enamel and pine. Hardwood floors, steam heat, hot water system, oil burning plant and vacuum cleaning. Wall beds and private baths. Bath rooms finished in tile. Exterior

ed with pressed brick. Plans complete and figures being taken.

APARTMENT HOUSE—7 story and base, brick and steel, \$100,000. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, Gerard Investment Co. Location, northeast corner of Geary and Leavenworth. Will contain over 200 rooms arranged in suites of two and three rooms, office, lobby and amusement rooms. Interior finish pine, hardwood and white enamel. Hardwood floors. Steam heat, oil burning furnace, hot water system and vacuum cleaning. All beds. Marble and tile wainscot. Bath rooms finished in tile. Exterior finished with pressed brick trimmed with terra cotta. Plans being prepared.

CITY HALL SHADES—Cost not stated. San Francisco. Architects, Baker & Brown, 251 Kearny street, S. F. Owners, City and County of San Francisco. Bids will be received by the Board of Public Works, Temporary City Hall, until October 20th for furnishing and installing shades in the new City Hall.

FLATS—2 story and base, frame, \$900. San Francisco. Architect, C. Clausen, Hearst Bldg., S. F. Owner's name withheld. Location, Baker street between Union and Filbert. Will contain two modern six room flats. Interior finished in pine and southern redwood. Hardwood floors. Open fireplaces, tile mantels and tile wainscot in bath rooms. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

FLATS—2 story and base, frame, \$900. San Francisco. Architect, none named. Frank Indelicato, 348 Union street, S. F. Location, north Brazil street east of London. Will contain two all flats. Interior finish pine with some hardwood floors. Open fireplaces and tile mantels. Exterior covered with shiplap. Plans complete and work to be done by Day Labor.

FLATS—3, 2 story and base, frame, \$500 each. San Francisco. Architect, none. Owner, W. G. McDiarmid, 100 Fair Oaks, S. F. Locations, north east of Dolores and northeast between 25th and 26th streets. Each will contain two flats of five and six rooms. Interiors finished with pine and redwood. Some hardwood floors. Open fireplaces and tile or brick mantels. Imitation tile in bath rooms. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FLATS AND STORE—2 story and base, frame, \$7,000. San Francisco. Architect, Paul F. De Martini, 2123 West street, S. F. Owner's name withheld. Location, 48th avenue and street. Will contain one store on first floor and two five-room flats above. Interior finish pine and elm panels with some hardwood floors. Open fireplaces and tile or brick mantels. Imitation tile in bath rooms. Automatic water heaters and patent window fronts. Exterior covered with cement plaster. Plans complete and under way.

FLATS—2 story and base, frame, \$900. San Francisco. Architect, none. Owner, R. W. Hoffman, 1734 Oak street, S. F. Location, south east of Dolores. Will contain

four modern flats. Interior finish pine with some elm panels and hardwood floors. Open fireplaces and tile mantels. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

HOSPITAL—1 and 2 story, frame. Cost not stated. San Francisco. Architects, City Department of Architecture, Temporary City Hall. Owners, City and County of San Francisco. The Board of Public Works has requested the Board of Supervisors to adopt an ordinance authorizing the construction of several frame buildings at the Isolation Hospital Tract. Further mention will be made of this work.

HOSPITAL—1 and 2 story and base. Class C construction. \$20,000. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Working drawings for the Central Emergency Hospital to be erected at the corner of Polk and Grove streets are progressing rapidly. Further mention will be made of the work when bids are called.

HOSPITAL COMPLETION—4 story. Class A construction. San Francisco. Architect, Lewis P. Hobart, Crocker Bldg., S. F. Owners, Regents of the University of California. Bids will be opened on October 25th for electric work, plumbing, heating, elevators, power plant and refrigerating plant at the University of California Hospital. Plans and specifications can be secured from the Berkeley office of the Regents. An official proposal appears in another column of this issue.

HOSPITAL WARD—1 story, frame, \$7,000. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Location, southwest Army and De Haro streets. Will contain two wards of sixteen beds each, kitchens, dining rooms and offices. Interior finish pine. Exterior cement plaster. Plans nearly complete and figures to be called for shortly.

RELIEF HOME BUILDINGS—1 and 2 story, frame and concrete. Cost not stated. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Several new buildings are to be erected at the Relief Home Tract. Preliminary plans have been prepared and have received official approval. Further mention will be made of this work.

BEACH ESPLANADE—Cost not stated. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Bids will close on October 20th for the construction of the first section of the Beach Boulevard. Plans can be secured from the Engineer's office. An official proposal appears in another column of this issue.

STORES AND OFFICES—10 or 12 story and base. Class A construction. Cost not stated. San Francisco. Architect, Willis Polk & Co., Hobart Bldg., S. F. Owners, McCreery Estate, leased to Western Union Telegraph Co. Location, northeast corner Montgomery and Pine streets, covering an

area of 73½ by 77 feet. Will contain departments of the Western Union and a large number of offices. Interior finish pine, hardwood and metal trim. Complete steel frame, hollow tile interior partitions and concrete floors. Marble and tile wainscot, ornamental plaster, patent store fronts and metal window sash and frames. Steam heat, elevator service and vacuum cleaning. Exterior faced with pressed brick and terra cotta. Plans being prepared.

STORES—1 story and base, frame, \$5,000. San Francisco. Architect, Ernest M. Essman, 24th and Church streets, S. F. Owners, Messrs. J. and Fred Braun, 730 Guerrero street, S. F. Location, west Valencia north of 17th street, covering an area of 60 by 84 feet. Will contain three stores. Interiors finished in pine. Patent store fronts and marble bases. Exterior covered with cement plaster. Plans complete and figures being taken.

STORE AND OFFICE ALTERATION—Store and frame. Cost not stated. San Francisco. Architect, O. R. Thayer, 20 Montgomery street, S. F. Owner, Thomas Pheby. Location, north O'Farrell west of Grant avenue. Work will consist of strengthening trusses and floors on third and fourth floors of commercial building. Plans complete and work to be done by Day Labor.

THEATRE—1 story and base, reinforced concrete, \$30,000. San Francisco. Architect, Mathew O'Brien, Foxcroft Bldg., S. F. Owner, M. L. Josey. Location, south Geary west of Powell, covering an area of 37½ by 137½ feet. Construction fireproof with reinforced concrete walls, floors and roof slabs. Interior finish pine and ornamental plaster. Interior partitions, hollow tile, metal window sash and frames. Special electric work. Exterior faced with cement plaster. Plans being prepared.

LIBRARY—2 story and base. Class A construction. Cost not stated. San Francisco. Architect, John Reid, Jr., First National Bank Bldg., S. F. Owners, City and County of San Francisco. Bids were opened at last Monday's meeting of the Library Trustees for the construction of the Noe Valley Branch Library. Segregated figures were taken. A complete list of the bids received will be found under the heading of San Francisco in this issue. No award of contract was made.

Contracts Awarded.

LIBRARY—1 story and base. Class A construction, \$1,200,000. San Francisco. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Contractors, Lindgren & Co., Monadnock Bldg., S. F., general construction only, \$114,000.

State Harbor Board Opens Pier Bids.

(Union Construction Co. Low For Pier No. 29 at Foot of Lombard Street. No Contract Awarded.)

Six sets of figures were opened by the State Board of Harbor Commissioners at their meeting Thursday for the construction of Pier 29 to be erected at

the foot of Lombard street. The pier will be 200 feet wide and 800 feet long. Concrete piles will be used over the first 600 feet. No award of contract was made. The following bids were received:

Pier No. 29.

Bates-Borland & Ayer.....	\$440,325
P. A. Palmer.....	234,920
San Francisco Bridge Co.....	349,041
Tibbitts-Pacific Co.....	388,000
Clinton Construction Co.....	283,230
Healy-Tibbitts Constr. Co.....	312,400

Noe Valley Library Bids Are Opened.

City Library Trustees Receive Many Figures for Two-story Brick and Steel Branch Library.

A large number of bids were received at the special meeting of the San Francisco Library Trustees held Monday last, for the construction of a two story and basement brick and steel branch library to be known as the Noe Valley Branch. The building will be erected at the corner of Jersey and Castro streets. Plans were prepared by Architect John Reid Jr., First National Bank Bldg.

Following is a complete list of the bids as received. No awards of contracts were made. At Tuesday's meeting of the Library Trustees no action was taken looking to the award of the general construction of the main library.

Noe Valley Branch Library. General Construction.

Commery-Peterson.....	\$26,527
D. B. Farquharson.....	24,170
W. D. Henderson.....	21,238
Lange & Bergstrom.....	21,580
T. W. McClenahan & Co.....	21,340
P. A. Palmer.....	20,495
Stockholm & Allyn.....	24,577
W. A. & C. C. Terrill.....	25,950
Williams Bros. & Henderson.....	21,470
C. L. Wold & Co.....	24,707
Mervyn G. Zelinsky.....	22,390
Monson Bros.....	26,918
Anderson & Ringrose.....	21,980

Architectural Terra Cotta.

Bilder Regular Polychrome	
N. Clark & Son.....	\$3,600
Cladding-McBean & Co.....	3,450
Stelger Terra Cotta & Pottery Works.....	3,650

Electric Work.

Butte Eng. & Elec. Co.....	\$1,134
California Constr. Co.....	1,159
Central Elec. Co.....	1,000
Decker Elec. Constr. Co.....	1,127
Globe Elec. Works.....	1,112
McFell Elec. Co.....	1,084
Rex Elec. & Constr. Co.....	1,087
H. S. Tittle.....	1,095
Turner Company.....	1,243
Newberry Elec. Co.....	1,177

Structural Steel and Iron.

California Constr. Co.....	\$3,245
California Steel Co.....	3,395
Golden Gate Iron Works.....	3,150
Pacific Rolling Mills Co.....	3,183
Ralston Iron Works.....	3,370
Schrader Iron Works.....	3,058
Vulcan Iron Works.....	3,444
Western Iron Works.....	3,484

Plumbing.

Joseph G. Gallagher.....	\$1,000
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Gilley-Schmid Co.....	716
Herman Lawson.....	750
J. E. O'Mara.....	713
Peterson-James Co.....	1,132
The Scott Co.....	863
Frederick W. Snook Co.....	846
The Turner Co.....	817
Wittman-Lyman Co.....	949
J. H. Pinkerton & Co.....	746

Heating.

Gilley-Schmid Co.....	\$1,374
Herman Lawson.....	1,460
Mangrum & Otter.....	1,813
J. E. O'Mara.....	1,647
Peterson-James Co.....	1,433
Scott Company.....	1,440
The Turner Co.....	1,625
Wittman-Lyman Co.....	1,657
Atlas Heating Co.....	1,627

Painting.

William Eaton.....	\$1,340
H. Maundrell.....	885
L. J. Neal.....	650
Olney & Palmer.....	1,830
T. W. McClenahan & Co.....	1,180

OAKLAND AND ALAMEDA COUNTY

APARTMENT HOUSE—3 story and base, frame. Cost not stated. Oakland, Cal. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. Location corner of Miles and College avenue. Will contain two and three room suites with wall beds and private baths. Interior finish pine and hardwood. Hardwood floors and tile baths. Steam heat and a hot water system. Exterior covered with cement plaster on metal lath. Plans being prepared. Ready for figures about November 1st.

APARTMENT HOUSES—4, 3 story and base, frame. Cost not stated. Oakland, Cal. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Clyde Improvement Co. Location, northwest corner of 3rd avenue and East 15th street. Each will contain two and three room suites. Interiors finished in pine and hardwood with some white enamel. Hardwood floors. Steam heat, hot water system, oil burning furnace and vacuum cleaning. Wall beds and private baths. Tile wainscot and floors in bath rooms. Exteriors covered with cement plaster. Plans ready for figures about November 1st. This will complete a group of nine similar buildings erected on this property by the Clyde Improvement Co.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, C. E. Wordlow, 812 Park street, Oakland. Location, northwest corner of 23rd avenue and East 25th street. Will contain five rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, J. F. Chambers, Plaza Bldg., Oakland. Location, east view north of Mather. Will contain five rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath. Automatic water heater. Exterior covered with rustic and ce-

ment plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, Walter H. Packard, Syndicate Bldg., Oakland. Location, west 108th avenue north of Bancroft. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,500. Oakland, Cal. Architect, none. Owner, R. E. Stubble, 1209 East 19th street, Oakland. Location, west Thomas north Napa. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors and open fire place. Mantel tile or brick. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, Cost not stated. Berkeley, Alameda Co., Cal. Architect, H. B. Monges, Hobart Bldg., S. F. Owner, Walton Van Winkle. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors and furnace heat. Open fire places and tile or brick mantels. Bath room finished in tile. Exterior covered with cement plaster. Plans complete and figures being taken.

RESIDENCE—2 story and base, frame, \$5,000. Piedmont, Alameda Co., Cal. Architect, Olin S. Grove, 2911 Telegraph avenue, Berkeley. Owner, M. Rose. Location, Piedmont Manor. Will contain seven rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame. Cost not stated. Berkeley, Alameda Co., Cal. Architect, E. W. Cannon, Central Bank Bldg., Oakland. Owner, W. J. Moylan. Location, Northbrae. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and revised figures being taken.

APARTMENT HOUSE—3 story and base, frame, \$20,000. Oakland, Cal. Architect, none. Owner, John A. Bischoff, 6045 Harwood street, Oakland. Location, corner of 30th and Grove streets. Will contain three and four room suites with wall beds and private bath rooms. Interior finish pine with some elm panels and hardwood floors. Steam heat and a hot water system. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

HOG HOUSE—1 story, reinforced concrete, \$3,375. Oakland, Cal. Architect's name not given. Owners, Alameda County. Frank Robinson sub-

mitted the low figure for the construction of a hog house at the Alameda County Infirmary and will probably be awarded the contract. A complete list of the bids received will be found under the heading of Oakland and Alameda County in this issue.

LIBRARY—2 story and base, brick and concrete, \$35,000. Oakland, Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, City of Oakland. Bids were received at the last meeting of the Oakland Library Trustees for the construction of the branch library at

the corner of 54th and Boulevard avenue. A complete list of the segregated figures will be found under the heading of Oakland and Alameda County in this issue. No award of contract was made.

Contracts Awarded

RESIDENCES—3, 1 story and base, frame, \$2,000. Piedmont, Alameda Co., Cal. Architect, Alvin J. Stern, 306 14th street, Oakland. Owner, C. B. Coit, Contractor, Roger Coit, 306 14th street, Oakland. Contract price, \$2,000 each.

Oakland Library Bids Opened By Board.

**Bids Received for General Construction
Exclusive of Electric Work and
Heating. No Award.**

Bids were opened Tuesday evening, October 5th, by the Oakland Library Trustees for the construction of the two-story Class "C" library building

Oakland Library.

Bidder	Gen.	Alt. 1	Alt. 2
Robert Frost	\$29,945	\$560	\$324
Fletcher & Winlund.....	33,780	520	400
E. T. Leiter.....	33,967	550	650
W. G. Thornally.....	28,775	540	60
Harvey A. Klyce.....	31,313	590	150
Lange & Bergstrom.....	31,921	560	400
Williams Bros. & Henderson.....	28,200	575	500
Schnebley, Hostrawser & Pedgrift.....	30,735	600	269
Collman & Collman.....	28,840	640	125
C. Christenson.....	28,300	600	245
Carnahan & Mulford.....	30,279	600	620
R. W. Littlefield.....	30,579	575	245
B. T. Owsley.....	33,700	585	250
R. Glaze.....	31,948	656	245
McLeran & Peterson.....	28,490	525	250
Foster-Vogt Co.	29,057	700	450

SAN JOSE AND THE SANTA CLARA VALLEY

RESIDENCE—1 story and base, frame, \$2,500. Pacific Grove, Monterey Co., Cal. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owner, Mr. Watterson. Will contain six rooms, bath and sleeping porch. Interior finish pine and redwood with some white enamel. Hardwood floors. Open fire place and tile or brick mantel. Bath room finished in tile. Automatic water heater. Exterior covered with rustle and cement plaster. Plans complete and figures being taken.

CULVERT—Reinforced concrete. Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The plans and specifications prepared by the County Surveyor for the construction of a concrete culvert at the foot of Millbrae Hill were adopted, and the Clerk of the Board was directed to advertise for bids on the work.

BRIDGE—Steel and concrete. Cost not stated. Santa Cruz, Santa Cruz Co., Cal. Engineers, County Surveyors, Hollister and Santa Cruz. Owners, San Benito and Santa Cruz Counties. Plans and specifications for the Chittenden bridge to be constructed by

Santa Cruz and San Benito Counties have been adopted by the Supervisors and bids will be received up to October 15th. Further information may be had from the County Surveyor at Santa Cruz.

BRIDGE—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications for a reinforced concrete bridge on New avenue in Santa Clara County have been adopted by the Supervisors and bids will be received up to 11 a. m. October 25th.

CONVENT—2 story and base, reinforced concrete, \$100,000. Santa Clara, Santa Clara Co., Cal. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Carmelite Sisters. Revised figures for this work are now in the hands of the architect and a general contract will be awarded this week.

STREET PAVING—Cost not stated. Palo Alto, Santa Clara Co., Cal. Engineer, City Engineer, Palo Alto. Owners, City of Palo Alto. The Palo Alto Board of Public Works took the initial step toward an extensive campaign of street paving to be done during the year 1918 at its last regular meeting. It was recommended by the City Council that proceedings be started at once

for paving the following streets: Homer avenue for its entire length; Webster avenue for its entire length; Byron avenue, from Lytton avenue to the creek; Scott street, from Channing avenue to Madison avenue; Gilman street, from Hamilton avenue to Forest; Kipling street, from avenue to Channing; Everett street, from Middlefield road to creek; Emerson street, from Channing avenue to Embarcadero road; Middlefield road, from McKillie avenue to Embarcadero road; Lincoln avenue from Alma street to Middlefield road; Addison avenue, from Alma street to Middlefield road.

STORE AND OFFICE ALTERATION—\$20,000. San Jose, Santa Clara Co., Cal. Architect, F. D. Wolfe, First National Bank Bldg., San Jose. Owners, San Jose Building and Loan Association. Location, north Santa Clara east of Market. Work will consist of interior and exterior alterations and will include new interior trim, hardwood and ornamental plaster, lighting fixtures, electric work, plumbing and painting. Exterior of the building will be faced with cement plaster or pressed brick. Plans are being completed.

Contracts Awarded

BRIDGE—Reinforced concrete, \$1,798. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, William Martin, San Jose. Contract price, \$1,798.

ROAD CONSTRUCTION AND RIVER PROTECTION—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, Granite Rock Co., Salinas, Salinas-Watsonville road. Contract price not stated. Lou G. Hare, Salinas, river protection work. Contract price, \$19,500.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

VIADUCT—Steel and concrete. Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer H. D. Chapman, Richmond. Owners, City of Richmond. City Engineer H. D. Chapman has been instructed to prepare plans and specifications for an opening through the Oakland branch of the Santa Fe at 16th street, which is to be spanned with a steel viaduct, and of sufficient width to allow the passing of vehicles and pedestrians in either direction.

FLOOD GATE—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, City Engineer Elam C. Brown, Martinez. A movement for the improvement of the conditions prevailing in Alhambra Creek north of Main street has been taken up by the development board committee. The desired end, it is believed, can be brought about by the building of a flood gate, the impounding of the flood tide waters and at low tide opening the gate and allowing the water to rush out to the bay.

WAREHOUSE—2 story and base, reinforced concrete. Cost not stated. Crockett, Contra Costa Co., Cal. Architect's name not given. Owners, California-Hawaii Sugar Refinery. Work has been started on the new concrete warehouse for the California-Hawaii

Sugar Refinery Co. The new structure will be 720 feet in length and will provide storage space for several thousand tons of sugar.

RAILROAD CONSTRUCTION—\$275,000. San Rafael, Marin Co., Cal. Engineer's name not given. Owners, Northwestern Pacific. The proposition of having the Corte Madera tunnel double tracked is now being considered by the Central Marin Chamber of Commerce. The cost is estimated at \$275,000. Engineers say the work could be completed in three months and would not interfere with the running of the system. Further information will be given on this work when further progress is made.

STREET IMPROVEMENTS—Cost not stated. San Anselmo, Marin Co., Cal. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. A resolution was adopted at the last meeting of the Trustees providing for street work on Willow avenue, and the Clerk has been instructed to advertise for bids on the work. Further information may be had from the Clerk of the Trustees at San Anselmo.

SEWER CONSTRUCTION—Cost not stated. Napa, Napa Co., Cal. Engineer, City Engineer, Napa. Owners, City of Napa. Plans and specifications have been completed and approved and the City Council has passed a resolution of intention providing for the laying of an ironstone sewer pipe 8 inches in diameter with 8 Y branches in Nursery street, 245 feet north of Vallejo street, running to a manhole at the intersection of Nursery and Vallejo streets. The resolution also provides for one flushing hole to be constructed of ironstone pipe 8 inches in diameter with iron cap and cover, at the north end of the sewer at Nursery street, also that an 8 inch ironstone pipe with eleven branches be laid in Vallejo street and a cement concrete catch basin. Bids on this work will soon be called for.

STREET IMPROVEMENT—\$8,275.40. Vallejo, Solano Co., Cal. Engineer, City Engineer Kilkenney, Vallejo. Owners, City of Vallejo. Plans have been prepared for the improvement of the alleys in blocks 265, 266, 267, 268 and 269, between Sonoma and Monterey and Georgia and York.

Contracts Awarded

SCHOOL LOCKERS—Metal, \$900. Petaluma, Sonoma Co., Cal. Architect's name not given. Owners, City of Petaluma. Contractors, Ralston Iron Works, S. F. Contract price, \$900.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

RESIDENCE—2 story and base, frame, \$3,500. Fresno, Fresno Co., Cal. Architect, none. Owner, C. Samuelson, 367 Jensen street, Fresno. Location, Fortcamp Addition. Will contain seven rooms, bath and sleeping porch. Separate garage. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

CULVERTS—Reinforced concrete. Hanford, Kings Co., Cal. Engineer,

County Surveyor. Hanford. Owners, Kings County. Bids will be received by the Board of Supervisors up to 2 p. m. of October 16th, 1915, for constructing bridges and culverts on Highway No. 3, in accordance with plans and specifications prepared by the highway commission. The work will involve 89.1 cubic yards of Class A concrete, 90.1 cubic yards of Class B concrete, 354 lineal feet corrugated iron, and 5,763 pounds of reinforcing steel.

CHURCH—1 story and base, frame, \$10,000. Turlock, Stanislaus Co., Cal. Architect, Ralph P. Morrell. Odd Fellows Bldg., Stockton. Owners, Church of Christ, Rev. Brooke, pastor. Will contain main auditorium, Sunday school rooms and pastor's study. Interior finish pine and ornamental plaster. Gas steam radiators. Exterior covered with cement plaster on metal lath. Clay tile roof. Plans being prepared.

IRRIGATION PROJECT—\$200,000. Turlock, Stanislaus Co., Cal. Engineer, R. V. Meikle, Turlock. Owners, Turlock Irrigation District. Engineer R. V. Meikle of the Turlock Irrigation District has started work on the proposed irrigation improvements recently authorized by a bond issue for \$200,000. It is thought the work will be completed about January 1st.

RAILROAD EXTENSION—Cost not stated. Porterville, Tulare Co., Cal. Engineer, Engineering Department Southern Pacific Co., Flood Bldg., S. F. Owners, Southern Pacific Co. Surveys are being completed by the Southern Pacific Company for a branch line of railroad to run from Adobe station on the line of the Porterville Northeastern to the base of Rocky Hill, where are located the granite quarries now in process of development, and then continuing to the base of Magnesite Hill, where the Porterville Magnesite Company is doing extensive work.

RAILROAD CONSTRUCTION—Cost not stated. Patterson, Stanislaus Co., Cal. Engineer's name not given. Owners, Patterson & Western Railroad Co. Patterson. The Patterson & Western Railroad Company has filed articles of incorporation. Among the incorporators are Oscar Engblom, E. R. Leedy, Olseen and T. J. Moe. The capital stock will be \$150,000, of which \$25,000 has been subscribed by Honolulu investors and the balance will be subscribed by the directors. The Hawaiian investors are connected with the Mineral Products Company, owners of the magnesite mines west of this city, to which point it is intended to build a line for the purpose of bringing the ore from the mines to the main line of the Southern Pacific.

STORM WATER SEWER—\$150,000. Fresno, Fresno Co., Cal. Engineer, City Engineer B. E. Cronkite, Fresno. Owners, City of Fresno. The City Engineer has been instructed to prepare plans for a complete storm water sewer system. This work will require between three and four months. Further mention will be made when bids are called.

ROAD CONSTRUCTION—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Plans and specifications having been approved, the County Supervisors have advertised for

bids to be received October 19th for the construction of the Caliente-Kernville road. Further information may be had from the County Engineer at Bakersfield.

STREET PAVING—\$15,000. Fresno, Fresno Co., Cal. Engineer, City Engineer, B. E. Cronkite, Fresno. Owners, City of Fresno. The paving of Santa Fe avenue, a distance of nine blocks is now being considered by the City Council. The Santa Fe Railroad Company owns all of the property along this thoroughfare, and it is understood that they are willing to have the paving laid.

STREET PAVING AND IMPROVEMENT—Cost not stated. Kingsburg, Fresno Co., Cal. Engineer, City Engineer, Kingsburg. Owners, City of Kingsburg. Kingsburg is planning to improve the streets of the city. At the last meeting of the City Trustees, the matter was discussed with the City Engineer and City Attorney and approval given to the plans and specifications for Simpson street. The plans for the other street improvements have not yet been completed. Bids will soon be called for.

Contracts Awarded.

RESIDENCE—2 story and base, frame, \$3,987. Bakersfield, Kern Co., Cal. Architect, none. Owner, Paul Fetchner. Contractor, Charles Scutt, Bakersfield. Contract price, \$3,987.

RESIDENCE—2 story and base, frame, \$7,000. Fresno, Fresno Co., Cal. Architect, Eugene Mathewson, Forsythe Bldg., Fresno. Owner, D. S. Ewing, Fresno. Contractor, Frank Rehorn, Fresno. Contract price, \$7,000.

SEWER EXTENSION SYSTEM—\$10,500. Visalia, Tulare Co., Cal. Engineer, City Engineer, Visalia. Owners, City of Visalia. Contractor, Michael Murphy, S. F. Contract price, \$10,500.

HIGHWAY CONSTRUCTION—Cost as follows. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractors, Worswick Paving Co., Union National Bank, Fresno, Weed Patch loop. Contract price, \$31,460.40. M. T. Kean, Bakersfield, bridges and culverts on McKittrick road. Contract price, \$12,350.78; and the Shattuck & Nimmo Warehouse Co., Bakersfield, paving McKittrick-Bakersfield road. Contract price, \$28,802.95.

SEWER CONSTRUCTION—\$20,300. Santa Barbara, Santa Barbara Co., Cal. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractor, Samuel Kurley, L. A. Contract price, \$20,300.

BRIDGE—Reinforced concrete, \$2,642. Hanford, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractor, Henry E. Walker, L. A. Contract price, \$2,642 and \$8.50 per cubic yard for paving approaches.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

RESIDENCE—1 story and base, frame, \$2,000. Sacramento, Cal. Architect, none. Owner, Tony Carey, 1612 Dana Way, Sacramento. Will contain five rooms and bath. Interior finish pine. Open fire place and tile mantel.

Exterior rustic and cement plaster. Let, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be opened on November 8th at 2 P. M. for the construction of a hay, storage and feed barn at the Stockton State Hospital. Plans can be secured from the State Department of Engineering. An official proposal appears in another column of this issue.

COURT HOUSE—3 story and base, Class A construction, \$200,000. Woodland, Yolo Co., Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, County of Yolo. W. H. Weeks has been officially appointed as the architect to design the new county court house. Other than the fact that the building will be of fireproof construction no details are yet available. Construction will not be undertaken until next year. Further mention will be made of the work.

BRIDGES AND CULVERTS—Reinforced concrete. Cost not stated. Redding, Shasta Co., Cal. Engineer, County Surveyor, Redding. Owners, Shasta County. After adopting the plans and specifications for bridges and culverts on highway No. 3 of the county improved system, the Board of Supervisors instructed County Clerk Pickertill to advertise for bids for the construction of the culverts and bridges. The bids will be opened on October 16th at 2 p. m.

BRIDGE CONSTRUCTION AND EXTENSION—Reinforced concrete, \$1,869. Marysville, Yuba Co., Cal. Engineer, County Surveyor, Marysville. Owners, Yuba County. L. J. Bryan, Marysville, submitted the lowest bid for the construction of the Timbuctoo bridge and will probably be awarded the contract.

CREEK FILL—Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. All bids received by the County Supervisors for the fill on the Salt Creek bridge were rejected, as it was thought the work could be done cheaper by Day Labor, and Supervisor Schafer was authorized to have the work done in that manner.

BRIDGE CONSTRUCTION—Timber and concrete. Cost not stated. Chico, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. The County Supervisors have voted to erect a new bridge over Forbes Creek on the Moncut-Bangor road in Supervisor Whipple's district. The structure is to cost in the neighborhood of \$400 and was ordered built under the emergency act. It was also decided to rebuild bridges Nos. 5 and 7 on the Oroville road. Further information relative to this work may be had from the County Engineer at Oroville.

BRIDGE—Reinforced concrete and steel, \$4,000. Sacramento, Cal. Engineer, County Surveyor, Sacramento. Owners, Sacramento, County. The County Supervisors have appropriated \$2,000 for the construction of the bridge across the P. G. & E. Co.'s canal on the road leading out of Folsom to Orangeville. The P. G. & E. Co. will pay the other \$2,000. Bids on this work will soon be called for.

HAY AND COW BARN—Frame construction, \$2,000. French Camp, San Joaquin Co., Cal. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owners, San Joaquin County. Bids are now being taken for the construction of a hay and cow barn on the County Farm. Plans can be secured from the architect.

HAY, STORAGE AND FEED BARN—Frame construction. Cost not stated. Stockton, San Joaquin Co., Cal. Archi-

tect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be opened on November 8th at 2 P. M. for the construction of a hay, storage and feed barn at the Stockton State Hospital. Plans can be secured from the State Department of Engineering. An official proposal appears in another column of this issue.

SEWER CONSTRUCTION—\$60,000. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Bids received for the construction of the new bond sewer through the southern part of the city indicate that the Contra Costa Construction Co., S. F., and the Ross Construction Co., Sacramento, are the two low bidders. Further mention will be made of the work when contracts are awarded.

SEWER CONSTRUCTION—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The City Commission has adopted a resolution calling for the laying of a sewer along Freeport road, between Burnside and El Dorado avenue.

STREET LIGHTING SYSTEM—Cost not stated. Redding, Shasta Co., Cal. Engineer's name not given. Owners, City of Redding. The proposition of installing a new lighting system in this city is under discussion by the Board of Trustees. The matter will be taken up by the Railroad Commission next month. Business men on Yuba street, between Market and the railroad tracks are now completing arrangements to finance the construction and maintenance of the proposed system. Further information on this work will be given when final arrangements have been started.

ROAD CONSTRUCTION—Cost not stated. Chico, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. In response to a petition presented to the County Supervisors a new road will be built in district No. 14, from Honcut road to the Palermo road, and thence to the Lone Tree road. Plans for the work have already been ordered prepared.

STREET PAVEMENT—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Resolutions providing for the improvement of alleys in the lower section of the city have been passed by the City Commission. The alleys to be improved are in the blocks bounded by Front and Second, W to X; and W and X, 4th to 6th; N and O, 10th to 11th and Oak avenue, 5th to 7th.

SEWER CONSTRUCTION—\$23,042.35. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. E. Bishop, Stockton, submitted the lowest bid at \$16,419.25 for the construction of sewers in South street, McKinley avenue and Edison street. The City Engineer's estimate was \$23,042.35. No award has been made.

Contracts Awarded.

BRIDGES—2, reinforced concrete, \$2,560. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. Contractors, J. L. Mery Co., Chico. Contract price, \$2,560.

SCHOOL—1 story, frame, \$7,960. Florin School District, Sacramento Co., Cal. Architect, George C. Sellon, 1005 K street, Sacramento. Owners, Florin School District. Contractor, E. E. Eiherton, Monadnock Bldg., S F. Contract price, \$7,960.

BRIDGES—Reinforced concrete. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors, Ross Construction Co., Forum Bldg., Sacramento. Contract price not stated.

RAILROAD STATIONS—Frame, \$10,000. Mendocino and Humboldt Counties, Cal. Architect, Engineering Department, Northwestern Pacific, Phenian Bldg., S. F. Owners, Northwestern Pacific Co. Contractors, Mercer-Fraser Co., Eureka. Contract price, \$10,000.

LOS ANGELES AND SOUTHERN CALIFORNIA.

RESIDENCE—2 story and base, brick veneer. Cost not stated. Los Angeles, Cal. Architects, Plummer & Feil, Story Bldg., L. A. Owner, Henry Boos. Location, Lafayette Square. Will contain twelve rooms, three baths and sleeping porch. Interior finish pine and hardwood with white enamel in bed rooms. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heater. Exterior faced with pressed brick veneer. Plans being prepared.

BRIDGE—Reinforced concrete. Cost not stated. Myers Creek, Imperial Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be received on November 1st by the State Highway Commission for the construction of this bridge. It will be about 300 feet long with a main span of 170 feet. Plans can be secured from the office of the State Highway Commission. An official proposal appears in another column of this issue.

BRIDGES—3, reinforced concrete. Cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be received by the Board of Supervisors up to 11 a. m. October 18, 1915, for the construction of three reinforced concrete bridges. They are designated as the Fairview bridge, the bridge across Calleguas Creek and the bridge on Los Angeles avenue, Simi. J. B. McCloskey is the County Clerk.

BRIDGES—Steel and concrete, \$13,500 and \$11,000 each. Santa Barbara, Santa Barbara Co., Cal. Engineer, E. T. Flaherty, L. A. Owners, Santa Barbara County. The Supervisors have ordered bids advertised for on the construction of state highway bridges over Eagle Canyon Creek, and Dos Pueblos Creek. Plans show the Eagle Canyon bridge to be 60 feet long, concrete girder, single span with dirt approaches and cement retaining walls to cost about \$13,500. The plans and specifications for the Dos Pueblos bridge show a 100-foot steel bridge with a concrete deck and two 20-foot concrete approaches to cost \$11,000.

BRIDGE—Steel. Cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor Pettit, Ventura. Own-

ers, Ventura County. County Surveyor Petit has completed plans for a new bridge to be constructed on the Ojai road. It will be of steel construction, and will consist of one 150-foot span, 19 feet above the creek bed.

WAREHOUSE—6 story and base, reinforced concrete, \$300,000. San Pedro, Los Angeles Co., Cal. Engineer, Harbor Commission, San Pedro. Owners, Town of San Pedro. Bids will be received by the Board of Harbor Commissioners up to 10:30 a. m. of October 27th, for all labor and equipment for the erection of a warehouse on Municipal Dock No. 1. The foundation is now under construction. The city will furnish all cement, sand, rock, steel, artificial stone, etc. The building will be 162x180 feet. The work to be done under this contract will require the placing of 27,000 cubic yards of concrete, placing 1,290 tons of reinforcing steel, setting 75 tons of structural steel, finishing 475,000 square feet of floor and about 2,000,000 feet of form lumber.

SCHOOL—1 story and base, brick or hollow tile, \$25,000. Los Angeles, Cal. Architects, Train & Williams, Exchange Bldg., L. A. Owners, City of Los Angeles. Location, west Los Angeles south of Pico. Will contain six rooms and an auditorium. Interior finish pine with maple floors. Central heating system and program clocks. Modern school plumbing and electric work. Exterior faced with cement plaster. Plans being prepared.

ROAD CONSTRUCTION—Cost not stated. Riverside, Riverside Co., Cal. Engineer, County Surveyor, Riverside. Owners, Riverside County. The County Highway Commission has ordered bids received for the construction of the Moreno-Beaumont and Palm Springs highways. The route from Moreno to Beaumont is 10 miles through the Moreno hills. The route from Palm Springs to Indio is 25 miles and terminates at Gard's store in Indio. Further information may be had from the County Engineer at Riverside.

STREET PAVING—Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. A resolution of intention, providing for the paving of Velerio street from Garden to Canal has been adopted by the City Council. Bids will soon be called for on the work.

SEWER CONSTRUCTION—\$15,000. Riverside, Riverside Co., Cal. Engineer, City Engineer, Riverside. Owners, City of Riverside. Preliminary steps have been taken by the City Council towards the construction of the Arlington sewer. The Riverside Council agrees to pay \$5,000 towards the cost of the proposed outfall sewer. The Supervisors have agreed to pay \$5,000 in order that the county hospital and detention home may be included in the sewer district.

ROAD CONSTRUCTION—Cost not stated. Riverside, Riverside Co., Cal. Engineer, County Surveyor, Riverside. Owners, Riverside County. Bids will be opened on October 19th at 3 p. m. for constructing 56½ miles of roads, more or less, and for furnishing 10,000 tons, more or less, of crushed rock, and for furnishing 5,000 barrels, more or less, of asphaltic oil for the Indio

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permanent road division. Further information may be had from the Clerk of the County Supervisors

THEATRE AND STORES—2 story and base, brick, \$25,000. Calexico, Imperial County, Cal. Architects, Allison & Allison, Hibernian Bldg., L. A. Owner, P. E. Carr. Will cover an area of 50 by 140 feet. There will be several stores besides the theatre on the first floor. Interior finish will be of pine and ornamental plaster. Patent store fronts are specified. Exterior will be faced with pressed brick. Plans are being prepared and the work will be done by Day Labor.

Contracts Awarded.

RESIDENCE—2 story and base, hollow tile. Cost not stated. Los Angeles, Cal. Architect, E. E. Rust, Title Insurance Bldg., L. A. Owner, Frank A. Keith. Contractor, John F. Andrews, Hollingsworth Bldg., L. A. Contract price not stated.

RESIDENCE—2 story and base, brick, \$60,000. Pasadena, Los Angeles Co., Cal. Architect, Bertram G. Goodhue, New York, represented by C. W. Winslow, U. S. Grant Bldg., San Diego. Contractor, Thomas C. Marlowe, Story Bldg., L. A. Contract awarded on a percentage basis.

APARTMENT HOUSE—7 story and base, reinforced concrete, \$87,000. Los Angeles, Cal. Architect, John Parkinson, Security Bldg., L. A. Owner, Dr. James H. Edmonds. Contractors, Atlas Planing Mill Co., 830 McGarry street, L. A. Contract price, \$87,000.

PORTLAND AND OREGON.

Contracts Awarded.

REPAIR FIRE DAMAGE—Class C construction, \$50,000. Portland, Ore. Architect, W. W. Lucius, Lewis Bldg., Portland. Owners, Altsky Building. Contractor, George Langford, Portland. Contract price, \$50,000.

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Financing	San Francisco, Cal.
Developments	503 Grant Bldg.
Construction	Los Angeles, Cal.

RICHMOND BUILDING TOTALS.

RICHMOND, Contra Costa Co., Cal.—According to Building Inspector Bert Wierda, during the month of September there were 30 permits issued at an estimated cost of \$16,491 for building construction in this city

Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Am't.
824	Nelson	Nelson	2900
825	Nelson	Nelson	2900
826	Indelicato	Owner	2000
827	Harry	Barry	3900
828	Korich	Ziganto	400
829	Universal Elec.	Hannah	400
830	Portal Rity.	Owner	800
831	McCreedy	McCreedy	1800
832	Quimby	Ross	750
833	Yorzany	Ferguson	800
834	Welsh	Welsh	15000
835	Born	Born	4000
836	Unfried	Rehn	998
837	Same	Holt	700
838	Noste	Gulmes	1875
839	Campanodonia	Higginson	9670
840	Fisher	Fisher	4300
841	Same	Same	4300
842	Tallent	Hurley	850
843	Powers	Hantsche	400
844	Tolentino	Tolentino	1000
845	Galway	Galway	3300
846	Hoffman	Hoffman	4250
847	Conserv Bldg Co.	Owner	4975
848	Same	Same	4975
849	Rucker	Wilson	1000
850	Osborn	Osborn	2800
851	Sudden	Cal Glass	440
852	Griffin	Hamill	2500
853	Shade	Binet	4375
854	Center	Gompertz	1000
855	Conlin	Mulcahy	2750
856	Castella	Ginardi	2000
857	Burris	Klein	1000
858	Anderson	Anderson	2500
859	de la Montanya	Reichley	20200
860	Nippert	Rednall	4800
861	Lamotte	Old	1750
862	McCormick	Johnson	7987
863	Poly College	Sibley	2500
864	Horn	Conolly	1750
865	Battloro	Carraro	6500
866	Heyman	Heyman	2500
867	Rednall	Rednall	4850
868	Shea	Hostman	500
869	Hart	Neldick	400
870	Grace Meth Ch.	Rounds	400
871	Erickson	Erickson	1000
872	Kiesling	Allyn	450
873	Grosjean	Grosjean	400
874	Sarubi	Mullen	400
875	Smith	Disston	1000
876	Fleishmann	Hansen	450
877	Lagomarsino	Owner	400
878	Erickson	Erickson	1800
879	McDiarmid	McDiarmid	400
880	Same	Same	2600
881	Same	Same	2800
882	Same	Same	2000
883	Schulz	Kiernan	863
884	Same	Kunst	642
885	Calegari	Carraro	3600
886	Kennedy	Keenan	10800
887	Eggers	McLelland	3680
888	Ellinwood	Routh	7000
889	Kornberg	Nelson	4255
890	Smith	Disston	988
891	O'Brien	Pac Str Iron	2905
892	Same	Franz	12700
893	Same	Gibbs	4050
894	Same	Chiappa	1920
895	Same	Bandion	7700

Correction in location published Sept. 8, 1915.)

RESIDENCE AND GARAGE

(2503) W FOURTH AVE 295-9½ S
Parnassus Ave S 25xW 105. All work
for two-story frame residence and
one-story garage.

Owner.....Pauline Williams, 1182 9th
Ave., San Francisco.

Architect...None.

Contractor...Cox Bros., 1375 9th Ave.,
San Francisco.

Filed Sept. 7, '15. Dated Sept. 4, '15.

Upon execution of contract, \$350.00
Rough frame up.....662.50

Brown coated 662.50
Completed 662.50
Usual 35 days..... 662.50

TOTAL COST, \$2000.00

Bond, none. Limit, 90 days. Forfeit,
\$5. Plans and specifications filed.

FRAME DWELLING

(2834) E NINETEENTH AVE 75 N
Balboa. Two-story and basement
frame dwelling.

Owner.....Nelson Bros., 515 Dolores,
San Francisco.

Architect...None.

Day's work..... COST, \$2900

FRAME DWELLING

(2835) E NINETEENTH AVE 50 N
Balboa. Two-story and basement
frame dwelling.

Owner.....Nelson Bros., 515 Dolores,
San Francisco.

Architect...None.

Day's work..... COST, \$2900

FRAME FLATS

(2836) N BRAZIL 100 W London. Two
story and basement frame (2) flats.

Owner.....Frank Indelicato, 348
Union, San Francisco.

Architect...None.

Day's work..... COST, \$2000

FRAME DWELLING

(2837) E COLERIDGE 23-4 S Lizzie.
Two-story and basement frame dwlg.

Owner.....J. J. Barry, 59 Prospect
Ave., San Francisco.

Architect...A. W. Richardson, 937
Church, San Francisco.

Day's work..... COST, \$3000

ALTERATIONS

(2838) W GRANT AVE 150 N Broad-
way. Alter exterior and interior of
grill.

Owner.....J. Korich and J. Ziganto,
927 Union, San Francisco.

Architect...None.

Day's work..... COST, \$400

ERECT WALL

(2839) NO. 217 STEVENSON. Erect
wall.

Owner.....Universal Electric & Gas
Co., 705 Market, S. F.

Architect...None.

Contractor...J. D. Hannah, Monadnock
Bldg., San Francisco.

COST, \$400

ALTERATIONS

(2840) S PINE 68-9 E Sansome. Alter
office.

Owner.....Postal Realty Co., 247 Pine,
San Francisco.

Architect...Chas. Paff & Co., 905 Mer-
chant Exchange Bldg., S. F.

Day's work..... COST, \$800

FRAME DWELLING

(2841) S NEY 225 E Congdon. One-
story and basement frame dwelling.

Owner.....E. H. McCreedy, 108 Cong-
don, San Francisco.

Architect...None.

Day's work..... COST, \$1800

FRAME DWELLING

2812 W HILMARTS 97 S Diamond.
One-story and basement frame dwlg.

Owner.....Albert Quimby, 203 Surrey,
San Francisco.

Architect...None.

Contractor...Mr. Ross, 28 Mispah Ave.,
San Francisco.

COST, \$750

ADDITION

(2843) NO. 1749 BUCHANAN. Add
porch, steps, etc.

Owner.....Yorzany Co., Premises.

Architect...None.

Contractor...R. Ferguson, 1672 Geary,
San Francisco.

COST, \$800

FRAME APARTMENTS

(2844) SE FIFTEENTH AVE AND
Geary. Three-story and basement
frame (11) apartments.

Owner.....James Welsh, 519 16th Ave
San Francisco.

Architect...None.

Day's work..... COST, \$15,000

FRAME RESIDENCE

(2845) LOT 24, Ashbury Terrace. Three
story and basement frame residence.

Owner.....S. A. Born Bldg. Co., 660
Market, San Francisco.

Architect...None.

Day's work..... COST, \$4000

FRAME APARTMENTS

(2846) W'CHURCH 64 N 20th N 25xW
100. Sewering, plumbing, gas fitting,
etc., for three-story frame apart-
ments.

Owner.....Mrs. Rosa Unfried, 2815
16th, San Francisco.

Architect...L. M. Weismann & Philipp
Schwerdt, Pacific Bldg.,
San Francisco.

Contractor...Geo. Rehn, 2034 Mission,
San Francisco.

Filed Oct. 2, '15. Dated Oct. 1, '15.

Roughed in \$100

Completed and accepted..... 348

Usual 75 days..... 250

TOTAL COST, \$998

Bond, \$500. Sureties, J. B. Schultz and
B. H. O. Bohr. Limit, without delay.

Forfeit, \$5. Plans and specifications
filed.

(2847) Except sewerage, plumbing,
gas fitting, etc., on above.

Contractor...O. K. Holt, 3877 26th, S. F.

Filed Oct. 2, '15. Dated Aug. 31, '15.

Frame up and enclosed.....\$1450

Brown coated 1450

Standing finish on windows

glazed and hung..... 1450

Completed and accepted..... 1400

Usual 35 days..... 1950

TOTAL COST, \$7700

Bond, \$3850. Sureties, Jas. H. Daly and
Chas. Coburn. Limit, forfeit, none.

Plans and specifications filed.

FRAME COTTAGE

(2848) E CASTRO 76-6 S Army 25x118.

All work for one- and one-half-story frame cottage.

Owner.....Albert and Karoline Noste, 4167 25th, San Francisco.

Architect...None.

Contractor...Victor Gullmies, 1886 Castro San Francisco.

Filed Oct. 4, '15. Dated Sept. 30, '15.

Completed and accepted.....\$1875

TOTAL COST, \$1875

Bond, none. Limit, 65 days. Forfeit, none. Plans and specifications filed.

FRAME APARTMENTS

(2849) E JONES 88 N Washington N 25x E 128-9. All work except painting, beds, electrical fixtures, shades and finish hardware for three-story and basement frame apartments.

Owner.....Sarah Campodonico, wife Charles, Care 360 Davis, San Francisco.

Architect...Rousseau & Rousseau, 110 Sutter, San Francisco.

Contractor...Higginson Co. Inc., Humboldt Bank Bldg., S. F.

Filed Oct. 4, '15. Dated Oct. 1, '15.

Frame up\$2417.50

Brown coated 2417.50

Completed and accepted..... 2417.50

Usual 35 days..... 2417.50

TOTAL COST, \$9670.00

Bond, \$4835. Sureties, J. H. McCallum and E. O. Benner. Limit, 90 days. Forfeit, \$15. Plans and specifications filed.

FRAME DWELLING

(2850) LOT 24 BLK 2988 Claremont Court. Two-story and basement frame dwelling.

Owner.....M. Fisher, 683 Mission, San Francisco.

Architect...D. C. Coleman, Merchants' Nat'l Bank Bldg., S. F.

Day's work. COST, \$4300

FRAME DWELLING

(2851) LOT 15 BLK 2988 Claremont Court. Two-story and basement frame dwelling.

Owner.....M. Fisher, 683 Mission, San Francisco.

Architect...D. C. Coleman, Merchants' Nat'l Bank Bldg., S. F.

Day's work. COST, \$4300

CONCRETE GARAGE

(2852) S GREEN 103 E Divisadero. Erect reinforced concrete garage.

Owner.....Mr. Tallent, Care Architect.

Architect...E. E. Young, 251 Kearny, San Francisco.

Contractor...Patrick Hurley, 578 Elizabeth, San Francisco.

COST, \$350

ALTERATIONS

(2853) NO. 178 TENTH AVE. Alter dwelling.

Owner.....J. J. Powers, Premises.

Architect...None.

Contractor...Hantzsche & McKay, 528 31st Ave., San Francisco.

COST, \$400

FRAME DWELLING

(2854) W LANE 50 N 24th. One-story frame dwelling.

Owner.....Mrs. Isabel Tolentino, 72 Stillman, San Francisco.

Architect...None.

Day's work. COST, \$1000

FRAME DWELLING

(2855) E FIFTEENTH AVE 200 N

Judah. Two-story and basement frame dwelling.

Owner.....Hugh Galway, 420 Pierce, San Francisco.

Architect...None.

Day's work. COST, \$3300

FRAME FLATS

(2856) S SEVENTEENTH 250 E Dolores. Two-story and basement frame flats.

Owner.....R. W. Hoffman, 1734 Turk, San Francisco.

Architect...None.

Day's work. COST, \$4250

FRAME DWELLING

(2857) S ALTON 141 E Ninth Ave. Two-story and basement frame dwlg.

Owner.....Conservative Bldg. & Invst. Co., C. A. Roberts, Supt., Phelan Bldg., S. F.

Architect...None.

Day's work. COST, \$4975

FRAME DWELLING

(2858) S ALTON 148-6 E Ninth Ave. Two-story and basement frame dwlg.

Owner.....Conservative Bldg. & Invst. Co., C. A. Roberts, Supt., Phelan Bldg., S. F.

Architect...None.

Day's work. COST, \$4975

REPAIRS

(2859) NO. 1741 O'FARRELL. General repairs for market.

Owner.....J. H. Rucker, agent, Post bet Montgomery & Kearny San Francisco.

Architect...None.

Contractor...Wilson & Christensen, 89 Broadway, San Francisco.

COST, \$1000

FRAME DWELLING

(2860) E NAPLES 30 S Munich. Two-story and basement frame dwelling.

Owner.....R. N. Osborn, 709 5th Ave., San Francisco.

Architect...C. O. Clausen, Hearst Bldg. San Francisco.

Day's work. COST, \$2800

GLASS AND GLAZING

(2861) N WASHINGTON 103 W Spruce N 127-8 1/4 x W 62-6. Glass and glazing for building.

Owner.....Margaret E. Sudden, 62 Jordan Ave., S. F.

Architect...G. A. Applegarth, Claus Spreckles Bldg., S. F.

Contractor...California Plate & Window Glass Co., 864 Mission, San Francisco.

Filed Oct. 5, '15. Dated Sept. 28, '15.

On list of each month..... 75%

Usual 35 days..... 25%

TOTAL COST, \$440

Bond, none. Limit, as fast as possible.

Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

(2862) W FORTY-SIXTH AVE 225 S Cabrillo S 25xW 120. All work for two-story frame residence.

Owner.....Jessie A. Griffin, 612 Buchanan, San Francisco.

Architect...None.

Contractor...Thos. Hamill, 268 25th Ave., San Francisco.

Filed Oct. 5, '15. Dated Oct. 5, '15.

Rough frame up and roof boards

on\$625

Brown coated 625

Completed and accepted..... 625

Usual 35 days..... 650

TOTAL COST, \$2500

Bond, none. Limit, 70 days. Forfeit, none. Plans and specifications filed.

FRAME FLATS

(2863) N SEVENTEENTH 86-3 E Guerrero 24x102. All work except plumbing for two-story frame flats.

Owner.....Louis G. and Elizabeth Shade, 336-A Capp, S. F.

Architect...None.

Contractor...John J. Binet Co., 88 Ramona, San Francisco.

Filed Oct. 5, '15. Dated Oct. 4, '15.

Frame up\$1093.75

Brown coated 1093.75

Completed 1093.75

Usual 35 days..... 1093.75

TOTAL COST, \$4375.00

Bond, none. Limit, 90 days after Oct. 11. Forfeit, none. Plans and specifications filed.

CONCRETE FLOOR

(2864) N SIXTEENTH 50 W Folsom. Concrete floor for stores.

Owner.....The John Center Co., 660 Market, San Francisco.

Architect...None.

Contractor...Chas. W. Gompertz, 503 Market, San Francisco.

COST, \$1000

BRICK WAREHOUSE

(2865) W MARY, bet. Minna and Natoma. One-story brick warehouse.

Owner.....J. Conlin.

Architect...R. H. Moss.

Contractor...Mulcahy Bros., 180 Jessie, San Francisco.

COST, \$2750

FRAME DWELLING

(2866) NE THOMAS 125 S Lane. One-story and basement frame dwelling.

Owner.....J. Casella, 1440 Van Dyke, San Francisco.

Architect...J. Devenenzi, 1069 Union, San Francisco.

Contractor...G. Ginardi, 938 Rutland, San Francisco.

COST, \$2000

FRAME DWELLING

(2867) E TENTH AVE 175 S Noriega. One-story and basement frame dwlg.

Owner.....T. A. Burris, 116 Lyon, S. F.

Architect...None.

Contractor...F. A. Klein, 1423 24th Ave., San Francisco.

COST, \$1000

FRAME DWELLING

(2868) W NINTH AVE 200 S Kirkham. Two-story and basement frame dwlg.

Owner.....A. V. Anderson, 1604 10th Ave., San Francisco.

Architect...None.

Day's work. COST, \$2500

ALTERATIONS

(2869) SE WASHINGTON & DRUMM S 115x137-6. Alterations and additions to make two-story and basement brick Class "C."

Owner.....Sarah Jane de la Montanya, 1760 Pacific Ave., S. F.

Plans by...J. de la Montanya, 1104 Nevada Bank Bldg., S. F.

Contractor...George Reichley, 353 Haight, San Francisco.

Filed Oct. 5, '15. Dated Oct. 4, '15.

in floor joists of front of
lin raised and 2d floor joists
and columns and girders in
ce\$2000
eck walls carried half height
2d story 2000
eck walls carried to ceiling
sts and trusses and roof
ards on 2250
of on, floors laid, glass, sash
d doors set 2772
in floor joists of rear set, 2nd
or joists of rear set and street
umns and girders set 2665
ompleted and accepted 3463
ual 35 days 5050
TOTAL COST, \$20,200
\$10,100. Surety, Maryland Casu-
Co. Limit, 90 days. Forfeit, \$25.
a and specifications filed.

ME DWELLING

(1) S FILBERT 137-6 W Baker W
S 137-6. All work for two-story
me dwelling.
er.....Paul M. Nippert, 433 Cali-
fornia, San Francisco.
itect.....None.
ractor.....W. W. Rednall, 2500 Fil-
bert, San Francisco.
d Oct. 5, '15. Dated Oct. 2, '15.
of on\$1200
t coat plaster on 1200
ompleted 1200
ual 25 days 1200
TOTAL COST, \$4800
\$4,000. Sureties, J. C. Doherty and
W. Lee. Limit, 90 days. Forfeit,
Plans and specifications filed.

ME COTTAGE

(1) E ELEVENTH AVE 25 N Law-
m. All work for four-room frame
tting with garage.
er.....Louis Lamotte, Elvarano,
California.
itect.....None.
ractor.....Geo. H. Old, Pittsburg, Cal
d Oct. 5, '15. Dated Sept. 15, '15.
ans & specifications approved.\$ 50
umber ordered 100
undation walls in 150
oors laid 200
of on 200
outside painted 200
umping roughed in 150
t coat plaster on 150
ompleted and accepted 125
ual 35 days 425
TOTAL COST, \$1750
\$900. Surety, R. H. Old. Limit,
days. Forfeit, \$100. Plans and
ifications filed.

AME APARTMENTS

(2) NW FIFTH AVE & CABRILLO
25xW 95. All work for two-story
ame apartments.
er.....John McCormick, Prem.
hitect.....W. H. Crim Jr., 425 Kear-
ny, San Francisco.
ractor.....J. Harold Johnson, 740 9th
Ave., San Francisco.
d Oct. 6, '15. Dated Oct. 2, '15.
rame pp and roof on\$1996.75
terior plaster done and rough
at on interior 1996.75
ompleted and accepted 1996.75
ual 35 days 1996.75
TOTAL COST, \$7987.00
\$3994. Sureties, Dante Segherl
H. A. Norman. Limit, 80 days.
felt, \$5. Plans and specifications
d.

ENCAVATION, ETC.

(2873) SW FOLSOM AND TWENTY-
sixth W 170 S 150-9¼ SE 175 N 173.
Excavation, filling, grading, lagging
and bracing for three-story and base-
ment Class "A" building.
Owner.....Jas. W. Kerr et al as Board
of Trustees Cogswell Poly-
technical College by Lange
& Bergstrom, Sharon Bldg.
San Francisco.
Architect...F. H. Meyer, Bankers In-
vestment Bldg., S. F.
Contractor..Sibley Grading & Teaming
Co., 180 Jessie, S. F.
Filed Oct. 6, '15. Dated Oct. 4, '15.
On 10th of each month 75%
Usual 35 days 25%
TOTAL COST, \$2500
Bond, limit, forfeit, none. Plans and
specifications, none.

REPAIRS

(2874) NOS. 2801-2803 MARIPOSA and
506 and 508 Florida. Repairs to
buildings damaged by fire.
Owner.....Elizabeth A. Horn, 1204
Jackson, San Francisco.
Architect...J. J. Connolly.
Contractor..J. J. Connolly, 180 Jessie,
San Francisco.
Filed Oct. 6, 15. Dated Oct. 4, 15.
15 days after work starts.... 75%
15 days after 1st payment.... 75%
When finished 75%
Usual 35 daysFinal
TOTAL COST, \$1750.45
Bond, none. Limit, 30 days. Forfeit,
none. Plans and specifications, none.

FRAME FLATS AND STORES

(2875) NW MISSION 229.62 NE Valen-
cia NE 30 NW 159-2¼ m or 1 S
35-2¼ m or 1 SE 140-9¼. All work
except light fixtures, shades and
electric radiators for three-story and
basement frame flats and stores.
Owner.....C. Batlloro, 1453 Valencia,
San Francisco.
Architect...Paul F. De Martini, 2123
Powell, San Francisco.
Contractor..Guiseppe & Pietro Carraro,
750 Felton, San Francisco.
Filed Oct. 6, '15. Dated Oct. 2, '15.
Frame up and roof on\$1625
Brown coated 1625
Completed and accepted 1625
Usual 35 days 1625
TOTAL COST, \$6500
Bond, \$3250. Sureties, Guiseppe Laga-
marsino and Peter F. Ferrari. Limit,
30 days from Oct. 5. Forfeit, \$5. Plans
and specifications filed.

FRAME DWELLING

(2876) W SIXTH AVE 200 S Geary.
Two-story and basement frame dwlg.
Owner.....Oscar Heyman & Bro., 742
Market, San Francisco.
Architect.....None.
Day's work COST, \$2500
FRAME DWELLING
(2877) S FILBERT 164 W Baker. Two
story and basement frame dwelling.
Owner.....W. W. Rednall, 2500 Fil-
bert, San Francisco.
Architect.....None.
Day's work COST, \$4830

REPAIRS

(2878) NO. 348 GOLDEN GATE AVE.
Repair roof, plastering, etc.
Owner.....Mrs. A. Shea, 1392 Golden
Gate Ave., S. F.

Architect...None.

Contractor..E. Hostman, 210 4th Ave.,
San Francisco.
COST, \$500

FRAME GARAGE

(2879) W QUANE 183 S 22nd. One-
story frame garage.
Owner.....Frank P. Hart, 937 Dolores
San Francisco.
Architect...M. J. Welsh, 915 Treat Ave
San Francisco.
Contractor..Frank Neidick, 2669 How-
ard, San Francisco.
COST, \$400

FRAME HALL

(2880) NW CAPP AND TWENTY-
first. One-story frame social hall.
Owner.....Grace Methodist Church,
Premises.
Architect...None.
Contractor..F. A. Rounds, 135 Cole-
ridge, San Francisco.
COST, \$100

FRAME DWELLING

(2881) W LEE AVE 50 N Grafton.
One-story and basement frame dwlg.
Owner.....Henry Erickson, 95 Bemis,
San Francisco.
Architect...None.
Day's work COST, \$1000

ALTERATIONS

(2882) NW BUSH AND GRANT AVE.
Wood turring, metal lath and plaster
in basement.
Owner.....Mrs. Hannah Keesing, 349
34th, Oakland.
Architect...None.
Contractor..Stockholm & Allyn, Mo-
nadnock Bldg., S. F.
COST, \$250

FRAME HULL HOUSE

(2883) NE HARRISON AND 20TH.
One-story frame hull house.
Owner.....C. E. Grosjean, Premises.
Architect...Wm. B. Schuyler, Premises
Contractor..C. E. Grosjean Mfg. Co.,
Premises. COST, \$400

NEW FRONT

(2884) SE GRANT AVE AND GREEN
New store front.
Owner.....Frank Sarubi, Premises.
Architect...None.
Contractor..Mullen Mfg. Co., 20th and
Treat Ave., San Francisco.
COST, \$400

ALTERATIONS

(2885) NO. 791 CASTRO. Alter and
add to dwelling.
Owner.....Mrs. Mary Smith, Premises.
Architect...None.
Contractor..A. E. Disston, 721 Clement,
San Francisco.
COST, \$1000

ADDITION

(2886) TWENTY-THIRD & MINNE-
sota. Add one room to shop.
Owner.....Fleishmann Co., 947 Mis-
sion, San Francisco.
Architect...None.
Contractor..C. W. Hansen, 110 Jessie,
San Francisco.
COST, \$450

ALTERATIONS

(2887) NO. 566 LONDON. Raise and
remodel dwelling.
Owner.....V. Lagomarsino, Premises.
Architect...None.
Day's work COST, \$400

FRAME DWELLING

(2888) E TWENTY-SIXTH 134½ S
Vincente. One-story and basement
frame dwelling.
Owner.....Carl A. Erickson, 2624
26th Ave., San Francisco.
Architect...None.
Day's work. COST, \$1800

ALTERATIONS

(2889) W TWENTY-SIXTH 97-6 E Do-
lores. Move and repair dwelling.
Owner.....W. G. McDiarmid, 394 Fair
Oaks, San Francisco.
Architect...None.
Day's work. COST, \$400

FRAME FLATS

(2896) E DOLORES 25 N 26th. Two-
story and basement frame (2) flats.
Owner.....W. G. McDiarmid, 394 Fair
Oaks, San Francisco.
Architect...None.
Day's work. COST, \$2600

FRAME FLATS

(2891) NE DOLORES AND TWENTY-
sixth. Two-story and basement
frame (2) flats.
Owner.....W. G. McDiarmid, 394 Fair
Oaks, San Francisco.
Architect...None.
Day's work. COST, \$2800

FRAME FLATS

(2892) N TWENTY-SIXTH 70 E Do-
lores. Two-story and basement frame
(2) flats.
Owner.....W. G. McDiarmid, 394 Fair
Oaks, San Francisco.
Architect...None.
Day's work. COST, \$2000

FRAME APARTMENTS

(2893) W MISSION 190-9 N 25th N 25x
W 117-6. Plumbing, gas work and
drainage for three-story frame apart-
ments.
Owner.....Annie M. Schulz, Guerrero
near Army, San Francisco.
Architect...Jno. J. Foley, 46 Kearny,
San Francisco.
Contractor...Kiernan & O'Brien, 232
Hartford, San Francisco.
Filed Oct. 7, '15. Dated Sept. 18, '15.
Work roughed in.....\$325.50
Completed and accepted..... 325.50
Usual 35 days..... 216.00
TOTAL COST, \$863.00
Bond, \$450. Sureties, Herman Lawson
and J. H. Pinkerton. Limit, 40 days.
Forfeit, none. Plans and specifications
filed.

(2894) PAINTING, STAINING AND

varnish on above.
Contractor...Henry Kunst.
Filed Oct. 7, '15. Dated Aug. 21, '15.
1st coat on outside and inside.....\$241.25
Completed and accepted..... 241.25
Usual 35 days..... 161.00
TOTAL COST, \$642.00
Bond, \$325. Sureties, N. A. Carlson and
Hugh Kennedy. Limit, 30 days. For-
feit, none. Plans and specifications filed.

FRAME FLATS

(2895) S CONNECTICUT 125 S 17th 25
x100. All work except gas fixtures
window shades and finish hardware
for two-story frame flats.
Owner.....G. and Maria Calegari, 128
Mississippi, San Francisco.
Architect...None.
Contractor...P. Carraro, 320 Felton,

San Francisco.

Filed Oct. 7, '15. Dated Oct. 3, '15.
Frame up\$900
Brown coated 900
Completed and accepted..... 900
Usual 35 days..... 900
TOTAL COST, \$3600

Bond, \$1800. Sureties, Rafael Barone
and Carraro. Limit, 70 days after Oct.
11. Forfeit, none. Plans and specifi-
cations filed.

FRAME FLATS

(2896) E ELEVENTH AVE 50 S Geary
S 50x E 82-6. Carpenter, plumbing,
painting, plaster, etc., for two-story
and basement frame flats.
Owner.....E. P. Kennedy, 63 7th Ave.,
San Francisco.
Architect...None.
Contractor...H. C. Keenan, 300 Webster,
San Francisco.

Filed Oct. 7, '15. Dated Sept. 27, '15.
Frame up and enclosed.....\$2700
Brown coated 2700
Completed 2700
Usual 35 days..... 2700
TOTAL COST, \$10,800

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

FRAME RESIDENCE

(2897) E TWELFTH AVE 75 S Balboa
S 25x E 95. All work for two-story
frame residence.
Owner.....Nellie R. Eggers, 190 Par-
nassus Ave., San Francisco.
Architect...John H. Von Ahnden, 251
Kearny, San Francisco.
Contractor...R. & J. S. McLelland, 530
12th Ave., San Francisco.
Filed Oct. 7, '15. Dated Oct. 4, '15.
Frame up\$920
Rough plumbing in and brown
coated 920
Completed and accepted..... 920
Usual 35 days..... 920
TOTAL COST, \$3680
Bond, \$1840. Sureties, A. Ratto and A.
R. Lapham. Limit, 90 days. Forfeit,
\$. Plans and specifications filed.

FRAME RESIDENCE

(2898) E DIVISADERO 102-8¼ N Jack-
son N 25x E 110. All work for three
story and basement frame residence.
Owner.....Elizabeth S. Ellinwood, 200
Cherry, San Francisco.
Architect...Russell L. Monson, 803
Merchants' National Bank
Bldg., San Francisco.
Contractor...Henry E. Routh, 76 De
Soto, San Francisco.
Filed Oct. 7, '15. Dated Oct. 7, '15.
Ready for lath and plaster.....\$1750
Finish coat plaster on..... 1750
Completed and accepted..... 1750
Usual 35 days..... 1750
TOTAL COST, \$7000

Bond, \$3750. Sureties, L. D. McDonald
and Geo. Hauptman. Limit, 75 days
from recording. Forfeit, \$. Plans and
specifications filed.

FRAME FLATS

(2899) E HARTFORD 145 S 19th 28x
flats.
Owner.....Anna Egelberg.
Architect...Arthur C. Scholz, Phelan
Bldg., San Francisco.
Contractor...Gust R. Nelson, 211 Dia-
mond, San Francisco.
Filed Oct. 8, '15. Dated Sept. 30, '15.
Frame up ready for roofing....\$1065

Brown coated 1065
Completed and accepted..... 1065
Usual 35 days..... 1070
TOTAL COST, \$4265
Bond, \$2135. Surety, The Aetna Ac-
cident Liability Co. Limit, 90 days. For-
feit, none. Plans and specifications
filed.

ALTERATIONS

(2900) NO. 791 CASTRO. All work ex-
cept plumbing and gas fitting for
alterations to residence into flats.
Owner.....Mary A. Smith, Premises.
Architect...None.
Contractor...Albert Disston, 721 Cle-
ment, San Francisco.
Filed Oct. 8, '15. Dated Oct. 5, '15.
Ready for rough plaster..... 25%
Mill work on job..... 25%
Completed and accepted..... 25%
Usual 35 days..... 25%
TOTAL COST, \$983.35
Bond, \$495. Surety, O. D. Disston.
Limit, without delay. Forfeit, none.
Plans and specifications filed.

CLASS "C" APARTMENTS

(2901) S BUSH 187-6 W Mason W 42
xS 137-6. Structural iron and bay
window framing, bond iron and
anchors for four-story and basement
Class "C" apartments.
Owner.....O'Brien Bros., Inc., 240
Montgomery, S. F.
Architect...O'Brien Bros., Inc., 240
Montgomery, S. F.
Contractor...Pacific Structural Iron
Works, 370 10th, S. F.
Filed Oct. 8, '15. Dated Sept. 22, '15.
On 1st and 15th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$2275
Bond, none. Limit, 30 days. Forfeit,
none. Plans and specifications filed.

(2902) CARPENTRY, ETC., on above.

Contractor...Val Franz & Son, 185
Stevenson, San Francisco.
Filed Oct. 8, '15. Dated Sept. 22, '15.
Building roofed\$3175
Standing finish on..... 3175
Completed and accepted..... 3175
Usual 35 days..... 3175
TOTAL COST, \$12,700
Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

(2903) PLUMBING, SEWERING AND

gas fitting on above.
Contractor...J. Gibbs, 2505 California
San Francisco.
Filed Oct. 8, '15. Dated Sept. 22, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$4050
Bond, none. Limit, 100 days. Forfeit,
none. Plans and specifications filed.

(2904) CONCRETE AND CEMENT

work on above.
Contractor...C. Chiappa Co.
Filed Oct. 8, '15. Dated Sept. 16, '15.
50% walling in place.....\$500
Completed and accepted..... 940
Usual 35 days..... 450
TOTAL COST, \$1920
Bond, none. Limit, 30 days. Forfeit,
\$. Plans and specifications filed.

(2905) BRICK WORK, FLUES, WALL

cementing on above.
Contractor...Brandon & Lawson, Hearst
Bldg., San Francisco.

Filed Oct. 8, '15. Dated Sept. 22, '15.
Weekly payments of..... 75%
Usual 35 days..... 25%
TOTAL COST, \$7700
Bond, none. Limit, 40 days. Forfeit,
none. Plans and specifications filed.

INCORPORATIONS

Pals Supply Co. Capitol Stock, \$10,-
000; subscribed, \$3; shares, \$1 each.
Directors—F. Sellinger, R. H. Redwood,
M. R. Hawkins, 1 share each. Place of
business, San Francisco.

Ellis Street Investment Co. To deal
in amusement places and theatrical en-
terprises. Capital Stock, \$1,000,000;
amount subscribed, \$300; 10,000 shares
at \$100 each. Place of business, San
Francisco. Directors—Allen Moyer, A.
E. Kern, B. G. McDougall, 1 share each.

LEASES.

Oct. 4, 1915—NW OAKDALE AVE AND
Quint; No. 1901 Oakdale Ave. Jno.
McDonough to Frank J Giblin. 5
years. \$2100 with option to renew.
Oct. 4, 1915—W MISSION 110-9½ S 23rd
S 50x125. James Crichton to P.
George, 10 years. \$34,800.
Oct. 6, 1915—NO. 656 PACIFIC, N line
bet. Grant Ave and Kearny. Mrs.
Wong Him to Toyokichi Jojima.
36 months. \$5100.
Oct. 6, 1915—NO. 101 PIERCE and 600
Waller NW Waller and Pierce. O B
Marlin, Gdn Estate Edgar W Hinkel,
incept. to Gottlieb Kugler. 5 years.
\$2380.
Oct. 7, 1915—NO. 493 NINTH. Henry
Hielberg to Andrew H Maass. 9
years. \$50 per month and option to
store ad.
Oct. 7, 1915—W VALENCIA 122 S 16th.
C F Hornung to Geo P Sonne. 5
years. \$50 per month with option
to renew.
Oct. 5, 1915—NO. 2443 CALIFORNIA,
Cor. Steiner. William Trost to Con-
stantine Alexander. 4 years. \$32.50
per month.
Oct. 5, 1915—S LOMBARD 88 E Octa-
via 16x31-3. Chas H Mohaupt to
Sabatino Parla. 12 years. \$1440.

NOTICE OF NON-RESPONSIBILITY.

Oct. 6, 1915—NW BROADWAY AND
Grant Ave.; No. 1203 Grant Ave.
Gus Harshall as to improvements
on leased property.....
Oct. 6, 1915—LOT 23 BLK 9 Crocker
Amazon Tract. Crocker Estate Co
as to improvements on leased
property.....
Oct. 6, 1915—LOT 24 BLK 642 Crocker
Amazon Tract. Crocker Estate
Co as to improvements on leased
property.....
Oct. 4, 1915—S O'FARRELL 137-6 W
Powell W 60xS 117-6. Katherine
Billion Winship as to improvements
on leased property.....

RELEASE OF BUILDING CONTRACT.

Oct. 4, 1915—S FILBERT 164 W
Baker W 26-6xS 137-6. Paul Nip-
pert with W W Rednall. Released
.....Oct. 2, 1915

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED

Oct. 1, 1915—SW DIVISION AND
Kansas S 260 W 200 N 191 NE to
S Division E 57. John C Rapp to
Jas S Fennell.....Sept. 28, 1915
Oct. 1, 1915—NE UNION & BAKER
N 100x E 25. Otto H Maskroth to
Joel Johnson.....Sept. 30, 1915
Oct. 1 1915—S TWELFTH & MAR-
ket SW 25-11 SE parallel with 12th
90 SW 50 SE 75 NE 75-11 NW 165.
I I Dehail to Judson Mfg Co.....
.....Sept. 20, 1915
Oct. 1, 1915—W TWENTY-SIXTH
Ave 225 N California N 25xW 120.
John J and Ethel L Walsh to
Mooney & McDonald.....Oct. 1, 1915
Oct. 4, 1915—SW CALIFORNIA AND
Mason W 77-6xS 60. S W Morshead
To The Automatic Refrigerating Co.
.....Sept. 27, 1915
Oct. 4, 1915—W GOUGH 90 N O'Far-
rell N 30xW 137-6. S D Michels to
A M Wallen.....Sept. 29, 1915
Oct. 2, 1915—E BRANNAN & FIRST
SE 140xNE 29.5. Frank G Drum
and Warren Olney Jr, receivers of
Ppty of Western Pacific Railway
Co to C A Day Co.....Sept. 25, 1915
Oct. 4, 1915—E BEALE 137.6 N Mis-
sion 91.10x137.6. S S Parsons to
Nilson & Arras.....Oct. 4, 1915
Oct. 4, 1915—N TWENTY-SECOND
250 W Sanchez W 25xN 114. Jno
J and Mary Grady to whom it may
concern.....Sept. 29, 1915
Oct. 5, 1915—N ELLIS 55 W Jones N.
120xW 52-6. The Peter Windeler
Co to M A De Lew.....Sept. 29, 1915
Oct. 5, 1915—LOT 22 and E 167 Lot
21 Blk 2818 Forest Hill Court. The
Newell-Murdoch Realty Co to Hig-
ginson Co, Inc.....Oct. 4, 1915
Oct. 5, 1915—N BERNARD 98-6 W
Jones 21x60. Pietro Ratto and wife
to Guisepe and Pietro Ratto.....
.....Oct. 2, 1915
Oct. 5, 1915—LOT 10 BLK 1, College
Hill Tract. Alphonse Nold to
Michael Costello and Bryan Peerlek
.....Oct. 4, 1915
Oct. 5, 1915—W TWENTIETH AVE
150 N Anza. A M Sylvia to whom
it may concern.....Oct. 5, 1915
Oct. 6, 1915—W ELEVENTH AVE 150
N Irving; No. 1271 11th Ave. H W
and Jeanette Thumler to whom it
may concern.....Oct. 6, 1915
Oct. 6, 1915—S GROVE 110-9½ W
Polk W 24—E 24 N 80. Eugene &
George Moran to Mulcaby Bros...
.....Oct. 5, 1915
Oct. 6, 1915—N POST 68-11½ W Hyde
W 24-4½xN 137-6. Wm J and
David Turner to whom it may con-
cern.....Oct. 6, 1915
Oct. 7, 1915—N GEARY 95 W Ninth
Ave W 25xN 100. Mrs M F (Annie)
and Martin F Dooley to Richard
Dunning.....Oct. 5, 1915
Oct. 7, 1915—W EIGHTEENTH AVE
250 S Anza (A) S 25xW 120. Jas
Welsh to whom it may concern...
.....Oct. 1, 1915
Oct. 7, 1915—SE VALENCIA AND
Sycamore Ave 35x80. Moore Invst
Co to J S Hannah.....Oct. 6, 1915
Oct. 6, 1915—W TWENTIETH AVE
325 S Geary S 25xW 120. Alfred

Johnson to whom it may concern
.....Oct. 4, 1915
Oct. 7, 1915—NE TWENTY-THIRD &
Louisiana. Western Sugar Refining
Co, copartnership of John D
Spreckels and A B Spreckels to
Dyer Bros Golden West Iron Works
.....Oct. 2, 1915
Oct. 8, 1915—E ELEVENTH AVE 30 S
Judah S 30x E 75. M A McCann to
Schroder Bros.....Oct. 8, 1915
Oct. 8, 1915—E ELEVENTH AVE 60
S Judah S 29x E 75. M A McCann
to Schroder Bros.....Oct. 8, 1915
Oct. 8, 1915—S JUDAH 75 E 11th Ave
E 25xS 90. M A McCann to Schroder
Bros.....Oct. 8, 1915
Oct. 8, 1915—SE JUDAH AND 11TH
Ave S 30x E 75. M A McCann to
Schroder Bros.....Oct. 8, 1915
Oct. 8, 1915—E THIRTEENTH AVE
57-6 S Cabrillo S 27-6x E 92-6.
Abram Zacharousky to whom it
may concern.....Oct. 4, 1915
Oct. 8, 1915—W NINETEENTH AVE
100 S Lake S 27-6xW 120. San
Francisco Bldg Co to whom it may
concern.....Oct. 2, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

Oct. 1, 1915—NE CHURCH & ARMY
N 51-6x E 96. Christen Eriksen vs
Jno G and Elizabeth Trapp.....\$16.70
Oct. 1, 1915—E CHURCH 25 N Army
N 25x E 96. Geo W Peek vs John
and Mrs John (Elizabeth) Trapp
and John Cerda.....\$12.50
Oct. 1, 1915—NE CHESTNUT AND
Franklin N 275 E 275 S 137-6 W
82-6 E 137-6 W 192-6. L A Williams
vs M C Goni, E Garcia and M E
Goni and E Garcia (as Garcia &
Goni), Panama Pacific Interna-
tional Exposition cpn, Julia Rossi,
Thos M Furlong et al.....\$975
Oct. 1, 1915—NE CHURCH & ARMY
N 51-6x E 96. Spring Valley Lum-
ber Yard vs John G and Elizabeth
Trapp and John Cerda.....\$545.81
Oct. 2, 1915—N OAK 157-6 W Van
Ness Ave W 89-9 N 120 E 68-9 S 40
E 21 S 80. Ward & Goodwin vs The
Young Men's Institute Hall Asso-
ciation.....\$8296.58
Oct. 4, 1915—NE CHURCH & ARMY
N 51-6x E 96. Palma & Ghiotto vs
John G and Elizabeth Trapp and
John Cera.....\$40.37
Oct. 5, 1915—NE ARMY & CHURCH
N 51-6x E 96. P Grassi and A Minu-
toli (as P Grassi & Co) vs J Cerda
and John G and Elizabeth Trapp.....\$52
Oct. 5, 1915—NE CHURCH & ARMY
N 51-6x E 96. Cornelius Lynch vs
John G and Elizabeth Trapp and
Jno Cerda.....\$21.50
Oct. 6, 1915—NE ARMY & CHURCH
N 51-6x E 96. Gonzalo Rodriguez
vs Jno G and Elizabeth Trapp and
Jno Cerda or Zerda.....\$158.50
Oct. 6, 1915—NE CHURCH & ARMY
N 51-6x E 96. Basil McDonald vs
John G and Elizabeth Trapp and
John Cerda.....\$12.50
Oct. 5, 1915—SE JUDAH AND 47TH
Ave E 32-6xS 100; W 47th Ave 150
N Kirkham N 100xW 120. J J
Callish vs Harry B Young.....\$120

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

Oct. 1, 1915—E DIVISADERO 152-8 1/4 N Clay N 25xE 110. Mission Concrete & Mosaic Co to Juliette Block and Steur & Bury.....
 Oct. 5, 1915—NW BRUNSWICK 153 SW Lowell SW 25xNW 213. H Blendes to Abraham and Nellie Clemo.....
 Oct. 7, 1915—E GRANT AVE 77-6 N Bush E 50xN 30. J Picioni to Herman Heskins, Cecil E McMullin, R W Von Voorhies (as McMullin & Von Voorhies Co).....
 Oct. 6, 1915—NW CHESTNUT AND Larkin N 56-3x187-6. C L Wold Co to Alice K and Clark (or Scott) Burnham.....
 Oct. 5, 1915—W HARTFORD 201 S 19th S 22xW 125. Bishop & Peirano to Ugo Arrigoni.....\$130

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Amt.
2044	Heinemann	Owner	450
2045	Young	Young	400
2046	Flittner	Dooley	1500
2047	McDonald	Anthony	6635
2048	Key route	Owner	400
2049	Key Route	Owner	750
2050	Key Route	Owner	800
2051	Key Route	Owner	800
2052	Key Route	Owner	6635
2053	Lind	Haskell	1453
2054	Staudenmeyer	Bassett	400
2055	Merritt	Wolfe	850
2056	Nelson	Offe	900
2057	Alkus	Saxton	6100
2060	Hawley	Muller	12000
2061	Scott	Scott	8500
2062	Scarborough	Boyd	2500
2063	Warren	Nelson	2750
2064	Santa Fe	Stewart	6500
2065	Packard	Packard	2500
2066	Michel	Michel	1000
2067	Marquise	Marquise	1800
2068	Phillips	Kringler	700
2070	Packard	Packard	2500
2071	Tutt	Higgins	450
2072	Wordlow	Wordlow	2000
2073	Chambers	Chambers	2000
2074	Okd Invest	Tuttle	1500
2075	Donohoe	Owner	30000
2081	Potter	Williams	1000
2084	Capwell	Llewellyn	1400
2076	Cohen	Marino	2100
2077	Kellogg	Bergen	1500
2086	McGuinn	Nall	400
2087	Howlett	McKay	400
2087	Loken	Jordan	400
2088	Schmidt	Bold	1520
2089	Hyman	Boehrer	5000
2092	Lucas	Winlund	3000
2096	Lucas	Lucas	1200
2097	Pennell	Warner	900
2098	Ratto	St. Mary	1000
2100	Coogan	Hewitt	2000
2101	Chirardford	Anthony	1000
2102	Rutherford	Greener	5000
2103	Smith	Wiser	1800
2104	Potter	Wiser	1000
2105	Lee	Lee	500
2106	Stubbe	Stubbe	3500
2107	Chiglieri	Chiglieri	1600
2109	O'Neil	Montgomery	2475
2110	Same	Same	2475
2111	Schaefer	Burnett	2300
2112	Christ Senst	Hurley	3068
2113	Same	Van Sant	48326

ALTERATIONS

(2044) W NINETY-FOURTH AVE 150 S 14th, Oakland. Alterations.
 Owner.....C. Heinemann, 9343 E-14th, Oakland.
 Architect...None.
 Day's work.....
 COST, \$450

DWELLING

(2045) No. 3896 BROWN AVE., Oakland. One-story 2-room dwelling.

Owner.....Chas. B. Young, 4005 39th Ave., Oakland.
 Architect...None.
 Day's work.....
 COST, \$400

DWELLING

(2046) W THIRTY-NINTH AVE 800 N Kanning, Oakland. One-story five-room dwelling.

Owner.....Jos. Flittner, 1700 35th Ave., Oakland.
 Architect...None.
 Contractor...E. E. Dooley, 3880 Magee Ave., Oakland.
 COST, \$1500

FRAME DWELLING

(2047) ALL LOT 77 and Lot 76 except ptn lies E line drawn parallel to E boundary line Lot 76 and distant at L 25 W therefrom Map Crocker Highlands, Oakland. All work for two-story frame dwelling.

Owner.....Alice F. McDonald, Okd.
 Architect...Chas. W. McCall, Central Bank Bldg., Oakland.
 Contractor...Mark Anthony and Chas. W. Heyer, Dalziel Bldg., Oakland.

Filed Oct. 2, '15. Dated Sept. 29, '15.
 Brick chimney built and roof sheathed.....\$1637 50
 Brown coated.....1664 50
 Completed and accepted.....1664 50
 Usual 35 days.....1668 50
 TOTAL COST, \$6635 00
 Bond, \$4000. Sureties, M. C. Anthony Rantz and C. W. Heyer, Sr. Limit, 100 days. Forfeit, none. Plans and specifications filed.

COOK HOUSE

(2048) S HAWTHORNE 15 W 96th Ave Oakland. Cook house.
 Owner.....San Francisco & Oakland Terminal Railways, 22nd & Grove, Oakland.

Architect...None.
 Day's work.....
 COST, \$400

COOK HOUSE

(2940) SW E-EIGHTEENTH & THIRD Ave., Oakland. Cook house.
 Owner.....San Francisco & Oakland Terminal Railways, 22nd & Grove, Oakland.

Architect...None.
 Day's work.....
 COST, \$750

BUNK HOUSE

(2050) S E-EIGHTEENTH 200 E 2nd Ave., Oakland. Bunk house.
 Owner.....San Francisco & Oakland Terminal Railways, 22nd & Grove, Oakland.

Architect...None.
 Day's work.....
 COST, \$800

BUNK HOUSE

(2051) S E-EIGHTEENTH 300 W 3rd Ave., Oakland. Bunk house.
 Owner.....San Francisco & Oakland Terminal Railways, 22nd & Grove, Oakland.

Architect...None.
 Day's work.....
 COST, \$800

BUNK HOUSE

(2052) SW TELEGRAPH AVE & 51st, Oakland. Bunk house.
 Owner.....San Francisco & Oakland Terminal Railways, 22nd & Grove, Oakland.

Architect...None.
 Day's work.....
 COST, \$400

DWELLING

(2053) W ADELIN 160 N 32nd, Oakland. One-story 4-room dwelling.
 Owner.....Axel Lind, 3219 Adeline, Oakland.

Architect...None.
 Contractor...Albert A. Haskell, 3122 Magnolia, Oakland.
 COST, \$1458

ADDITION

(2054) NO. 2253 E-FOURTEENTH, Oakland. Addition.
 Owner.....Ben Staudenmeyer, 3220 Bridge Ave., Alameda.
 Architect...None.
 Contractor...E. D. Bassett, 804 Fruitvale Ave., Oakland.
 COST, \$400

DWELLING

(2055) S MARION AVE 150 W 38th Ave., Oakland. One-story 3-room dwelling.

Owner.....Orrin Merritt, 3773 Marlon Ave., Oakland.
 Architect...None.
 Contractor...Max Wolfe, 3934 Angelo Ave., Oakland.
 COST, \$850

DWELLING

(2057) E SANTA CLARA 400 N Perry, Oakland. Two-story 7-room dwlg.
 Owner.....A. Kiers, Oakland.
 Architect...None.
 Contractor...John R. Faulkes, 9828 E-14th, Oakland.

COST, \$3000

DWELLING

(2059) E BROADWAY 160 N Ridge-way being S 30 Lot 16 Bk "E" Highland Terrace No. 2, Oakland. All work for two-story and basement dwelling.

Owner.....Harry Alkus, 4220 Terrace, Oakland.
 Architect...None.
 Contractor...Erle Saxton, 4225 Terrace, Oakland.

Filed Oct. 4, '15. Dated Sept. 25, '15.
 Roof on.....1/4
 Brown coated.....1/4
 Completed and accepted.....1/4
 Usual 35 days.....1/4
 TOTAL COST, \$6100

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.
 NOTE:—1st report No. 1999.

BRICK STORES

(2060) NW FIFTEENTH & FRANKLIN Oakland. One-story brick stores.
 Owner.....Hawley Investment Co., Syndicate Bldg., Oakland.

Architect...C. W. Dickey, Central Bk. Bldg., Oakland.
 Contractor...F. A. Muller, Syndicate Bldg., Oakland.
 COST, \$12,000

DWELLING

(2061) N ASHMOOT 700 W Mandana Blvd., Oakland. Two-story 8-room dwelling.

Owner.....L. S. Scott, Oakland.
 Architect...Edw. T. Foulkes, Crocker Bldg., San Francisco.
 Day's work.....
 NOTE:—Nearly completed.
 COST, \$8500

DWELLING

(2062) S WELLINGTON 500 W Park Blvd., Oakland. One and one-half-story 5-room dwelling.

Owner.....H. Scarborough, San Le-
andro.
Architect...None.
Contractor...W. E. Boyd, 4135 Park
Blvd., Oakland.
COST, \$2500

DWELLING
(2063) N EVANS 120 W Everett, Oak-
land. One-story 5-room dwelling.
Owner.....C. E. Warren, 1620 Webster
Alameda.
Architect...None.
Contractor...O. E. Nelson, 1215 Monterey
Ave., Berkeley.
COST, \$2750

STEEL CRANE
(2064) W JACKSON 110 S First, Oak-
land. Steel crane.
Owner.....Alchison, Topeka & Santa
Fe Railway Co., 1st and
Alice, Oakland.
Architect...None.
Contractor...S. R. Stewart.
COST, \$6500

DWELLING
(2065) E 108TH AVE 120 S Voltaire,
Oakland. One-story 6-room dwlg.
Owner.....Walter H. Packard, 1516
52nd Ave., Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING
(2066) NE SIXTY-SIXTH & HERZOG,
Oakland. One-story 4-room dwlg.
Owner.....R. Michel, 1092 66th, Okd.
Architect...None.
Day's work. COST, \$1000

DWELLING
(2067) W FORTY-FIRST AVE 320 S
Santa Rita, Oakland. One-story five-
room dwelling.
Owner.....E. M. Marquis, 2827 Rus-
sell, Berkeley.
Architect...None.
Day's work. COST, \$1800

ADDITION
(2068) NO. 714 FIFTH AVE., Oakland.
Addition.
Owner.....Mrs. Alice Phillips, Prem.
Architect...None.
Contractor...John Kringler, 3201 1/2 13th
Ave., Oakland.
COST, \$700

DWELLING
(2070) W 105TH AVE 194 N Bancroft
Oakland. One-story 6-room dwlg.
Owner.....Walter H. Packard, Care
M. T. Minney Co., Syndicate
Bldg., Oakland.
Architect...None.
Day's work. COST, \$2500

TANK FRAME
(2071) NO. 1712 NINETY-SECOND
Ave., Oakland. Tank frame.
Owner.....R. W. Tutt, Premises.
Architect...None.
Contractor...W. H. Higgins, 2477 94th
Ave., Oakland.
COST, \$450

DWELLING
(2072) NW TWENTY-THIRD AVE &
E-28th, Oakland. One-story six-room
dwelling.
Owner.....C. E. Wordlow, 812 Park,
Alameda.

Architect...None.
Day's work. COST, \$2000
DWELLING
(2073) E VIEW 375 N Mather, Oak-
land. One-story 5-room dwelling.
Owner.....J. F. Chambers, Plaza
Bldg., Oakland.
Architect...None.
Day's work. COST, \$2000

DWELLING
(2074) NW THIRTY-NINTH AVE AND
Kanning, Oakland. One-story four-
room dwelling.
Owner.....Oakland Investment Co.,
Bacon Bldg., Oakland.
Architect...None.
Contractor...P. M. Tuttle, 1365 87th
Ave., Oakland.
COST, \$1500

APARTMENTS
(2075) SW HARRISON BLVD AND
Grand Ave., Oakland. Three-story
75-room apartments.
Owner.....C. L. Donohoe, Owen Apts.,
Oakland.
Architect...Oliver & Thomas, Pan-
tages Bldg., Oakland.
Day's work. COST, \$30,000
NOTE:—Frame is up.

ALTERATIONS
(2081) NO. 5606 EDGERLY, Oakland.
Alterations.
Owner.....S. A. Potter, Premises.
Architect...None.
Contractor...E. R. Williams.
COST, \$1000

PAINTING STORE BUILDING
(2084) E CLAY from 14th to 15th.
Oakland. All work for painting store
building.
Owner.....H. C. Capwell, 14th and
Clay, Oakland.
Architect...C. W. Dickey, Central
Bank Bldg., Oakland.
Contractor...J. Llewellyn Co., 1635
Broadway, Oakland.
Filed Oct. 6, '15. Dated Sept. 23, '15.
One coat paint on.....\$500
Completed and accepted.....550
Usual 35 days.....350
TOTAL COST, \$1400
Bond, \$700. Surety, Massachusetts
Bonding & Insurance Co. Limit, 3
weeks after Oct. 3. Forfeit, none.
Specifications only filed.

DWELLING
(2076) N THIRTY-SECOND 50 E Lin-
den 25x100, being Lot 26 Blk 674
Glassecock Tract, Oakland. All work
for one-story 6-room dwelling.
Owner.....Rachael and Henry Cohen,
Oakland.
Architect...None.
Contractor...Frank Marino, Oakland.
Filed Oct. 5, '15. Dated Oct. 2, '15.
Execution and delivery of this
agreement.....\$500
1st of month, 10 per month and
interest at 7%.....
TOTAL COST, \$2400 for house and lot
Bond, none. Limit, 60 days. Forfeit,
none. Plans and specifications filed.

DWELLING
(2077) LOT 10 BLK 3 Fruitvale Or-
chard Terrace, Oakland. All work for
one-story five-room dwelling.
Owner.....I. A. Kellogg, S. F.
Architect...None.

Contractor...O. L. Bergen, S. F.
Filed Oct. 5, '15. Dated Oct. 2, '15.
Frame up.....1/4
Plastered.....1/4
Completed and accepted.....1/4
Usual 35 days.....1/4
TOTAL COST, \$1500
Bond, \$750. Sureties, P. E. Bergen and
M. A. Kellogg. Limit, 90 days. For-
feit, \$10. Plans and specifications filed.

BARN
(2085) N FORTY-FIRST 32 E Linden,
Oakland. Two-story barn.
Owner.....J. McGuinn, 805 11th, Okd.
Architect...None.
Contractor...Geo. C. Nall, 920 41st, Okd.
COST, \$100

ALTERATIONS
(2086) NO. 3409 E-FOURTEENTH,
Oakland. Alterations.
Owner.....W. F. Howlett, Premises.
Architect...None.
Contractor...D. McKay, Berkeley.
COST, \$100

ALTERATIONS
(2087) NO. 1134 SECOND AVE., Oak-
land. Alterations.
Owner.....Gilbert Loken, Premises.
Architect...None.
Contractor...F. L. Jordan, 2051 Austin,
Oakland.
COST, \$400

DWELLING
(2088) E MINNESOTA AVE 435 N
Boulevard, Oakland. One-story 5-
room dwelling.
Owner.....Paul and Rose Schmidt,
1984 Minnesota Ave., Okd.
Architect...None.
Contractor...Bold & Son, 1984 Minne-
sota Ave., Oakland.
COST, \$1520

APARTMENTS
(2089) E LINDEN 139 N 10th, Oak-
land. Two-story 16-room apartments.
Owner.....Joe A. Hyman.
Architect...J. Henry Boehrer, Delger
Bldg., Oakland.
Contractor...Boehrer & Legault, Delger
Bldg., Oakland.
COST, \$5800

DWELLING
(2093) E PARK BLVD 290 S Everett,
Oakland. One-story 7-room dwelling.
Owner.....Robt. N. Macfarlane, Okd.
Architect...None.
Contractor...P. N. Winlund, 1011 Frank-
lin, Oakland.
COST, \$3000

DWELLING
(2096) E DESMOND 215 N 49th, Oak-
land. One-story 5-room dwelling.
Owner.....Gottlieb Lucas, 5015 Law-
ton Ave., Oakland.
Architect...None.
Day's work. COST, \$1200

ALTERATIONS
(2097) NO. 280 SEVENTH, Oakland.
Alterations.
Owner.....T. Fennell, Premises.
Architect...None.
Contractor...Warner & Anderson, 1011
Franklin, Oakland.
COST, \$900

DWELLING
(2098) E FORTY-EIGHTH AVE 60 S

"C," Oakland. One-story 4-room dwlg
Owner.....B. Tatto, 1070 54th Ave.,
Oakland.
Architect...None.
Contractor...Joe St. Mary, 9257 E-14th,
Oakland.

COST, \$1000

DWELLING

(2100) N SIXTIETH 315 E Grove, Oak-
land. One-story 5-room dwelling.
Owner.....Wm. H. Coogan, 1636 Todd
Berkeley.
Architect...None.
Contractor...Harry L. Hewitt, 1626 Todd
Berkeley.

COST, \$2000

ALTERATIONS

(2101) NO. 740 OAKLAND AVE., Oak-
land. Alterations and additions.
Owner.....Mrs. L. Ghirardelli, Prem.
Architect...Schirmer Bugbee & Co.,
Dalziel Bldg., Oakland.
Contractor...Anthony & Heyer, Dalziel
Bldg., Oakland.

COST, \$1000

STORES

(2102) NW SANTA CLARA & GRAND
Aves., Oakland. One-story stores.
Owner.....V. Z. Rutherford, 310
Thomson Bldg., Oakland.
Architect...None.
Contractor...W. N. Greuner, 310 Thom-
son Bldg., Oakland

COST, \$5000

DWELLING

(2103) W COLE 55 S Ygnacio, Oakland
One-story 5-room dwelling.
Owner.....Herbert S. Smith, 1505 Cole
Oakland.
Architect...None.
Contractor...Gordan J. Wiser, 1468 55th
Ave., Oakland.

COST, \$1800

ALTERATIONS

(2104) NO. 5601 EDGERLY, Oakland.
Alterations and additions.
Owner.....S. A. Potter, E-14th and
Fruitvale Ave., Oakland.
Architect...None.
Contractor...Gordan J. Wiser, 1468 55th
Ave., Oakland.

COST, \$1000

FIRE REPAIRS

(2105) NO. 2178 HIGH, Oakland. Fire
repairs.
Owner.....Geo. H. Lee, 1212 Fruitvale
Ave., Oakland.
Architect...None.
Contractor...C. F. Lee, 1212 Fruitvale
Ave., Oakland.

COST, \$500

DWELLING

(2106) W THOMAS 200 N Napa, Oak-
land. Two-story 7-room dwelling.
Owner.....R. E. Stuhbe, 1209 E-19th,
Oakland.
Architect...None.
Day's work.

COST, \$3500

DWELLING

(2107) E WEBSTER 65 S 48th Ave.,
Oakland. One-story 5-room dwelling.
Owner.....B. Ghiglieri, 5132 Miles
Ave., Oakland.
Architect...None.
Contractor...G. Ghiglieri, 5132 Miles
Ave., Oakland.

COST, \$1600

DWELLING

(2109) S STANFORD AVE 350 E San
Pablo Ave., Oakland. One-story 5-
room dwelling.
Owner.....Wm. O'Neil, 1082 57th, Okd
Architect...None.
Contractor...W. S. Montgomery, 2321
Ward, Berkeley.

COST, \$2475

DWELLING

(2110) S STANFORD 310 E San Pablo
Ave., Oakland. One-story 5-room
dwelling.
Owner.....Wm. O'Neil, 1082 57th, Okd.
Architect...None.
Contractor...W. S. Montgomery, 2321
Ward, Berkeley.

COST, \$2475

DWELLING

(2111) E SIXTY-FIFTH AVE 115 S
Harriman, Oakland. One-story five-
room dwelling.
Owner.....M. A. Schaefer, 15 Croxton
Ave., Oakland
Architect...None.
Contractor...C. H. Burnett, 865 32nd,
Oakland.

COST, \$2300

HEATING AND VENTILATING.

(2112) NE THIRTY-FOURTH & ELM,
Oakland. Complete heating and ven-
tilating for church.
Owner.....Second Church of Christ
Scientist.
Architect...Wm. A. Newman, Hewes
Bldg., San Francisco.
Contractor...J. C. Hurley Co, 509 6th,
San Francisco.

Filed Oct. 7, '15. Dated Oct. 6, '15.
Monthly payments of..... 75%
30 days after..... 25%
TOTAL COST, \$3068
Bond, none. Limit, Nov. 1. Forfeit,
none. Plans and specifications filed.

(2113) ALL WORK FOR COMPLETION
of church.

Contractor...Van Sant-Houghton Co.,
503 Market, San Francisco.
Filed Oct. 7, '15. Dated Oct. 7, '15.
Monthly payments of..... 75%
Usual 35 days..... 25%
TOTAL COST, \$48,326
Bond, none. Limit, 175 days. Forfeit,
none. Plans and specifications, none.

Building Contracts Awarded

Berkeley.

2057	Kiers	.....	Faulkes	2000
2058	Gunthrop	.....	Warren	2200
2069	Jacobus	.....	MacIntyre	1815
2094	Smith	.....	Dekay	500
2095	Mackie	.....	Mackie	4000
2099	Hicks	.....	Hicks	1000
2108	Thompson	.....	Smith	500

ALTERATIONS

(2056) NO. 2223 SEVENTH, Berkeley.
Alterations.
Owner.....T. Nelson, Premises.
Architect...None.
Contractor...F. Offe, 1023 Bristol, Ber-
keley.

COST, \$300

FRAME DWELLING

(2058) N CEDAR 75 E Euclid Ave.,
Berkeley. All work for two-story
frame dwelling.
Owner.....Miss Pauline Gunthrop,
2318 Hilgard Ave., Bkly.
Architect...James W. Plachek, Ache-
son Bldg., Berkeley.

Contractor...C. H. Warren, 2200 Ather-
ton Ave., Berkeley.
Filed Oct. 4, '15. Dated Sept. 27, '15.

Frame-up	.....	1/4
Plastered	.....	1/4
Completed and accepted	.....	1/4
Usual 35 days	.....	1/4

TOTAL COST, \$3200

Bond, limit, forfeit, none. Plans and
specifications filed.

NOTE.—1st report Oct. 2, No. 2034.

DWELLING

(2069) N BERKELEY WAY 300 E
California, Berkeley. One-story 4-
room dwelling.
Owner.....T. J. Jacobus, 2017 E-16th,
Oakland.
Architect...None.
Contractor...P. G. MacIntyre, 335 34th,
Oakland.

COST, \$1815

ALTERATIONS

(2094) NOS. 2601-03 SHATTUCK AVE.,
Berkeley. Alterations.
Owner.....M. Smith, 601-A Diamond,
San Francisco.
Architect...None.
Contractor...De Kay & Co, 2147 Center,
Berkeley.

COST, \$500

DWELLING

(2099) W CORNELL AVE 550 N Gil-
man, Berkeley. One-story 5-room
dwelling.
Owner.....A. L. Hicks, 1208 Cornell
Ave., Berkeley.
Architect...None.
Day's work.

COST, \$1000

REPAIRS

(2108) NO. 1641 JULIA, Berkeley. Re-
pairs.
Owner.....Mrs. L. Thompson, Prem.
Architect...None.
Contractor...Smith & Nielsen, 366 10th,
Oakland.

COST, \$500

Building Contracts Awarded

Alameda.

2078	Noble	.....	Noble	2000
2079	Cole	.....	Cole	2500
2080	Same	.....	Same	2500
2082	Noble	.....	Noble	2000
2083	Noble	.....	Noble	1800
2090	Kitterman	.....	Ort	2900
2091	Scott	.....	Young	1000
2092	Smith	.....	Johnson	1900

DWELLING

(2078) NO. 2514 NOBLE AVE., Ala-
meda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central
Ave., Alameda.
Architect...None.

COST, \$2800

DWELLING

(2079) NO. 3226 FAIRVIEW AVE., Ala-
meda. One-story 6-room dwelling.
Owner.....M. T. Cole, 3200 Fernside
Blvd., Alameda.
Architect...None.

COST, \$2500

DWELLING

(2080) NO. 3243 FAIRVIEW AVE., Ala-
meda. One-story 6-room dwelling.
Owner.....M. T. Cole, 3200 Fernside
Blvd., Alameda.
Architect...None.
Day's work.

COST, \$2500

BUILDING
2082) NO. 2527 NOBLE AVE., Ala-
meda. One-story 6-room dwelling.
Owner.....G. H. Noble, 2220 Central
Ave., Alameda.
Architect...None.
Builder's work. COST, \$2000

BUILDING
2083) NO. 2529 NOBLE AVE., Ala-
meda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central
Ave., Alameda.
Architect...None.
Builder's work. COST, \$1800

BUILDING
2090) NO. 2142 CLINTON AVE., Ala-
meda. Two-story 6-room dwelling.
Owner.....Jas. Kitterman, 2142 Clin-
ton Ave., Alameda.
Architect...None.
Contractor...Wm. Ort, 2162 Alameda
Ave., Alameda.
COST, \$2900

ALTERATIONS
2091) NO. 1723 CENTRAL AVE., Ala-
meda. Alterations.
Owner.....Geo. W. Scott, Premises.
Architect...None.
Contractor...E. Young, 2415 Webb Ave.,
Alameda. COST, \$1000

BUILDING
2092) NO. 1807 ALAMEDA AVE., Ala-
meda. One-story 6-room dwelling.
Owner.....Jeff Smith, 2421 Clement,
Alameda.
Architect...None.
Contractor...L. Johnson, 223 Greenbank
Ave., Piedmont.
COST, \$1900

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED	AMOUNT
Oct. 1, 1915—LOT 5 BLK "C" Map Piedmont Knoll Tract, Okd. V Z Rutherford to whom it may concern	
Oct. 1, 1915—SE FIFTY-SIXTH AND Adeline E 71.46 SE 31.59 SW 86.84 N 35.15, Okd. John F Whalen to whom it may concern—Sept. 28, 1915	
Oct. 2, 1915—LOT 29 BLK 11, Oak- ridge, Claremont, Bkly. Edward A Hasson to Jacob Kollmer—	
Sept. 22, 1915	
Oct. 4, 1915—NW ELLIOTT and NE E-33rd NE 60xNW 60, Okd. Ida Fabling to Fred N Fabling, Oct. 1, 1915	
Oct. 5, 1915—NO. 3221 E-SEVEN- teenth, Oakland. F B Warner to Ben Pearson—Oct. 5, 1915	
Oct. 5, 1915—LOT 45 SBDVN 19 Map Reshdvn Peralta Park, Berkeley. Earle Sinclair and Guy Taylor to whom it may concern—Oct. 5, 1915	
Oct. 5, 1915—LOTS 7 AND 8 BLK "J" Country Club Heights, Oakland. Mynard and Eva Anslyn to W C Brown—Oct. 1, 1915	
Oct. 5, 1915—LOT 43 BLK 1 Map Berkeley Heights, Bkly. Berkeley Development Co to O M and H G Patrick—Oct. 2, 1915	
Oct. 6, 1915—NE 26½ LOT 2 BLK "A" Map Oakland View Homestead Assoc- iation, being No. 350 Walsworth Ave, Okd. S Weiner to whom it may concern—Oct. 1, 1915	
Oct. 7, 1915—LOT 19 BLK 3 Thousand	

Oakland, Bkly. Mina M Wil-
liams to M P Brash—Oct. 7, 1915
Oct. 7, 1915—LOT 83 Colby Tract,
Bkly. Miss A C Perdue to Harry
M Frostholt—Oct. 6, 1915
Oct. 7, 1915—LOT 27 BLK 25 Map
Amended Map Fairmount Park,
Albany. Oscar Swanson to whom
it may concern—Oct. 5, 1915
Oct. 7, 1915—W STANNAGE AVE 375
S Marin Ave S 50xW 100, Albany.
John Larson to whom it may con-
cern—Oct. 4, 1915
Oct. 8, 1915—LOT 97 Map Woodlawn
Park, Okd. Ethel Knotts to Edwin
C Graff—Sept. 30, 1915

LIENS FILED

ALAMEDA COUNTY.

Sept. 25, 1915—NE E-16th ST, 152.51
NW Nutley avenue, also called 57th
avenue, NW 31.26xNE 100, Oakland.
E K Wood Lumber Co. vs. Mrs.
Mary H Sparks\$59.38
Sept. 25, 1915—JUNE E 35 and Hop-
kins streets, Oakland. C L Cum-
mins vs. Robert Frost and The
Altenheim\$530
Oct. 2, 1915—W MONTE CRESTO
Ave 600 S Linda, Okd. Piedmont
Elec Co vs R M Barton and A L
Young.....\$40
Oct. 2, 1915—NW TENTH AVE and
NE E-20th NW 150xNE 100, Okd.
Downey Glass & Paint Co vs E G
Campbell and Chas D Halner.....\$92.73
Oct. 4, 1915—NW TENTH AVE AND
NE E-20th NW 150xNE 100, Okd.
James Cahill & Co vs E G Campbell
and Charles D Haines.....\$69.45

BUILDING CONTRACTS.

SANTA CLARA COUNTY.

FRAME RESIDENCE
STEVENS CREEK ROAD, bet. Cleve-
land and Topeka Aves, San Jose. All
work for frame residence.
Owner.....The Roman Catholic Arch-
bishop, 1100 Franklin, S. F.
Architect...L. T. Lenzen, 110 S-2nd
St., San Jose.
Contractor...The San Jose Contract
Mill & Lumber Co., 60
Vine St., San Jose.
Filed Sept. 22, '15. Dated Sept. 18, '15.
Frame up\$593
Brown plastered593
When completed597
Usual 35 days624
TOTAL COST, \$2403
Bond, \$1252. Sureties, W. M. Stalker
and S. D. Williams. Limit, 90 days.
Forfeit, none. Plans and specifications
filed.

FRAME RESIDENCE
HAMILTON AVE near Seneca St., Palo
Alto. All work for frame residence.
Owner.....Robert C. Ray, Palo Alto.
Architect...C. D. Kaiser, Mechanics'
Inst. Bldg., S. F.
Contractor...Collman & Collman, Shar-
on Bldg., San Francisco.
Filed Sept. 29, '15. Dated Sept. 25, '15.
Roof on\$3350
Brown plastered3350
Building completed3350
Usual 35 days3350
TOTAL COST, \$13,100
Bond, \$6700. Surety, New Amsterdam
Casualty Co. Limit, 110 days. Forfeit,
none. Plans and specifications filed.

FRAME RESIDENCE, ETC.
HAMILTON AVE near Seneca St., Palo
Alto. All work for frame residence
and garage.
Owner.....Caroline E. Ray, Palo Alto.
Architect...C. D. Kaiser, Mechanics'
Inst. Bldg., S. F.
Contractor...Collman & Collman, Shar-
on Bldg., San Francisco.
Filed Sept. 29, '15. Dated Sept. 25, '15.
Garage completed\$ 825
House roof on3185
Brown plastered3185
When completed2185
Usual 35 days3509
TOTAL COST, \$13,889
Bond, \$6915. Surety, New Amsterdam
Casualty Co. Limit, 110 days. Forfeit,
none. Plans and specifications filed.

FRAME RESIDENCE
LOT 4 OF THE J. S. LAKIN SUBDIV.
Palo Alto. All work for frame resi-
dence.
Owner.....San Jose Home Builders,
San Jose.
Architect...C. T. McKenzie, Bank of
San Jose Bldg., S. J.
Contractor...B. F. Richards & H. Sibley
Filed Sept. 29, '15. Dated Sept. 21, '15.
Frame up25%
When plastered25%
When completed25%
Usual 35 days25%
TOTAL COST, \$1890
Bond, \$900. Sureties, John Duffield and
D. J. Farris. Limit, 65 days. Forfeit,
none. Plans and specifications filed.

FRAME SCHOOL
ON MOUNT PLEASANT ROAD about 6
miles E of San Jose. All work for
frame school building.
Owner.....Mount Pleasant School
District Trustees.
Designer...F. G. Aitken, Theatre Bldg
San Jose.
Contractor...C. N. Smith, 15 S-8th, S. J.
Filed Oct. 1, '15. Dated Sept. 30, '15.
Frame up25%
Brown plastered25%
When completed25%
Usual 35 days25%
TOTAL COST, \$6196
Bond, \$3139. Sureties, H. Ray Fry and
F. Eberhart. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

COTTAGE
TWENTY-FOURTH near Santa Clara.
San Jose. Six-room cottage.
Owner.....Mrs. Elisha Miller.
Architect...None.
Contractor...J. E. Perkins, 1652 Santa
Clara, San Jose.
COST, \$1905

COTTAGE
THIRTEENTH AND MISSION, San Jose
Five-room cottage.
Owner.....V. Guardino, Premises.
Architect...None.
Contractor...S. Decarli.
COST, \$1750

ALTERATIONS
DEVINE AND MARKET, San Jose.
Alterations.
Owner.....Mrs. Mary Ward, Premises
Architect...F. Wolf, Lighthouse and
Santa Clara, San Jose.
Contractor...Wm. Moore, 75 Puane,
San Jose. COST, \$1500

COTTAGE

NO. 765 S-TWELFTH ST., San Jose.

Four-room cottage.

Owner.....Mrs. Mary Marks, Premises

Architect...None.

Day's work. COST, \$1100

DWELLING

NO. 363 S-TWELFTH ST., San Jose.

Four-room dwelling.

Owner.....Mike Cuffaro, Premises.

Architect...None.

Day's work. COST, \$500

FRAME CLUB ROOM

TENTH AND JULIAN, San Jose. One-story frame club room.

Owner.....Pastime Social Club, Prem

Architect...None.

Day's work. COST, \$500

BUILDING CONTRACTS**SAN MATEO COUNTY.****ADDITION**

PTN LOT 10 BLK 5, Town of Burlingame. All work except plumbing, tinning, sheet metal, heating and painting for one-story frame addition to church.

Owner.....First Methodist Episcopal Church, Burlingame.

Architect...Willson J. Wythe, 513

Central Bank Bldg., Okd.

Contractor...W. S. Leadley, San Mateo.

Filed Sept. 23, '15. Dated Sept. 22, '15.

Frame up\$500

When plastered 800

When completed 800

Usual 35 days 807

TOTAL COST, \$3207

Bond, \$1605. Sureties, E. O. Hessler and

Eliza A. Hopper. Limit, 70 days. For-

feit, none. Plans and specifications

filed.

COTTAGES

LOTS 4, 5, AND 6 BLK 2 of Metropolis

Homestead Tract, Daly City. All

work for three cottages.

Owner.....Arthur G. Duncan and L.

Abraham, 526 Crocker Bldg

San Francisco.

Architect...None.

Contractor...T. H. Parry, 222 Raymond

Ave., San Francisco.

Filed Sept. 20, '15. Dated Sept. 17, '15.

Frame up\$825

When plastered 825

When finished 825

Usual 35 days 825

TOTAL COST, \$3300

Bond, \$1650. Sureties, W. D. Stephenson

and H. P. Coleman. Limit, 70 days.

Forfeit, \$5. Plans and specifications,

none.

CLASS "C" RESIDENCE

LOT 26 BLK 125 Plot "T" South San

Francisco. All work for two-story

and basement reinforced concrete

Class "C" residence and store room.

Owner.....James Carmody, South San

Francisco.

Architect...None.

Contractor...Charles Johnson, South

San Francisco.

Filed Sept. 23, '15. Dated Sept. 24, '15.

Joists for 2nd floor in.....\$2250

Brown coated 2250

When completed 2250

Usual 35 days 2250

TOTAL COST, \$9000

Bond, \$4500. Sureties, J. Jorgensen and

H. Scampini. Limit, 100 days. Forfeit,

\$5. Plans and specifications filed.

FREIGHT SLIP, ETC.

WATER FRONT, South San Francisco.

All work for freight slip and apron

(wharf.)

Owner.....South San Francisco Land

& Improvement Co., Mo-

nadnock Bldg., S. F.

Engineer...E. W. Seymour.

Contractor...San Francisco Bridge Co.,

Nevada Bank Bldg., S. F.

Filed Sept. 24, '15. Dated Sept. 10, '15.

On 15th days of each month.... 75%

Usual 35 days 25%

TOTAL COST, \$7330

Bond, \$5000. Surety, Pacific Coast

Casualty Co. Limit, Dec. 1, 1915. For-

feit, none. Plans and specifications

filed.

FRAME COTTAGE

LOT 40 BLK 5, Crocker Estate Tract,

Sub. No. 1. All work for one-story

five-room and bath, basement and

garage frame cottage.

Owner.....John and Helen Gill, 371

Third, San Francisco.

Architect...None.

Contractor...G. J. Doering, Daly City.

Filed Sept. 21, '15. Dated Sept. 13, '15.

Roof on\$375

Rough plastered 375

When completed 375

Usual 35 days 375

TOTAL COST, \$1500

Bond, \$750. Surety, New Amsterdam

Casualty Co. Limit, 45 days. Forfeit,

\$5. Plans and specifications filed.

FRAME RESIDENCE

LOT 48, Burlingame Heights, Burling-

ame. All work for one-story frame

residence.

Owner.....Gertrude Smith Radle, S. F.

Architect...None.

Contractor...S. McClure, Burlingame.

Filed Sept. 23, '15. Dated Sept. 22, '15.

Frame up\$764

1st coat plaster on 764

When completed 764

Usual 35 days 764

TOTAL COST, \$3056

Bond, none. Limit, 90 days. Forfeit,

none. Plans and specifications, none.

FRAME RESIDENCE

PTN LOTS 1 AND 2 BLK 5, Burlingame

Park, Burlingame. All work for one

story and basement frame residence.

Owner.....Samuel Hill.

Architect...J. E. Kraft & Sons, Phen-

ian Bldg., San Francisco.

Contractor...S. B. Kress, 110 Jessie,

San Francisco.

Filed Sept. 22, '15. Dated Sept. 13, '15.

Frame up\$ 800

When plastered 800

When completed 1056

Usual 35 days 1000

TOTAL COST, \$3656

Bond, \$1828. Surety, Fidelity & De-

posit Co. of Maryland. Limit, on or

before December 18, 1915. Forfeit, \$3

per day. Plans and specifications filed.

CLASS "C" STORES

LOTS 11 AND 12 BLK 11, City of San

Mateo. Excavating, concrete work,

steel reinforcement, carpenter work,

lathing, plastering, roofing, plumbing,

gas fitting, painting, etc., for one-

story and basement reinforced con-

crete Class "C" building (2 stores

Owner.....E. A. Husing, San Mat

Architect...Will H. Toepke, 46 Kes

San Francisco.

Contractor...W. S. Leadley, San Ma

Filed Oct. 1, '15. Dated Sept. 29, '1

Foundations and basement walls

up\$

Concrete walls all up.....

When completed

Usual 35 days.....

TOTAL COST, \$

Bond, \$2700. Sureties, Eliza A. H

and E. A. Hessler. Limit, 70 d

Forfeit, \$5. Plans and specifiati

filed.

CONCRETE WORK, ETC.

"UPLANDS" Hillsborough. Cop

cement work, etc., of lower

wall, pool bottoms, etc., for resh

Owner....Charles Templeton Cro

Hillsborough.

Architect...Willis Polk & Co., H

Bldg., San Francisco.

Contractor...Floodberg & McCo

Monadnock Bldg., S.

Filed Oct. 2, '15. Dated Sept. 29,

On 15th of each month.....

Usual 35 days.....

TOTAL CO\$

Bond, \$1690. Surety, New

Equitable Insurance Co. Lim

30, 1915. Forfeit, \$10 per de

and specifications filed.

COMPLETION NOTICES.**SAN MATEO COUNTY.****RECORDED**

Oct. 2, 1915—LOT 31 BLK "K" Mis-

sion Street Land Co., Daly City

Homestead Realty Co to William

H Grahn.....Aug. 10, 1

Oct. 4, 1915—LOT 15 BLK 22, Red-

wood Highlands, Redwood City

Redwood Highlands Co to whom i

may concernOct. 1, 1

Oct. 4, 1915—LOT 3 BLK 30, Red-

wood Highlands, Redwood City

Redwood Highlands Co to whom i

may concernOct. 1, 1

Oct. 5, 1915—SUB 2 Burlingame Parl

Burlingame. May H and George I

Paine to J H Rockingham.Oct 5, 1

LIENS FILED**SAN MATEO COUNTY.****RECORDED**

Sept. 25, 1915—LOT 26 Taylor Addr

to San Mateo City. Rousseau &

Rousseau vs A Baradat and Mrs A

Baradat\$40

COMPLETION NOTICES**SAN MATEO COUNTY.****RECORDED**

Sept. 21, 1915—LOT 19 BLK 125,

South San Francisco. George Kles-

sling to whom it may concern...

.....Sept. 15, 19

Sept. 23, 1915—LOT 7 BLK 30 Red-

wood Highlands, Redwood City

Redwood Highlands Co to whom it

may concernSept. 22, 19

Sept. 25, 1915—LOT 5 BLK 17 Crocker

Estate Sub. No. 1. Chester A and

Gertrude F Jones to whom it may

concern.....Sept. 22, 19

Building & Engineering News

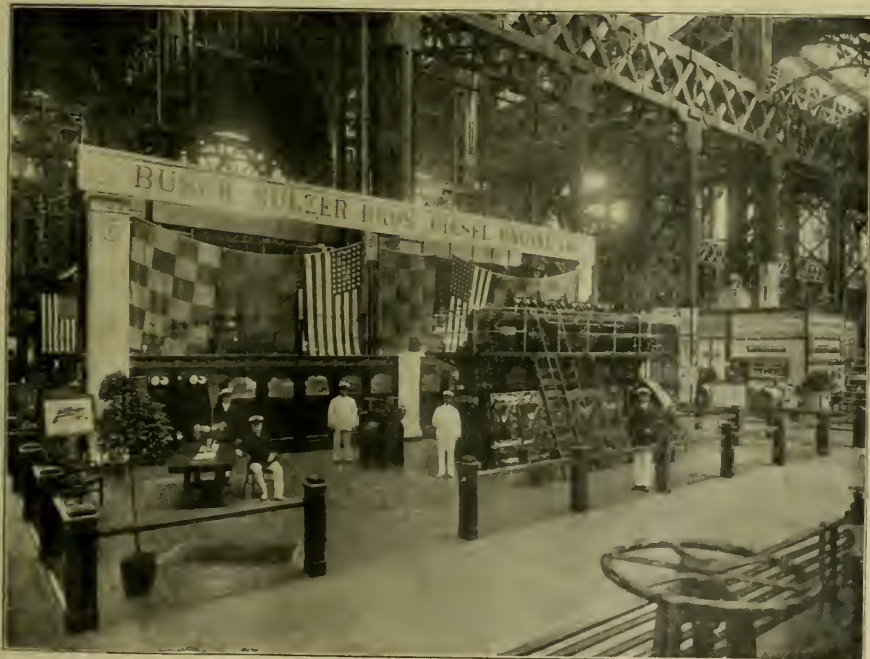
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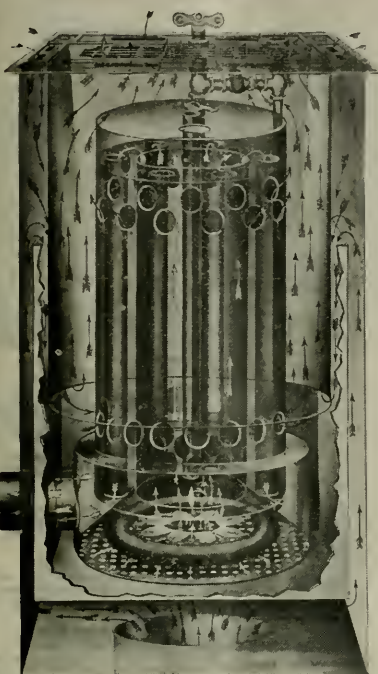
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Has 8-in. Fresh Air Intake with Damper.
Has 3-in. Outlet Vent
Fits in space between floor joists
Hangs from Register which lays flush with floor.

Style

A. Floor Furnace with fresh air intake on side. For use in buildings having sufficient fresh air circulation under same. For artificial gas only.

B. Floor Furnace with fresh air intake at bottom. For use in buildings where it is desirable to obtain air directly from outside of cellar or basement. For artificial gas only.

NOTE—Style A and B are built alike except for position of fresh air intake.

C. Wall Furnace with fresh air intake at bottom. For artificial gas only.

D. Wall Furnace with fresh air intake at back. For artificial gas only.

NOTE—Style C and D are built alike except for position of fresh air intake.

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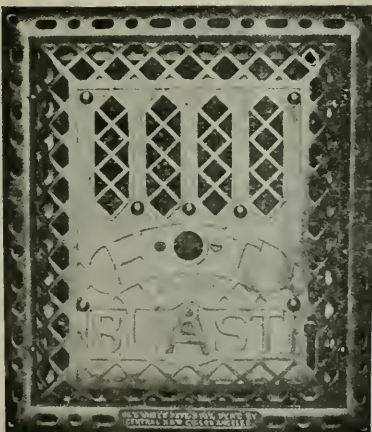
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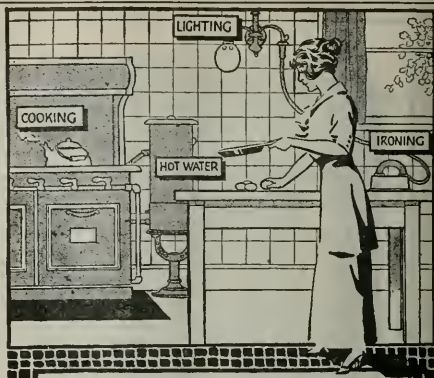
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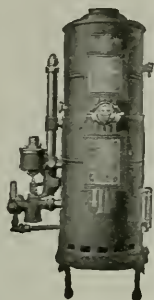
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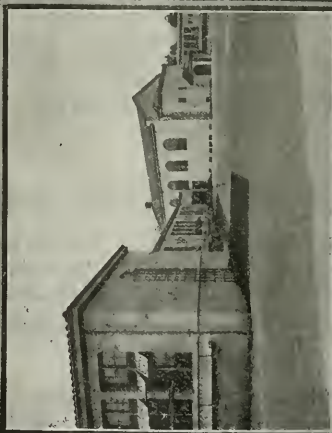
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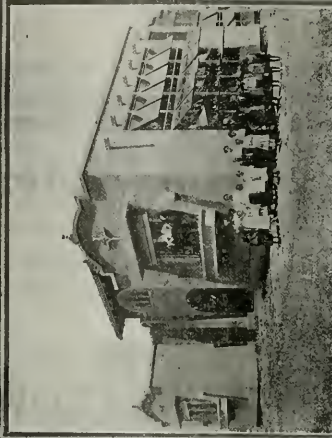
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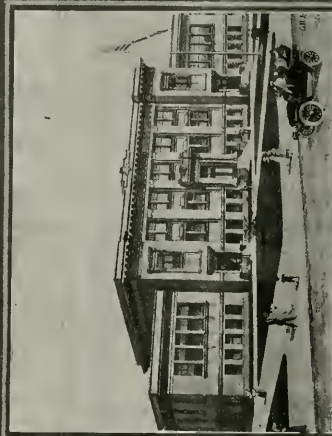
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Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
of the Pacific Coast.

Issued Weekly, \$3.00 per year

San Francisco, October 20, 1915

Fifteenth Year, No 42

THE DIESEL ENGINE.

Its Economy and Efficiency for Contractors.

By H. S. Jones, M. E.

The Diesel Engine is an invention of the late Dr. Rudolph Diesel of Munich, Germany, and the engine has been attracting wide spread interest, particularly on the Pacific Coast, owing to the fact that the engine has proven its ability to operate successfully on the California oil.

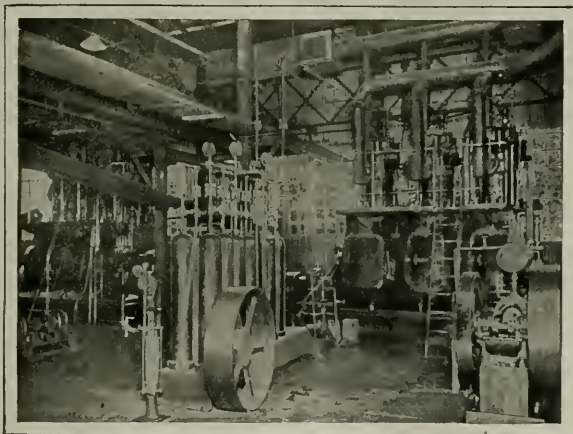
The basis of operation of this engine differs radically from the carburetted type of internal combustion engine. The compression is carried to a very much higher point and the fuel is admitted after the compression has been completed. In a four-stroke-cycle, vertical engine, which is the one most often met with in practice, the down stroke of the piston draws air from the atmosphere into the cylinder. With the up stroke this air is compressed to approximately 500 lbs. per square inch with an accompanying temperature of about 1,000 deg. Fahr. At or near the top point of the stroke the fuel oil is admitted, being sprayed into the cylinder by an external source of compressed air obtained from a direct connected compressor. This oil is allowed to enter the cylinder during a definite portion of the downward travel, and it burns and expands without explosion during the entire stroke, thus eliminating any shock on crank and bearings. On the next up stroke the burnt gases are exhausted and the cylinder is again ready to take its charge of pure air. This type of engine requires four strokes of the piston for one working stroke, and is called the four-stroke-cycle engine, or popularly known as the four-cycle engine. This type of engine is the one most used in commercial operation and has been the one that has stood the test of time. It is to be expected, however, that two-stroke-cycle engines, those with a fuel injection every down stroke, will come into more general use in the future in the larger sizes.

Almost any kind of liquid fuel can be used in Diesel Engines and in fact experimentally practically all kinds have been tried, but it is not economical to use fuel that will form a deposit in the cylinder or on the valves as it is expensive to shut down the engine for cleaning, particularly if the type of service the engine has to perform is of a continuous character. The

oil companies in the West sell what they call fuel oil. This oil is crude oil with the lighter kerosene and gasoline removed, and at certain times of the year asphalt is also removed for road use. The removal of the asphalt, however, with some companies depends upon the season of the year or more properly on the demand for asphalt. This fuel oil which is sold under various ranges between 20 deg. and 24 deg. gravity, Beaume, and has a so-called asphalt content of approximately 25%. This oil has been used successfully in Arizona for the last five years and has given entire satisfaction.

State of California, one consisting of two Busch-Sulzer Bros. Diesel Engines at Needles, which supply power for an ice plant.

These engines of 500 and 120 H. P. are operated upon fuel known as "Calol Fuel Oil" supplied by the Standard Oil Co. at approximately 70c per barrel of 42 gallons in Bakersfield. Another installation on the coast is the municipal plant at Palo Alto, Cal. This installation consists of an engine manufactured in Hanover, Germany. It is of the horizontal, four-stroke, four-cycle type with four cylinders direct connected to an electric generator. This engine has given excellent



The 450 H. P. engine at the United Verde Copper Co.'s plant at Jerome has operated on this oil this oil 24 hours per day, 6 days in the week; on Sunday a shut down of approximately 2 hours is made for observation and possible changing of valves. This engine drives a Roots blower and must be depended upon to ventilate certain portions of the mine so that it can be imagined that no type of engine would be considered about which there was the slightest question of reliability.

There are at the present time several Diesel plants in operation in the

satisfaction and is generating electricity for the municipality at a minimum figure. This engine is using the same fuel oil that was previously burnt under the boilers in the same plant.

The National Ice Co of San Francisco have two engines of 200 H. P. each installed in their ice plant, and the power cost of ice has been reduced to one third the cost using steam power.

There is one point which is vital to the installation of a Diesel Engine in comparison with the purchase of electricity from a public service corpora-

tion, and that is the matter of load factor, or the portion of the total time that the plant will be in operation. It will be noticed by the installations cited that the ice industry apparently offers an excellent opportunity for Diesel engines owing to the continuous character of its load, while industrial plants which operate but eight hours per day usually have a load factor below 25%. Owing to the first cost of the Diesel Engine, the fixed charges are relatively high in comparison with the operating charges and with the fixed charges for other types of apparatus. These fixed charges continue day and night, Sundays and holidays, and must be divided by the number of hours, or kilowatts, or horsepower of useful work performed by the apparatus. From this it will be readily seen that should the useful output of the engine be small, the fixed charges per unit will be large, and this fixed charge expense can only be decreased by increasing the number of hours of operation. In this regard the Diesel Engine will appeal strongly to contractors who are contemplating undertaking large contracts at isolated points, such as tunnel work where air compressors must be operated continuously, or where it is impossible to obtain electric power at any thing approaching a reasonable figure. Due to the life of the Diesel, which experience shows is far in excess of ten years, the engine can be sold after the expiration of the contract at a figure very near its first cost, in fact there are few, in any, second hand Diesel Engines for sale in the United States, and those who have Diesel Engines in operation may be quoted as saying that they would not sell the engine at any figure if they could not buy another to take its place, and as far as they can see the engine is as valuable to them after five or six years operation as the day it was first purchased.

To the contractor the matter of the transportation of the engine may at first sight appear to be a problem in an isolated location, but the engine is so constructed that the weight of each separate piece is not great. Even an engine as large as 500 H. P. can be transported on wagons over such character of roads as may be found in the West, and it would also be likely that an undertaking that could make use of a 500 H. P. engine would necessitate building a good road to transport other material for the work. Where power is necessary for rock drills, hoists, derricks and all apparatus in connection with a large contract, the Diesel Engine would be a most economical installation. The average cost of the Diesel Engine would be from one-quarter to one-third greater than that of a steam plant, but the saving in fuel would be very great, and it can be stated roughly that the consumption would be from one-sixth to one-ninth that of the steam plant usually erected by contractors, and also eliminates all expense and trouble due to boiler operation and repair.

The labor of operating an engine is a minimum and the character of the operation is practically the same as that employed in a steam plant, the

master mechanic employed on the job would have supervision over the operation in connection with his other duties. A 500 H. P. engine would use approximately 30 gallons of fuel per hour or about three-fourths of a barrel, using a barrel containing 42 gallons. In this way the cost of fuel would be three-fourths of the price of one barrel of oil, which at San Francisco, Bay points is approximately 80c per barrel. At isolated plants, such as are under consideration, the price of a barrel of oil ranges from \$1.25 to \$1.35. To this must be added approximately 5c per hour for lubricating oil.

The engine will also require cooling water of 30 to 50 gallons per minute. If the expense of cooling water is considerable, it is generally customary to install a cooling tower. In any event the quantity of water used will be far less than that used in a steam plant so that this matter can be dropped from consideration when comparing these two types of prime movers.

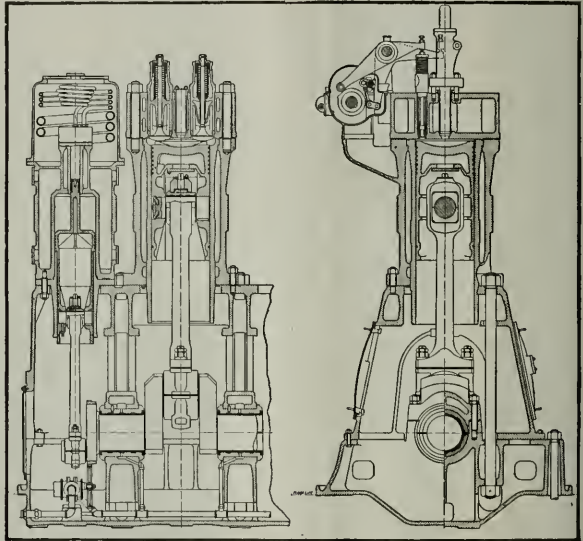
\$1.04 divided by 336 equals 31c per K. W. H.

Total Cost of Power.

	Per K. W. H.
Fixed charges .....	.21
Operating charges .....	.31

Total52
In the table above an estimate is made of the cost of installation and operation of a 500 H. P. engine direct connected to A. C. generator, and assuming that the work will last three years the cost per kilowatt hour is figured. This table assumes that plant has a salvage value of 50%. The table shows the cost per kilowatt hour to be 52c, which is far below purchased price of electricity by any other type of prime mover.

There is another matter which often comes before the consideration of contractors on large undertakings, and that is the purchase of electricity from a public utility company, and is often accompanied by the necessity of build-



Cost of 500 H. P. Diesel plant including engine, generator, switchboard, exciter, all erected in suitable building.....\$36,000
Considering salvage value to be 50% and plant to be operated 3 years, 1-6th of this investment must be written off each year, or fixed charges... 6,000
Each year there will be generated 336 H. W. x 360 days x 24 hours equals 2,900,000 K. W. H., or 6,000 divided by 2,900,000 equals 207c per K. W. H. fixed charges.

Operating Costs.

	Per hour
Fuel Oil, 30 gals per hour.....	.71
Oil at \$1 per bbl of 42 gals.....	
Lubricating oil .....	.05
4 gals per 24 hours at 32c per gal	
Maintenance at \$300 per year....	.03
Labor, 2 men at \$3 per day.....	.25

Total\$1.04
336 K. W. H. generated per hour or

ing a pole line of considerable length. This pole line has no salvage value and if it is not charged direct, it is reflected in the rate obtainable per kilowatt hour as ordinarily it would be of little value when the construction work is completed.

CUT NO 3

We are showing herewith a section of a modern Diesel Engine showing the air compressor and one working cylinder. This is the engine being put out by Busch-Sulzer Bros. Diesel Engine Co. of St. Louis, a company having fifteen years' experience in Diesel building in this country. The engine combines the American experience with that of Sulzer Bros., the premier builders of Diesels abroad. It will be noted that no cross heads are used, a trunk type of piston having been found most serviceable. All the valves are in the head, being set in cages, and permit of ready removal, the fuel valve being at the center. The cylinder walls, head

Design of the New Long Beach Outfall.

By Frank Gihelen,* Consulting Engineer.

In 1913 about one-fifth of the total area of Long Beach was provided with sewer. The outfall for this territory was built some fifteen years ago by a bond issue and the connecting laterals were built under the District Assessment Act. In May, 1913, we were called in to design an outfall and main trunk line sewer that would serve the entire city. Owing to the location of the old outfall and the topography of the city, all the territory that could be drained into this outfall was sewered, and in order to sewer the new territory a new outfall was planned and located, so that practically the entire city could be sewered into the new outfall by gravity. In considering the size of the new outfall, not only the present city limits were included but also the territory lying outside of the present city limits, and which in all probability would become a portion of the city within the next few years.

The present population at Long Beach is approximately 35,000. The new outfall is designed of sufficient capacity for from 125,000 to 150,000.

The city voted by a large majority \$310,000 in bonds for the construction of the work. The work consists of 12 miles of outfall and main trunk line, ranging in size from ten inches at the extreme upper end to 48 inches at the lower end.

Bids were solicited on both vitrified pipe and machine made cement pipe for all sizes up to 24 inches. On sizes from 24 inches to 48 inches bids were

solicited on reinforced concrete pipe, brick pipe, and segmental tile block, and exhaust valve and pipes are water cooled. An integral air compressed supplies the air for starting as well as furnishing the pressure for atomizing and spraying the fuel. In order to insure the operation of the three-stage air compressor, which must attain a pressure of approximately 1,000 lbs. per square inch, inter and after cooling of the air must be resorted to for such high temperatures are almost prohibitive to the proper lubrication of the cylinders.

The two center cylinders in a four-cylinder engine are usually used for starting, and as soon as the engine is turning over the first compression is obtained in the two outer cylinders and the first burning of fuel accomplished. The engine can be started from cold in less than half a minute.

The reliability of the Diesel Engine has been proven by years of successful operation in this country and abroad, and in the West practically all of the installations are in isolated points where expert labor is hard to obtain. The fact that nearly half of the Diesel Engines sold in this country have been sold on reorder speaks volumes for their success in every possible way.

Bent Brothers of Los Angeles were the low bidders on the work. Their bid consisted of the use of machine made cement pipe for the small and reinforced concrete pipe for the larger sizes.

After a thorough investigation of the Riensch-Wurl screen, its use and the results accomplished in Germany and elsewhere in Europe, it was decided that this method of clarification of the sewage was, everything considered, the most satisfactory system for Long Beach. No attempt at purification was made, because the sewage, after passing the fine screen, is discharged into the ocean 1100 feet from shore, and in 15 feet of water. The screen openings are 1-32 of an inch, so that only the finest particles will appear in the effluent. These will readily oxidize and will not be noticeable in ocean discharge. In order to obtain a gravity flow for nearly the entire city, it is necessary to have the elevation of the inlet to the screening plant at approximately half tide. Under this condition it is necessary to pump the sewage for about one-third of the time while the tide level is above the elevation of the inlet. The gravity discharge is obtained for about two-thirds of the time during the low tide interval. The sludge collected on the screens is consumed in an oil burning incinerator connected to a stack 65 feet high. The outlet for the screening plant under the ocean is 36 inch cast iron pipe laid along the ocean bottom and anchored with three concrete piles at each joint. These piles are driven to a 20 foot penetration.

A portion of the sewer has a cut of 30 feet and this section was tunnelled with shafts placed every 100 feet. A little difficulty was encountered in this tunnel work which was all in sand, due to the fact that caves occurred here and there, which left pockets above the roof lagging. It was impossible to pull the lagging after the pipe was laid, so these pockets were filled from the surface by boring six-inch auger holes ten feet apart, and pumping sand together with enough water to make the sand flow through these holes.

In other places the 48-inch pipe crosses a flat which formerly was a slough. This flat was raised by filling in with dredgings from the harbor, and consists of the finest silt. The water plain is only a few feet from the surface, and the saturated silt proved to be a very unstable and quaking foundation on which to lay the sewer pipe. Timber supports and concrete cradle were used throughout this section in order to give the pipe a substantial footing.

Great credit is due the contractor for his skillful handling of several difficult sections of this sewer.

*Gihelen & Gihelen, Consulting Engineers, 1112 Hollingsworth Bldg., Los Angeles, Cal.

U. S. Civil Service Examination.

Associate Gas Engineer (Male), \$2,000.

November 3, 1915.

The United States Civil Service Commission announces an open competitive examination for associate gas engineer, for men only, on November 3, 1915. From the register of eligibles resulting from this examination certification will be made to fill a vacancy in this position in the Bureau of Standards, Department of Commerce, Washington, D. C., at a salary of \$2,000 a year, and vacancies as they may occur in positions requiring similar qualifications, unless it is found to be in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

This examination is open to all men who are citizens of the United States and who meet the requirements.

Persons who desire this examination should at once apply for Form 1212, stating the title of the examination for which the form is desired, to the United States Civil Service Commission, Washington, D. C. Applications should be properly executed, excluding the medical certificate, and filed with the Commission at Washington in time to arrange for the examination at the place selected by the applicant. The exact title of the examination as given at the head of this announcement should be stated in the application form.

Surveyor (Male).

December 8-9, 1915.

The United States Civil Service Commission announces an open competitive examination for surveyor, for men only, on December 8 and 9, 1915. From the register of eligibles resulting from this examination certification will be made to fill vacancies in positions of United States surveyor and transitman in the General Land Office, and vacancies as they may occur in positions in any branch of the service requiring similar qualifications, unless it is found to be in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

This examination is open to all men who are citizens of the United States and who meet the requirements.

Persons who desire this examination should at once apply for Form 1212, stating the title of the examination for which the form is desired, to the United States Civil Service Commission, Washington, D. C. Applications should be properly executed, excluding the medical and county officer's certificates, and filed with the Commission at Washington in time to arrange for the examination at the place selected by the applicant. The exact title of the examination as given at the head of this announcement should be stated in the application form.

International Engineering Congress, 1915.

W. A. CATTELL, Mem. Am. Soc. C. E., Secretary.

Friday, September 24.

10:00 A. M. Utilization of Underground Waters, G. E. P. Smith. Irrigation in India, M. Nethersole, C. S. I. Dams, Arthur P. Davis. Earthen Dams, William Lumisden Strange. 2:00 P. M. The Distribution of Water in Irrigation in Australia, Elwood Mead. The Co-relation between Demand and Supply, in view of the Variation between Annual Demand and Supply from Natural Flow, which leads up to a study of the amount of Storage necessary, L. C. Hill. Irrigation in Spain; Regulations Controlling the use of Water, Metering Water for Irrigation and Methods of Charging, J. C. Stevens.

Saturday, September 25.

10:00 A. M. The Problem of Irrigation in the Argentine Republic, Carlos Wauters. Duty of Water in Irrigation, Samuel Fortier. Drainage as a Correlative of Irrigation, C. G. Elliott.

MUNICIPAL ENGINEERING.

Tuesday, September 21.

2:00 P. M. City Planning, Nelson P. Lewis. London Traffic in 1913, Sir Albert Stanley. Transit Problems in American Cities, W. F. Reeves.

Wednesday, September 22.

10:00 A. M. Recent Progress and Tendencies in Municipal Water Supply in the United States, J. W. Alvord. Municipal Water Supply in France, Belgium, Algeria-Tunisia, Dr. E. Imbeaux. Water Supply in Japan, S. Imone. The Disposal of Suspended Matters in Sewage, Rudolph Hering. Sewage for Low Countries with Special Regard to the Town of Amsterdam, A. W. Bos.

Thursday, September 23.

10:00 A. M. Streets, Geo. W. Tillson. Rural Highways, L. W. Page. Rural Highways, L. Limasset. Construction and Maintenance of Rural Highways, Alfred Dryland. Rural Highways, Arthur Gladwell. The Struggle Against Dust, C. C. Dassen. Thermal and Traffic Effects on Street Pavements, Jas. E. Howard.

Friday, September 24.

10:00 A. M. Utilities, Dr. A. C. Humphreys. Short Paper on Public Utilities, Edward Willis. Fire Protection, John R. Freeman. Arch Bridges of Hooped Cast Iron, Dr. Ing. Fritz von Emperger. 2:00 P. M. Preliminary Municipal Engineering at Panama, Henry Wells Durham. Municipal Engineering and Domestic Water Supply in the Canal Zone, George M. Wells. Sanitation in the Panama Canal Zone, Lt. Col. Charles F. Mason. "Soliditi" Concrete Roads in Italy, Prof. Luigi Luiggi.

RAILWAY ENGINEERING.

Tuesday, September 21.

10:00 A. M. Railways, Wm. Barclay Parsons. The Status of the Railways of North and South America, F. Lavis. Italian Railways, Prof. Luigi Luiggi. The Status of Indian Railways, Victor Bayley. The Status of Chinese Rail-

ways, Charles Davis Jameson. The Status of Russian Railways, V. A. Nagrodsky. The Status of Railways and Tramways in the Netherland East-Indies, E. P. Wellenstein, C. E. 2:00 P. M. Economic Considerations controlling and governing the Building of New Lines, John F. Stevens. The Locating of a New Line, William Hood. The Locating of a New Line, David Wilson. Tunnels, Chas. S. Churchill. Tunnels in Italy, Prof. Luigi Luiggi. Tunnels in Switzerland, R. Winkler.

Thursday, September 23.

10:00 A. M. The Reconstruction of the Panama Railroad, Lieut. Frederick Mears. Railway Construction Methods and Equipment, F. C. Hitchcock. Railway Construction Methods and Equipment in Australia, Maurice E. Kernot. Track and Roadbed, George H. Pegram. American Railroad Bridges, J. E. Greiner.

Thursday, September 23.

2:00 P. M. Recent Locomotive Development, George R. Henderson. Rolling Stock (other than Motive Power), A. Stucki. The Floating Equipment of a Railroad, F. L. DuBosque. Railroad Terminals, B. F. Cresson, Jr.

Friday, September 24.

10:00 A. M. Electric Motive Power in the Operation of Railroads, William Hood. Electric Motive Power in the Operation of Railroads, E. H. McHenry. Signals and Interlocking, Charles Hansel.

MATERIALS OF ENGINEERING CONSTRUCTION.

Tuesday, September 21.

10:00 A. M. Structural Timber in the United States, H. S. Betts; W. B. Greeley. Timber in Canada, R. H. Campbell. Indian Timbers used in Engineering Construction, R. S. Pearson. Timber in Russia, N. Tkatchenko. Preservative Treatment of Timber, Howard S. Weiss; Clyde H. Teesdale. 2:00 P. M. Clay Products as an Engineering Material, A. V. Bleninger. Aggregates for Concrete, Sanford E. Thompson. Probable and Presumptive Life of Concrete Structure Made from Modern Cements, Bertram Blount. Volume Changes in Concrete, Alfred H. White. Waterproof Concrete, Richard L. Humphrey.

Wednesday, September 22.

10:00 A. M. The Outlook for Iron, Prof. James Furman Kemp. Alloy Steels in Bridgework, J. A. L. Waddell. Use of Wood and Concrete in Structures standing in Sea Water with Special Reference to Dock Work, Harrison S. Taft.

Thursday September 23.

10:00 A. M. The Economics of the World's Supply of Copper, Thomas T. Read; H. D. Hawks. Alloys and Their engineering Field, Thomas T. Read; H. D. Hawks. Alloys and Their Use in Engineering Construction, W. Reuben Webster. 2:00 P. M. The En-

gineering Uses of Aluminum, Prof. Jos. W. Richards. Testing of Materials, G. Batson. Testing Full Size Members, Gaetano Lanza.

MECHANICAL ENGINEERING.

Tuesday, September 21.

10:00 A. M. Recent Advances and Improvements in Founding, Thomas D. West. Forgings from Early Time until the Present, C. von Philp. Recent Progress and Present Status of the Art of Forging with Special Reference to the Use of Quick-Acting Forging Presses, A. J. Capron. Permanent Shops, Pacific Terminals, Panama Canal, H. D. Hinman; A. L. Bell. 2:00 P. M. Machine Shop Equipment, Methods and Processes, E. R. Norris; H. F. L. Orcutt. Automatics, R. E. Flanders. High Temperature Flames in Metal Working, H. R. Swartley, Jr.

Wednesday, September 22.

10:00 A. M. The Internal Combustion Engine of the Year 1915. The Gas Power System. A Survey of the Status in the Year 1915, Chas. Edward Lucke. The Development of the Construction of Turbines in the Netherlands, D. Dresden, w. I. The 1915 Steam Turbine, E. A. Fosberg. The Diesel Engine in America, Max Rotter.

Thursday September 23.

2:00 P. M. Developments in Modern Water Turbine Practice, Dr. H. Zoelly. Water Wheels of Pressure Type, Arnold Pfau. Hydraulic Power Development and Use, J. D. Galloway. Water Wheels of Impulse Type, W. A. Doble. Canadian Hydraulic Development, Charles H. Mitchell.

Friday, September 24.

10:00 A. M. Safety Engineering. Frederic Renssen Hutton. Industrial Management, A. Hamilton Church. Motor Vehicles; Passenger Type, Ethelbert Favary. Motor Tractors, F. S. Davis. 2:00 P. M. The Boiler of 1915. Arthur D. Pratt. Compressed Air in the Arts and Industries, W. L. Saunders. Equipment Processes and Methods for Boiler Shop, E. C. Meier.

ELECTRICAL ENGINEERING.

Thursday September 23.

10:00 A. M. Economics of Electric Power Station Design, H. F. Parshall. The Water Power of Sweden, Sven Lubeck. Electric Power in Canadian Industry, Charles H. Mitchell. Industrial Effect of Low Cost of Electric Energy, L. A. Ferguson. The Effect of Hydroelectric Power Transmission upon Economic and Social Conditions, with special Reference to the United States of America, Frank G. Baum. 2:00 P. M. Electrical and Mechanical Installation of the Panama Canal, Edward Schildhauer. Electric Welding, C. B. Aue. The Application of Electricity to the Heating of Metals, F. L. Bishop. The Electric Motor as an Economic Factor in Industrial Life, David B. Rushmore.

(Continued in next issue.)

News From the California State Commission.

STATE CORPORATION DEPARTMENT.

Commissioner of Corporations H. L. Carnahan has granted a permit to Martinez Land Company, a \$200,000 corporation, to issue \$48,000 par value of its shares to B. Schapiro, R. R. Veale and others in payment for the Babbitt, Henderson and Potter ranches, aggregating 170 acres, situated near Martinez, subject to \$39,000 indebtedness. The company may also sell \$76,000 par value of its shares to net par for the purpose of subdividing the property for sale for residential purposes.

Consolidated Electric Company, San Francisco, is permitted to issue its stock to the Great Western Power Company and issue \$2,593,000 face value of 5 per cent forty-year bonds, in accordance with the order of the Railroad Commission.

Another \$5,000,000 of European money is coming into California to develop the oil industry. The Shell Company of California has just been issued a permit by Commissioner of Corporations H. L. Carnahan authorizing it to sell \$5,000,000 par value of its preferred shares for cash, to net the company not less than 90. None of this stock is to be sold in California but is to be taken up entirely, it is understood, by Holland capitalists. The proceeds will be used in the general development work undertaken by the Shell interests in this State.

Amelia Custom Milling Company, Bakersfield, is permitted to sell 15,000 shares at 25 cents per share, for the purpose of erecting a five-stamp mill in the Amelia District of Kern County for the use of various mines.

Applications Filed.

Red Cap Mining and Development Company of Scotia, Cal., operating ten quartz claims and three placer claims in northeastern Humboldt County, makes application for permission to sell 100,000 shares at 10 cents to net the company the full amount of the selling price. The \$10,000 raised, it is estimated, will pay off indebtedness and complete development work preparatory to installing a mill.

Maximoi Company of Vernon, Cal., makes application to issue \$18,000 par value of its shares in exchange for the refining plant and other assets of the firm of Murray, McHugh & Murray.

RAILROAD COMMISSION.

That jurisdiction over motor bus lines and auto stage lines has never been conferred upon the State Railroad Commission is the decision reached by that body after hearing the cases of the Western Association of Short Line Railroads vs. the Wichita Transportation Company, and that of the United Railroads of San Francisco

vs. the Peninsula Rapid Transit Company.

In a review of the public utilities act the commission dismissed both complaints on the grounds of no jurisdiction. The contention of the railroads that every common carrier is a public utility and consequently subject to control by the commission was disproved by the commission. It is distinctly provided that the Railroad Commission shall have and exercise only "such power and jurisdiction" to supervise and regulate public utilities "as shall be conferred upon them by the Legislature."

That the Legislature did not confer this jurisdiction is the opinion of the commission.

Supreme Court.

A decision has been rendered by the State Supreme Court which involves a realignment of claims of various large creditors of the California Development Company. The latter company, now in the hands of a receiver, built the canal which takes water from the Colorado River into the Imperial Valley.

A break in the bank of the river, occurring in 1904, started litigation which became very complicated, and finally was taken to the Supreme Court on appeal of the Southern Pacific Company. The water poured through the break in the bank and flooded the Salton sink, making the Salton sea. This water damaged the new Liverpool Salt Company's plant. The latter sued and got judgment for \$458,000. Then the Southern Pacific Company advanced money to the Development Company and helped repair the break. For its services it got a judgment for \$1,500,000. Subsequently the Development Company failed to pay interest on its bonds, a foreclosure suit was filed, and the Title Insurance and Trust Company secured a judgment for \$634,000. Litigation followed to determine the rights asserted by the various parties. From the judgment given by Superior Judge Walter Bordwell of Los Angeles, in 1912, an appeal was taken by the Southern Pacific.

The effect of the Supreme Court decision is to affirm the priority of claim of the insurance company, and of certain bond holders, and also of holders of receiver's certificates in the sum of \$315,000. The salt company is given a priority of lien on the Development Company's property in California; the Southern Pacific is given a priority of lien on stock of the old Mexican Company, which built that part of the canal running through Mexico; and the case is sent back for retrial on the issue of the relative value of the old Mexican stock and the California property.

Appellate Court.

A decision that will mean a saving to the city and county of San Fran-

cisco of between \$14,000 and \$15,000 was handed down by the Appellate Court of the Third District.

The decision was in the matter of a taxation of San Francisco's Hetch-Hetchy holdings in Tuolumne County, the Appellate Court ruling that Tuolumne had no right to levy upon the property of San Francisco.

This ruling, written by Presiding Justice Chipman, upholds the judgment of the Superior Court of San Joaquin, before which City Attorney Long of San Francisco urged the claims of the metropolis some time ago. Prior to the opening of litigation, Long petitioned the Tuolumne Supervisors to leave the San Francisco holdings from its assessment roll, but without result. Court proceedings were begun in Tuolumne and transferred to San Joaquin.

Railroad Commission.

Since March, 1912, the State Railroad Commission has authorized the issuance of stocks, bonds, notes and certificates for the public utilities of California amounting to \$466,000,000, according to a report it has made to the Governor.

Of this total \$175,900,000 has been allowed for the payment of maturing debts. The sum of \$248,000,000 has been authorized for new construction, additional development of existing utilities and new ventures. The balance has been approved for miscellaneous purposes. To date approximately \$200,000,000 of the total amount authorized already has been expended or is in process of expenditure.

16 Railroad Enterprises.

The report sets forth that under the regulation of the Railroad Commission there have been launched or carried forward almost from their inception 16 new railroad enterprises, the only independent ferry line on San Francisco bay, 13 new gas and electric companies, a \$5,000,000 oil pipe line and a score of new water companies.

Under the commission there have been built or are now being constructed in this State 700 miles of new railway lines, and power companies have initiated or completed projects embracing 100,000 additional horsepower for California.

Distribution of Funds.

The authority for new improvements and new enterprises in the three and one-half year period has been distributed as follows:

Steam railroads (including \$25,000,000 for expenditures outside of California)	\$102,800,000
Electric railroads	32,500,000
Gas and electric companies	80,000,000
Water companies	18,500,000
Tel. & Tel. companies	2,500,000
Warehouses	1,600,000
Pipe lines	10,000,000

ITEMS OF INTEREST.

MINERAL PRODUCTION OF CALIFORNIA FOR 1914.—MINING LAWS.

The completed, detailed report of the mineral yield of California for the year 1914, compiled under the direction of Fletcher Hamilton, State Mineralogist, is now ready for distribution in the form of Bulletin 70 of the State Mining Bureau.

California stands pre-eminent among the States of the Union in the diversity of her mineral wealth and is exceeded in the total value of the annual output by only four—the large coal and iron producing States of the East.

California's yield for the year 1914, though a slight decrease from that of 1913 due to the general business depression which pervaded the entire country for the greater part of 1914, maintained the creditable sum of \$93,436,553 worth of crude materials. It should be borne in mind that this value, with the exception of gold, silver and quicksilver, is, as far as obtainable, that of crude materials at the mine, or quarry, or well, as the case may be—and not sale price values at the marketing centers, which would include the elements of transportation and refining costs and the middlemen's profits.

The gold yield of 999,113 fine ounces, valued at \$20,653,496 was, with the exception of 1883, the greatest of any year in California since 1864. California leads all States in this item, as well as petroleum which is the largest single item here, the 1914 figures for which were 102,881,907 barrels, value \$47,487,109. The structural materials, including cement, crushed rock, building stones, etc., hold a prominent place and are growing in importance each year. Their total for 1914 was \$14,469,981.

An appendix contains the principal California and Federal mining laws.

Copies of Bulletin 70 may be obtained free of charge by addressing the State Mining Bureau, Ferry Building, San Francisco, California.

SANITARY INSPECTOR VISITS TAHOE RESORTS.

As a part of its campaign for improving the sanitation of summer resorts in California, the State Board of Health has recently sent its Sanitary Inspector, Edward T. Ross, to the Lake Tahoe region, where he made inspections of sixteen resorts around the lake as well as six resorts on the Placerville road in El Dorado County.

Insanitary conditions were found in eighteen out of the twenty-two places visited, the most common fault relating to stream pollution. In some places privies were placed directly over running streams; hog pens were found on the banks, and sewage from some resorts was flowing into Lake Tahoe or its tributaries. Such pollu-

tion not only creates a nuisance, but is also a distinct menace to the health of persons who drink from these beautiful mountain lakes or streams. Besides, such pollution of streams and lakes is a direct violation of State law.

Sanitary conditions at Tahoe Tavern, Pomin's Resort, Al Tahoe Inn and at Homewood Resort met with the approval of the inspector. Instructions for improving conditions at eighteen resorts which did not come up to the required standard were given to the owners, who were glad to receive the expert information furnished by Mr. Ross. They willingly agreed to make the changes required and will have ample opportunity to do so before the 1916 season opens, at which time Mr. Ross will make a re-inspection. In no case will sewerage into Lake Tahoe or its tributaries be permitted. Accordingly, in most instances, resorts were instructed to provide sanitary toilets and to dispose of sewage in septic tanks or leaching cesspools, situated at least 200 feet from lakes or streams.

It was found also, that a number of places were dumping garbage and rubbish in the brush near the camps. This procedure frequently resulted in a breeding place for flies and also became an eyesore. Rubbish and garbage will be required to be buried or burned.

Through the systematic inspections of Mr. Ross, the State Board of Health is bringing about the correction of insanitary conditions at summer resorts and thereby markedly lessening the conditions responsible for "vacation typhoid." By looking after the summer resorts, the Board will lessen the typhoid fever death rate in our cities as well as in our rural districts.

UNITED STATES NAVAL ADVISORY BOARD.

The members of the board best known to the general public are Thomas A. Edison, Hudson Maxim and Peter Cooper Hewitt, whose fame is world-wide. Eleven scientific societies took part in forming the new board, each offering two names, as follows:

The American Chemical Society: Dr. W. R. Whitney of Schenectady, inventor of photographic films and electric lamps; Dr. L. H. Baekeland, Yonkers, N. Y., a Belgian inventor, principally of photographic apparatus.

The American Institute of Electrical Engineers: Frank Julian Sprague, Milford, Conn.; B. G. Lamme, Springfield, Ohio.

American Mathematical Society: Dr. Robert Simpson Woodward, Washington, D. C., civil engineer, astronomer and geographer; Dr. Arthur Gordon Webster, Worcester, Mass., leading authority in America on sound.

American Society of Civil Engineers:

Andrew Murray Hunt; Alfred Craven, New York City, a graduate of the United States Naval Academy, who has distinguished himself in irrigation work in California and elsewhere.

American Aeronautical Society: Matthew Bacon Sellers, Baltimore, Md., a pioneer in aeronautics; Hudson Maxim, who has won world-wide fame in his work with explosives.

The Inventors' Guild: Dr. Peter Hewitt, New York City, inventor of electrical apparatus; Thomas Robins, Stamford Conn., inventor of numerous mechanical devices.

American Society of Automobile Engineers: Howard E. Coffin, Detroit, Mich., whose inventions have revolutionized the industry; Andrew L. Riker, who placed the American automobile on a meritorious world-wide basis.

American Institute of Mining Engineers: William Lawrence Saunders, Plainfield, N. J., inventor and author of scientific treatises; Benjamin Bowditch Thayer, president of the Anaconda Mining Company and expert on copper and high explosives.

American Electro-Chemical Society: Dr. Joseph William Richards and Lawrence Addison.

American Society of Mechanical Engineers: Spencer Millet, South Orange, N. J., whose cable-ways speeded the completion of the Gatun locks on the Panama Canal; William Le Roy Emmet, New York City.

American Society of Aeronautic Engineers: Henry A. W. Wood, New York, foremost in America in naval aeronautics; Elmor Ambrose Sperry, one of the world's foremost inventors of electric apparatus and inventor of the gyroscopic compass.

WAR DEMAND FOR HORSE SHOES.

Late Government statistics indicate the scale of the war demand for horse shoes. Our exports in June, 1915, were 750 per cent greater than in June, 1914, or 6,621,671 pounds against 86,333 pounds. For the fiscal year ended June 30, 1915, the exports were 29,157,243 pounds against 2,723,806 pounds and 2,594,448 pounds and 2,594,448 pounds in the fiscal years 1914 and 1913 respectively.

OREGON BUREAU OF MINES AND GEOLOGY COMMISSION—Office of the Commission, 526 Yeon Bldg., Portland, Ore.

Office of the Director, Corvallis, Ore.

Governor..... James Withycombe
Director..... Henry M. Parks
Mining Engineer..... Arthur M. Swartley
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PUBLIC WORKS IN JAPAN.

by

Bureau of Public Works Ministry of Home Affairs, Tokyo.

(2) These 65 rivers were divided into two classes, on one of which work is to be commenced prior to the other. Those which were at that time actually under the care of the state and other most important rivers, numbering twenty in all, were selected as the first group. All the others, numbering 40, are included in the second group. The work on the first group shall be finished in 18 years—from 1912 to 1930—during which period the government has also to make ample investigation regarding the other group of rivers and make preparation so as to be able to commence the work on them as soon as that on the former group shall have been completed.

This radical plan was put in operation at once and a great deal of good has since been effected.

The total expense on these works on the first group of rivers is estimated at \$2,500,000, about two-thirds of which is to be paid from the national treasury, and the remainder by prefectures concerned. The state revenue appropriated to meet the expenditure is put aside as a special fund, so that the works in view may not be postponed by any obstruction which may occur in the condition of the general finances of the state.

Improvement schemes of those rivers which are under actual work are explained as follows:

The River Tone.

This river is one of the greatest rivers in the Pacific Coast, having a drainage basin of over 3,573 square miles and irrigation area of over 294,84 acres. Considering the data obtained from minute investigation of the state of the river, the following scheme was decided upon. Some 130 miles of the main channel from its mouth upward to the district Shibane and the whole line of the river Yedo,

distributary, which is 40 miles in length, were taken as the area for the improvement. Discharge at the highest water was assumed to 200,000 cubic feet, 80,000 cubic feet of which should be apportioned to the Yedo. Main works of the scheme are: to enlarge the sectional area of the river channel so that it may afford sufficient space for the passage of this vast volume of water (construction of embankments of great magnitude on both sides of the river, diversion of the waterway where the natural course is too devious and revetment on the bank) to shut up the Gogendo, a distributary, at its junction with the main channel, by which the whole body of water is made to flow into the latter; to remove the watercourse of the Gyaku, a distributary, and to make a new channel connecting the new watercourse and the natural course of the Gyaku, by which sufficient width is given to convey 90,000 cubic feet of water which is to be carried to the Yedo and then by the Yedo to the sea; to extend the breadth

of the whole line of the Yedo; which conveys the combined water of the Sakasa and the Gogendo; to make a short cut from Gyotoku, in the lower part of the river, to the sea for detaching flood water, together with the construction of a lock and a weir at the junction; to divert the river Kinu, an affluent, making it join at a lower point, thus to facilitate the discharge of the Kinu into the Tone; to dam the watercourse of the Shogen, a distributary; to make a lock at the junction of the Yokotone with its main in order to dam the flood of the main toward lake Kasumi through the Yokotone and last of all to improve the state of the northern watercourse of the river which branches off in the neighborhood of the district Karuno. The work is now in course of execution and expected to be completed in the year 1920.

The Watarase, a Tributary of the Tone.

The idea of the work is to improve the channel for 23 miles above the mouth, and the channels of its three tributaries, namely, the Akiyama, the Omol, and the Uzuma. The main works are: The improvement of the state of the channel, by which the flood can be hurried forward into the Tone, before the water in the latter rises much; the surrounding the great area of damp ground near the Watarase, called Akama swamp, of 8,087 acres, with an embankment of great size, so that it may serve as a complete reservoir; the excavation of the hill lying between the river and the swamp for a weir, and the making cut-offs for the Omol and the Uzuma, by which the water, otherwise allowed to overflow, as the Tone increases, may be confined to the reservoir and the channel running downwards from the upper reservoir, the latter being also enlarged to a proper extent. For this scheme, the highest water was supposed to be 90,000 cubic feet for the Watarase, 60,000 cubic feet for Omol; and the maximum volume of 6,000,000,000 cubic feet is to be reserved in this swamp. This work was commenced in 1910 with the expectation of completing it in 1920.

The Kuzuryu.

This is one of the greatest rivers in the north coast. The area to be improved covers the main channel for 30 miles above the mouth, the Hino, a branch for 13 miles, the Asuha for 15 miles and smaller branches such as the Asozu, the Kuratan. The work is chiefly the dredging of channels, the extension of embankments and the construction of weirs in those parts where the discharge capacity is deficient, so that they may be able to discharge the highest water, namely, 150,000 cubic feet for main channel, 60,000 cubic feet for the Hino, and 25,000 cubic feet for the Asuha. The work was begun in the year 1900, and so far as it concerns the Kuzuryu and the Asuha, has already finished, the balance being in course of construction.

It will be completed by the year 1916.

The Onaga.

One of the main rivers in Kyushu Island. Operations to be carried out are chiefly the enlargement of the embankments and the dredging of channels of the main river and its tributaries — the Izumikochi, the Hikosan, the Chugenji and the Inunaki. The length of the main river to be improved is 23 miles from the mouth to Kasamatsu. Besides the Izumikochi will be dammed at its mouth, and the water led to a newly cut channel which joins the main river at a lower point, by which the slope may be increased. A new waterway will be constructed at each of the two towns, Iizuka and Kotake where the main river and the Izumikochi respectively pursue a devious course. By these means, the supposed highest water, viz., the Onaga 150,000 cubic feet, Izumikochi 40,000 cubic feet, the Hikosan 80,000 cubic feet, the Chugenji and the Inunaki each 30,000 cubic feet, has sufficient discharge provided for its passage. The reason why the high water of the main river is small in quantity compared with its tributaries is explained by the fact that the increase of the water of the main generally comes later than that of the smaller so that it is not necessary to convey all the floods at the same time, the work was commenced in 1906 and completed in 1914.

The Shinano.

The greatest river in the opposite side of the Pacific coast with a drainage basin of over 1,548 square miles and irrigation area of some 196,656 acres. Early in the year 1877 an improvement work was set about on the main course from the city of Nagasaki downwards to its mouth at Niigata, and was substantially completed by the year 1902 by the co-operated efforts of the state and the prefecture of Niigata, the low water work by the latter and the high water work by the former. Next to this, the repair works at the mouth began in 1886 with similar way and were completed in 1903. At length, a thorough scheme was planned for diversion of floods and the improvement of the mouth. For the former purpose, a heavy cut is to be made through a narrow neck of land between Okozu and the seashore of Teradomari, measuring 7 miles in length and more than 800 feet to 1,600 feet in width, by which the total water of the river can be carried direct to the sea instead on long detour. (Some photos showing these works are exhibited in this Grand Exposition. At its junction with the main channel a lock and weir are to be made, through which the volume of water necessary for navigation and irrigation below the mouth of the cut-off is admitted into the natural channel. As to the mouth improvement, the Jetty on the west side

(Continued in next issue.)

Technical Societies.

SAN FRANCISCO ASSOCIATION OF MEMBERS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.

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Vice-Presidents—H. L. Hachl, M. C. Couchot.

Secretary—E. T. Thurston, Jr.
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Board of Directors—M. C. Couchot, H. L. Hachl, A. M. Hunt, P. E. Harroun, E. T. Thurston, Jr., C. H. Snyder, C. B. Wing.

Weekly luncheons in College Room, Hoffbrau Cafe, Wednesdays at 12:30. Engineers welcome; informal; no program.

Regular meetings are held bi-monthly at such time and place as may be appointed by the board of directors. The established custom is to meet on the third Fridays of February, April, June, August, October and December.

Address E. T. Thurston, Secretary, 813 Mechanics' Institute Bldg., Post street, San Francisco.

SAN FRANCISCO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS. 233 Post Street.

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Secretary.....C. G. Pyle
Asst. Secretary.....Edward Woodbury
EXECUTIVE COMMITTEE — J. A. Lighthipe, J. E. Barker, Geo. A. Damon, A. W. Nye.

Regular meetings third Tuesday in each month. Address all communications to C. G. Pyle, Secretary, Standard Underground Cable Co., 914 Hibernian Bldg., Los Angeles.

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DIRECTORS—Arthur S. Bent, J. J. Backus, A. C. Martin, Kenneth Shibley.
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Regular meetings second Tuesday evening each month. Address all communications to A. R. Walker, Acting Secretary, 1403 Hibernian Building.

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Monthly luncheon at Rudder's first Monday each month. Address all communications to Robt. Halley, Jr., 314 Union Bldg., San Diego.

PERSONAL.

Announcement was made at Stanford University on October 15th that Dr. Ray Lyman Wilbur will become president of the institution January 1, succeeding Dr. John Caspar Branner. The appointment was made at a meeting of the board of directors Thursday, the 14th.

President Branner presented his resignation to the board October 12th. He will be retired under the provisions of the Carnegie pension fund and will continue all research work in geology at Stanford University. On accepting the appointment in 1913 on the retirement of Dr. David Starr Jordan, Dr. Branner stipulated that he be permitted to relinquish the post at the end of two years.

Dr. Wilbur, dean of the Stanford Medical School, formerly Cooper Medical College of San Francisco, is the youngest of the three presidents of Stanford University. He was born in Boonesville, Ia., April 13, 1875. He received his A. B. degree at Stanford in 1896 and his master's degree the following year. In 1899 he was given the degree of doctor of medicine at Cooper Medical College.

From 1903 to 1904 Dr. Wilbur studied in Germany and England. In 1911 he was made dean of the medical school. In 1911 and 1912 he served as president of the American Academy of Medicine.

President Branner, on his retirement at the end of the year, will resume his former duties as head of the geology department.

Merits Of Unit Plant Warm Air Furnace.

By P. Edson Snell,
(of Central Hardware Co., Inc.)

Prominent Manufacturer Says This Appliance Is the One the Heating World Has Been Waiting for as Successful Gas Competitor Against Coal, Wood or Oil Heating Appliances.

If service is to come first as the chief watchword of gas companies and appliances manufacturers and dealers of the United States and later of the entire world, those of us who are connected with this part of the game must first make it our business to discover what the great public desires and then do our utmost to render service accordingly. Not only in the gas business but in every other line of commercial endeavor, real profit can only come as the result of giving real service first. Only a few years ago but a few hundreds of people knew anything about the many advantages of gas fuel for cooking or hot water heating. Now there are hundreds of thousands doing all or most of their cooking and water heating with gas and enjoying its many practical conveniences. Our forefathers would think it an extremely long way from the iron kettle and log fire to the modern gas range or automatic water heater.

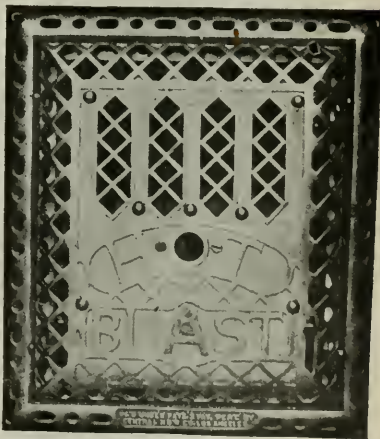
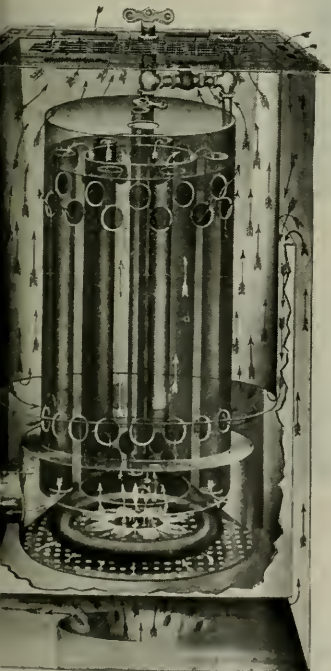
If cooking and water heating with gas fuel has been made as practical and as economical as well as more convenient than with coal, oil or wood, why has warm air heating with gas fuel not come into more general use? Simply because the gas appliance manufacturers have given much less attention to the production of permanent gas fuel heating devices than to either cooking or water heating devices; and further because most of the gas heating devices which have been produced for the purpose of heating air were designed purely for temporary heating or portable auxiliary heating. Very little attention has been given permanent gas fuel warm air heating devices either for general or auxiliary heating and most of the actual efforts in this direction have been expended along lines which in the general heating game are classed as the most expensive, while by no means most efficient, namely, heat by direct radiation.

The gas appliance world almost as a whole has seemed to overlook the great and important fact that by far the greater portion of general heating, particularly of private homes, has been accomplished by heating devices known as hot air furnaces, or those using the circulating principle. The world's greatest heating engineers as well as medical specialists and scientific experts have all agreed that the most efficient heating device and the one which creates the most sanitary and livable conditions in the one which brings in a continuous supply of fresh air from outside of the building heated and passing this air rapidly over a heating chamber into room, thus supplies the heat desired. In extremely cold weather such devices are sometimes arranged so as to draw some of the cool air off floor and back through the heating chamber up into the room again. The principle, however, remains the same: circulated warm air.

To return to the question of why general heating with gas fuel has not come into general use; one of the chief reasons can be summed up in the statement that an exceedingly large percentage of gas fuel, warm air heating devices which have been produced have not proven as practical or as efficient nor as economical or sanitary as those using coal, oil or wood as fuel. Permanent warm air gas heating devices have been chiefly constructed as central heating plants, none of which can be operated without a very large percentage of heat loss. This has been estimated by heating experts and manufacturers of central heating plants at not less than 50 per cent heat loss. Heat absorbed by the air passing to registers or steam or water passing to radiators; heat lost by radiation from furnace or boiler casing; heat lost by passing up chimney or vent in

form of gas of high temperature; heat lost by unburnt gases passing out of vent by reason of lack of oxygen when most needed—these all contribute to the 50 per cent or more heat loss connected with central heating plants, no matter what fuel is used or whether of the steam, hot water, or hot air types. With gas fuel central heating plants this heat loss has been enough to cause an excess of operating expense which compared with other fuels used in similar types of central plants has been large enough to make gas fuel prohibitive for general heating.

Some attention has been given to unit systems of permanent character but these have mostly been constructed along the very expensive line of heat radiation and have proven much less efficient than the general radiator types which they followed. These devices have had the added serious fault of depletion of oxygen contents of room heated, using such oxygen for combustion purposes and many of them actually pouring back into room heated all of the products of combustion. The author claims that any permanent gas fuel warm air device should be constructed so as to secure its air for combustion from outside of rooms to be heated and positively vent all of its products of combustion to the out-door air, via chimney or properly constructed vent pipe. The time is unquestionably coming when the general public will absolutely demand this quality in the construction of gas warm air heating devices and this demand will come before the inquiry as to its practicability, efficiency, economy, cleanliness, or convenience. To be practical and economical a permanent heating device using gas for fuel must come very close to the general efficiency and economy of devices



using other fuel. The many other advantages of gas fuel such as cleanliness, convenience, quickness, easier regulation, etc., should and will help sell such heating devices and make them the universal method for heating the air we breathe, but these advantages are only secondary to the first insistent demand of the public whom we serve for as practical and as economical efficiency as the fuel which they are now using. The other advantages will remain for the clinching argument which results in sales. We then have an answer to the vital question asked, mainly why have gas fuel warm air heating devices not come into more general use or kept pace with gas fuel cooking and water heating devices?

The next question which naturally arises is can a gas fuel device be constructed which will successfully compete with coal, oil or wood for general permanent heating of air?

With all sincerity yet with due modesty the author answers the above question with a very emphatic yet, and in explanation states that in his judgment the only practical device produced up to the present is the unit plant warm air furnace constructed without heat conducting pipes but so that all but a very small percentage of the heat units are utilized to rapidly warm a large volume of fresh air, all of which passes directly into the room heated. These unit plant furnaces should be constructed so as to be operated and regulated from within the room instead of the basement and located directly under floor between joists or in the wall between studding. Such devices must deliver a continuous supply of fresh air and be absolutely free from all injurious products of combustion and so constructed as to eliminate the great loss of heat connected with the operation of all central or basement plants. To be successful, a permanent gas fuel air heating device must be one which compares favorably in operating expense with other fuel and which at a minimum of gas consumption most quickly heats the largest volume of air by coming into contact with surfaces against which hot gases come in direct contact. The heating chamber should be constructed so as to create a quick upward circulation of the fresh air. Maintenance and regulation of such devices is an important matter to all gas companies and appliance dealers. The author desires to call attention to the fact that the luminous flame properly utilized in furnace construction requires practically no care after installation and entirely avoids the many repeated come back, trouble shooting, calls connected with devices using the Bunsen burner principle, which delivers no greater heat. The steel chamber so combined with a properly constructed luminous flame burner as to avoid direct contact of flame with metal and also avoiding smoking of such flame offers very interesting and effective possibilities.

It can be readily understood that the unit plant warm air furnace using gas for fuel can be at once considered as affording practically double the efficiency of the central plant type.

Associated Catalogues.

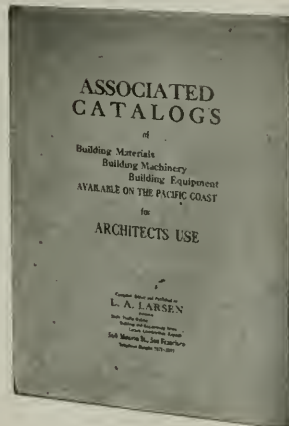


Here is where the Architect usually files the circulars, catalogues, announcements, etc., that come to his office. He can't take care of them. There are too many of them.

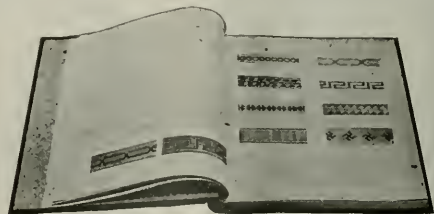


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APARTMENT HOUSES.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$24,000. Architect, John H. Powers, 460 Montgomery street, S. F. Owner, John Biller, 160 Montgomery street. Location, southeast corner of Polk and Vallejo streets. Will contain two stores and a total of 14 suites of two and three rooms. Interiors finished in pine with some elm panels and hardwood floors. Steam heat, hot water system and oil burning system. Wall beds and private bath rooms. Bath rooms finished in tile. Patent store fronts. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$15,000. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. Location, 15th and Dolores streets. Will contain twelve suites of two and three rooms. Interiors finished in pine throughout. Some hardwood floors. Wall beds and private baths. Tile floors and wainscot in bath rooms. Exterior covered with cement plaster on metal lath. Plans being prepared and bids to be called for at once.

OAKLAND, CAL.—Apartment house, 2 story and base, frame, \$15,000. Architect, J. Henry Boehrer, Delger Bldg., Oakland. Owner, Nevada L. Rudolph. Location, southwest corner of Staten avenue and Belmont. Will contain ten suites of two and three rooms. Interior finish pine with some elm panels and hardwood floors. Wall beds and private bath rooms. Bath rooms finished in tile. Steam heat and hot water system. Exterior covered with cement plaster. Plans complete and in the hands of the owner who is letting all contracts.

SAN FRANCISCO—Apartment houses 1, 3 and 1, 4 story and base, reinforced concrete, \$16,000 and \$22,000. Architects, O''Brien Bros., 240 Montgomery street, S. F. Owner's name withheld. Location, China Town District. The smaller building will contain 36 rooms and the larger 16 rooms, both arranged for three room suites with bath and wall beds. Interior finish pine. Steam heat and a hot water system. Exteriors faced with cement plaster. Plans being prepared.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$10,000. Architects, Helman & Schwartz, Nevada Bank Bldg., S. F. Owner, A. Birrer, 1180 Sutter street, S. F. Location, north California west of Larkin. Will contain six suites. Interior finish pine with some elm panels and hardwood floors. Wall beds. Tile bath rooms. Exterior covered with rustic and cement plaster. Plans complete and owner to take figures.

BATH HOUSES.

SAN RAFAEL, MARIN CO., CAL.—Bath house filter. Cost not stated. Engineer, City Engineer, San Rafael. Owners, City of San Rafael. Bids will be opened on Nov. 1st at 8 p. m. for furnishing and installing a Continental Pressure Filter or equal in the Municipal Baths.

BANKS

LOS ANGELES, CAL.—Bank and offices, 4 story and base. Class A construction. Cost not stated. Architect, John Parkinson, Security Bldg., L. A. Owners, Security National Bank. Location, Spring street adjoining present Security Bldg. First floor occupied by bank, upper floors arranged for offices. Steel frame, hollow tile partitions, concrete floors, metal window sash and frames. Ornamental iron and bronze. Interior finish hardwoods, ornamental plaster and metal trim. Marble and tile wainscot. Special bank fixtures and vaults. Exterior faced with granite. Plans complete and figures being taken.

BONDS

LOS ANGELES, CAL.—The sale of \$1,026,000 of power bonds has been made by the City Council to the Chase National Bank of New York. These bonds are a portion of the \$6,500,000 power bond issue voted at the election a year ago.

OREGON CITY, ORE.—A flax mill, costing between \$300,000 and \$500,000 will be built within a radius of forty miles of Oregon City by the Willamette Valley Flax Company, according to statements of City Recorder Loder. A certificate of incorporation has been issued by Corporation Commissioner Schulderman to the company.

Those interested are William Hassel-din, superintendent of the Oregon City Wooden Mills; Roy D. Cox, one of the owners of the Oregon City Ice and Cold Storage Company; E. S. Larsen, merchant, and W. C. Elliott, Portland contractor.

CALIXICO, IMPERIAL CO., CAL.—This city at the present time is taking proceedings for the purpose of voting bonds for water main and sewer extensions.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—The City Council, at a special meeting decided to postpone the proposed special election to vote bonds in the sum of \$210,000 for the erection of a new city hall and municipal auditorium which was scheduled for October 18th. The election will probably not be held until next spring. Elmore H. Jeffery and Frank H. Schaefer, 605 Wesley Roberts Bldg., L. A., are the architects.

SANTA BARBARA, SANTA BARBARA CO., CAL.—The Board of Supervi-

sors has sold the first \$50,000 block of the \$50,000 bridge bond issue to Byrne, McDonnell & Co., at a premium of \$97.

WASCO, KERN CO., CAL.—The Board of Trustees of the Wasco Union High School District will shortly call a special election to vote bonds for the erection of a new high school building.

POMONA, LOS ANGELES CO., CAL.—Elections will be held in this city during the month of November to vote bonds of \$30,000 for the construction of storm drains and culverts; \$10,000 for the improvements to be made in Ganesha Park and \$5,000 for the erection of a chamber of commerce building.

FORTUNA, HUMBOLDT CO., CAL.—The last election held to vote bonds of \$24,000 for the erection of a high school carried, but after placing the bonds for sale they were declared invalid. The trustees are making preparations for another election.

PORTERVILLE, TULARE CO., CAL.—The Doyle ranch, 14 miles of this city, has been purchased by a number of Porterville business men and orange growers, who have the intention to erect a modern club house building on the site. The club membership will be limited to 100.

OAK PARK, SACRAMENTO CO., CAL.—The Oak Park Business Men's Association is working for the following improvements: A comfort station for Magnolia and Sacramento avenues; high pressure system for city main by connection with the system at the Western Pacific plant at the shops; alley sewage drains; surface drainage into the bond sewers, and repair of damaged streets.

MODESTO, STANISLAUS CO., CAL.—Although the required number of signatures have not been secured, the petitions now being circulated, calling a bond issue for good roads, is meeting with success.

EUREKA, HUMBOLDT CO., CAL.—The County Supervisors have sold \$125,000 county highway bonds to The Anglo & London-Paris National Bank.

AUBURN, PLACER CO., CAL.—November 16th is the date set for the voting of bonds of \$22,000 for extending city sewers, constructing a septic tank, purchasing three fire trucks and installing a fire alarm system.

GRASS VALLEY, NEVADA CO., CAL. E. S. De Golyer, head of the California and West Point Mining Company, has been in this city, accompanied by George Kingsbury, mining engineer of Los Angeles, with the intention of rebuilding the California surface plant, recently destroyed by fire.

HANFORD, KINGS CO., CAL.—The construction of a new city jail building is now under construction by the City Trustees. It is thought a bond issue to vote \$2,000 for the extension of fire mains will be called shortly. While no definite action was taken by the Trustees, it is probable that bonds of \$50,000 for the jail and main extensions will be voted.

TAFT, KERN CO., CAL.—The Trustees have definitely decided to revoke bonds of \$50,000 for the erection of a new high school, the last issue having been declared invalid. Notices have been posted calling the election for November 6th.

BAKERSFIELD, KERN CO., CAL.—Owing to the crowded conditions of the school buildings the Board of Education will recommend that a bond issue for making additions to the present schools and for the erection of new buildings.

BRIDGES AND DAMS

WILLOWS, GLENN CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, Willows. Owners, Glenn County. Four new bridges have been ordered constructed by the County Supervisors. One will be over Salt Creek near Newville, and will be 80 feet long. Two will be over a slough in Van Sickle subdivision at Hamilton City, 30 and 60 feet long. One will be over Farrar Creek, three-fourths of a mile east of Butte City, and will be 80 feet in length. All will be of concrete, and bids for their construction will be opened November 1st. Further information may be had from the County Engineer at Willows.

SACRAMENTO CAL.—Bridge, reinforced concrete, \$2,300. Engineer, City Engineer Frank C. Miller, Sacramento. Owners, City of Sacramento. Bids are now being taken by the City Park Board for the construction of a bridge in Del Paso Park, to cost approximately \$2,300. Two sets of plans will be offered to bidders, one by City Engineer Frank C. Miller and the other by Jenkins & Wells. Further information may be had from the City Engineer at Sacramento.

UKIAH, MENDOCINO CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, City Engineer, Ukiah. Owners, City of Ukiah. At the last meeting of the City Trustees only one bid was received by the board for the construction of a wooden bridge across Orr Creek at Oak street. Walter B. Dickie offered to do the for \$1,150, this amount including grading and filling with driven piles, or for \$1,075 with piles on mud sills. Action on awarding a contract was laid over until October 11th. Trustee Charlton recommended that bids be called for the construction of a concrete bridge at the same location in accordance with the plans prepared by the City Engineer. It is said that the cost of a concrete bridge will run about \$3,000. Plans and specifications may be had from the City Engineer at Ukiah.

GALT, SACRAMENTO CO., CAL.—Levee construction, \$30,000. Engineer's name not given. Owners, Allen Estate. The Allen Estate for the past few weeks have been working on a new levee on their place known as the old Hicks ranch. Approximately two miles of levee work has been completed of the three miles to be done. The levee is from five to seven feet high.

BAKERSFIELD, KERN CO., CAL.—Bridges and culverts, reinforced concrete. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids will be opened on November 8th at 10 a. m. for grading, construction of bridges and culverts on Division 10, Section 7, Bakersfield-Mojave road.

VISALIA, TULARE CO., CAL.—Bridge, concrete, \$1,750. Engineer,

County Surveyor, Visalia. Owners, Tulare County. Bids of Thompson Bros. and Noble & Noble were taken under advisement for the construction of the Mill creek bridge. The former bid \$1,735 and the latter \$1,941.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridges, 4 reinforced concrete. Cost not stated. Engineer, W. M. Thomas, Hibernian Bldg., L. A. Owners, Santa Barbara County. Engineer W. M. Thomas has been commissioned to prepare plans and specifications for four bridges to be erected on the state highway under the recent bond issue. The bridges will be located as follows: One overhead bridge crossing near Bell canyon; a reinforced concrete span over El Capitan creek, and two reinforced concrete bridges over Gaviota creek between Gaviota gorge and the ocean.

VENTURA, VENTURA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Ventura. Owners, Ventura County. The Board of Supervisors has authorized the County Clerk to advertise for bids for the construction of a bridge across the Ellsworth Barranca in Road District No. 5, in accordance with plans and specifications prepared by the County Surveyor.

FRESNO, FRESNO CO., CAL.—Retaining walls, reinforced concrete. Cost not stated. Engineer, County Surveyor, Fresno. Owners, Fresno County. Bids will be received by the Board of Supervisors up to 2 p. m. of November 1, 1915, for the construction of four concrete retaining walls for the bridge across Kings River near Sanger, in accordance with plans and specifications on file in the office of the Board.

Contracts Awarded.

UKIAH, MENDOCINO CO., CAL.—Bridges, reinforced concrete, \$1,045.76. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Contractor, T. J. Hyman, Ukiah. Contract price, \$1,045.76.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Jetty work. Cost as follows. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractors, Grace & Bernier Spreckels Bldg., S. F. Contract price 26-foot piles, \$10.80; 28-foot piles, \$11.50; 30-foot piles, \$12.40; barbed wire per 100 lbs. \$5.50.

MODESTO, STANISLAUS CO., CAL.—Bridges, reinforced concrete, \$4,538. Engineer, County Surveyor, Modesto. Owners, Modesto County. Contractors, F. F. Reames and R. N. Simpson, Modesto. Contract price, \$4,538.

EUREKA, HUMBOLDT CO., CAL.—Bridges. Cost as follows. Engineer, County Surveyor, Eureka. Owners, Humboldt County. Contractor, Mercer Fraser Co., Eureka, trestle bridge, \$2,200. D. C. Farnell, Eureka, culvert \$372.

CHURCHES

HOME OF PEACE, SAN MATEO CO., CAL.—Mausoleum, 1 story, granite and concrete, \$10,000. Architects, Cunningham & Politeo, First National Bank Bldg., S. F. Owners, I. Cohn Estate. Will contain several receptacles. Interior finish Caen stone and plaster. Ornamental iron and bronze, art glass and modern plumbing. Exterior face with granite. Plans being prepared.

FACTORIES AND WAREHOUSES.

KELLOG, IDAHO—Copper smelter, 1,000,000. Engineers, Bradley, Bluff & Labrathe, Hobart Bldg., S. F. Owners,unker Hill and Sullivan Mining Co. Engineers, Bradley, Bluff & Labrathe have been commissioned by the management of the Bunker Hill and Sullivan Mining Co. to prepare plans for smelter plant to be erected on their property in Kellog, Idaho. Mr. Easton, manager of the mining company, states that it is possible that the plant may be located in either Seattle or Portland as the freight rates on ore from Kellog are very high. Further mention will be made of the work.

EUGENE, ORE.—Warehouse, 2 story and base, reinforced concrete, \$25,000. Architect, J. R. Ford, Eugene. Owners, Allen & Lewis, Eugene. Will cover an area of 80 by 122 feet. Construction will be either reinforced concrete or hollow tile. Tin roof. Furnace heat and electric elevator will be installed. Interior finish rough and pine. Exterior cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Warehouse, 1 story and base, brick and reinforced concrete. Architect, John A. Ettler, 504 Mission street, S. F. Owners, Bohlin Co. Location, north Clementina east of 4th, covering an area of 75 by 80 feet. No interior finish, cement floor, plumbing and electric work. Exterior faced with cement plaster. Plans complete and work to be done by Day Labor.

Contracts Awarded.

CALWA, FRESNO CO., CAL.—Warehouse addition, 1 story, brick, \$10,500. Architect, John H. Powers, 460 Montgomery street, S. F. Owners, Fresno Bonded Warehouse Co. Contractor, John Miller, 460 Montgomery street, S. F. Contract price, \$10,500.

FIRE REPORT

VENICE, LOS ANGELES CO., CAL.—The Pacific and Standish apartment houses of this city, were destroyed by fire at a loss of \$20,000.

THERMAL, CAL.—S. D. Nichols, whose general store was destroyed by fire recently, will rebuild at once. The new structure will cost in the neighborhood of \$30,000.

PALO ALTO, SANTA CLARA CO., CAL.—The planning mill of J. F. Parkinson, near the Stanford University grounds, was destroyed by fire last week, causing a loss of \$25,000. There was no insurance carried on the building.

REDDING, SHASTA CO., CAL.—A livery barn owned by Thomas Laffon of Redding, has been destroyed by fire. The loss is placed at \$9,000.

SAN FRANCISCO—The plant of T. H. Meek at 1157 Mission street was completely destroyed by fire last week. The building was of frame and corrugated iron construction.

SANTA ROSA, SONOMA CO., CAL.—The lumber mills at Fort Ross have been destroyed by fire. A considerable amount of lumber and machinery was lost.

ALAMEDA, CAL.—The Alaska Packers' Association warehouse in Alameda has been destroyed by fire, entailing a loss of \$18,000.

CLOVERDALE, SONOMA CO., CAL.—Fire threatening the entire town of Cloverdale caused damage to business and dwelling buildings. The loss is estimated at \$50,000.

NORD, BUTTE CO., CAL.—The warehouse of James H. Jones Company of Nord was completely destroyed by fire last week at a loss of \$15,000.

PROBERTA, TEHAMA CO., CAL.—Causing a loss of \$10,000 fire destroyed the Proberta Hotel building. The building will be rebuilt immediately, according to those interested in the property.

BIEBER, LASSEN CO., CAL.—The general store of N. Bieber & Co. was destroyed by fire last week. The loss is placed at \$25,000, and is partly covered by insurance.

FLATS

SAN FRANCISCO—Flats, 3, 2 story and base, frame, \$3,500 each. Architect, O. R. Thayer, 20 Montgomery street, S. F. Owner, W. A. Goericke, San Rafael Location, south Pacific west of Taylor. Each building will contain two flats of five and six rooms. Interior finish will be of pine and hardwood with some hardwood floors. Open fire places and tile or brick mantels. Imitation tile in bath rooms. Automatic water heaters. Exteriors covered with cement plaster and shiplap. Plans complete and bids to be taken by the owner and architect.

SAN FRANCISCO—Flats, 2 story and base, frame, \$3,000. Architect, none. Owner, John F. Haner, 3580 20th street, S. F. Location, west San Carlos north of 19th street. Will contain two flats of five and six rooms. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile mantels. Automatic water heaters. Bath rooms finished in imitation tile. Exterior covered with cement plaster and shiplap. Plans complete and work to be done by Day Labor.

GARAGES

Contracts Awarded.

PORTLAND, ORE.—Garage, 2 story and base, brick, \$30,000. Architects, Jacobberger & Smith, Board of Trade Bldg., Portland. Owner, Gay Lombard, tor, James P. Taylor, Macleay Bldg., lessee, Oregon Motor Car Co. Contractor, Portland. Contract price, \$30,000.

GOVERNMENT WORK & SUPPLIES

Pearl Harbor, Wharf.

The Hawaiian Dredging Co., of Honolulu, H. T., has the contract at \$155,900 for constructing reinforced concrete wharf at the naval station, Pearl Harbor, H. T.

Chico, Cal., Furniture.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for installing furniture in the U. S. public building at Chico, Cal.:

Jacob Britzel & Son, York, Pa., \$1,378.

Furnas Office and Bank Furniture Co., Indianapolis, Ind., \$1,655.10.

Lauck & Hill, Richmond, Ind., \$1,689.11.

The Federal Equipment Co., Carlisle, Pa., \$1,741.75.

John E. Sjostrom Co., Philadelphia, Pa., \$1,700.

Richmond School Furniture Co., Muncie, Ind., \$1,552.75.

McGuire Cabinet Co., Los Angeles, Cal., \$1,257.10.

Operating Mechanism.

The Reclamation Service is asking for proposals for furnishing the operating mechanism for two cylinder gates of 12-foot diameter for Shernburne reservoir, Milk River project, Mont., and a duplicate set for Keechelus reservoir, Yakima irrigation project, Wash. The bids will be opened at the office of the U. S. Reclamation Service, Washington, D. C., on October 20.

Chain Shafts.

The Reclamation Service is asking for proposals for furnishing chain shafts and chains for the rolling crest of the Grand River diversion dam, Grand Valley irrigation project, Colo. The contract involves one safety chain, one chain shaft, one operating chain, and one guard chain, all for the 60-foot roller, and six safety chains, six chain shafts, six operating chains, and six guard chains for the 70-foot rollers. The bids will be opened at the office of the U. S. Reclamation Service, Washington, D. C., November 8.

Puget Sound, Stable.

Under bids opened September 29 at the bureau of yards and docks, Navy Department, for constructing a stable at the navy yard, Puget Sound, the contract has been awarded to B. Ward, of 513 31st avenue, Seattle, Wash., at \$1,595.

Pearl Harbor, Marine Railway.

The bids opened on September 18 by the bureau of yards and docks, Navy Department, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii, have been rejected.

Fort Kamehameha, H. T., Distributing System.

The contract for installing an electric distributing system at Fort Kamehameha, H. T., bids for which were opened by the depot quartermaster, Washington, D. C., has been awarded to the Safety Insulated Wire and Cable Co., Washington, D. C., at \$6,345.41; delivery Honolulu.

Berkeley, Cal., and Denver, Colo., Lighting Fixtures.

In the installation of lighting fixtures in the U. S. public buildings at Berkeley, Cal., and Denver, Colo., for which the Horn & Brannen Mfg. Co., Philadelphia, Pa., has the contract, fixtures and material manufactured by the following firms will be used: Pendant switches, General Electric Co.; canopy switches, Cutler-Hammer; key sockets, Weber; reflectors, Holaphane; glassware, Marbeth-Evans and Holaphane.

Everett, Wash., Post Office.

As previously reported, the contract for the construction, complete, of the U. S. post office at Everett, Wash., was awarded to Hendrickson & Co., of Seattle, Wash., at \$111,519. In the construction of the building fixtures and material manufactured by the follow-

ing firms will be used: Plumbing fixtures, Federal-Huber Co.; cast iron column and wall radiators, American Radiator Co.; damper regulator, do; non-conducting coverings, Johns-Manville Co.; air valves for steam mains, Jenkins Bros.; cabinet and tablet, Agutta-Grissold Electric Co.; rubber-covered wire, Simplex; flush switches, General Electric Co.; pendant and canopy switches, Cutler-Hammer; keyless sockets, Weber; reflectors and glassware, Macbeth-Evans and Holaphane; light fixtures, Gas Fixture and Brass Co.

Tender Sequoia, Repairs.

The following bids were received by the lighthouse inspector, 18th district, San Francisco, Cal., for miscellaneous repairs to tender Sequoia:

Moore & Scott Iron Works, San Francisco, Cal., \$1,075; 15 days.

W. G. Tibbitts & Co., San Francisco, Cal., \$1,390; 7 days.

Mare Island Navy Yard, \$1,049; 8 days.

Dundons Iron Works, San Francisco, Cal., \$1,533; 10 days.

United Engineer Works, San Francisco, Cal., \$902; 10 days; accepted.

San Diego, Cal., Repairs.

The contract for repairs to piling of wharf at the U. S. quarantine station, San Diego, Cal., has been awarded to Spreckels Bros. Commercial Co. at \$582.50.

Yards and Docks, Torpedo Boat Piers.

The contract for constructing torpedo boat piers at the naval station, Pearl Harbor, H. T., has been awarded to the Lord-Young Engineering Co., of Honolulu, H. T., at \$55,600.

San Francisco, Cal., Subtreasury.

As previously reported, the contract for the completion of the second story of the U. S. Subtreasury, San Francisco, Cal., was awarded to Construction & Engineering Co., 1047 Folsom street, San Francisco, Cal., at \$9,760. Fixtures and materials manufactured by the following firms will be used: Plumbing fixtures, John Douglas Co.; cast iron column radiators and wall radiators, American Radiator Co.; radiator valves, Crane Co.; conduit, National Metal Molding Co.; rubber-covered wire, Simplex Wire & Cable Co.; flush switches, Hart & Hageman.

Chico, Cal., Furniture.

The contract for installing furniture in the U. S. post office at Chico, Cal., has been awarded to McGuire Cabinet Co., Los Angeles, Cal., at \$1,257.10.

HALLS AND SOCIETY BUILDINGS

SAN FRANCISCO—Club house, 3 story and base, frame, \$30,000. Architect, H. C. Bauman, Hearst Bldg., S. F. Owners, Dorian Olympic Club. Location, northwest corner 32nd avenue and California street. Will contain club rooms, kitchen, dining room, special accommodations for golf players and living apartments. Interior finish pine and hardwoods with some hardwood floors. Central heating system and open fire places. Mantels tile and brick. Bath rooms finished in tile.

Exterior covered with cement plaster. Plans complete and figures being taken.

HOSPITALS

LOS ANGELES, CAL.—Clinic building, 2 story and base, reinforced concrete. Cost not stated. Architect, A. B. Benton, 114 North Spring street, L. A. Owners, Parent Teachers' Association. Location, Castelar street, covering an area of 25 by 120 feet. Will contain offices for dentists and physicians, operating room for minor cases and dispensary. Interior finish pine. Steam heat and modern plumbing. Exterior faced with cement plaster. Plans being prepared.

UKIAH, MENDOCINO CO., CAL.—Steward's cottage, 1 story and base, frame, \$15,000. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Plans are being prepared for a steward's cottage and additions to the buildings at the Mendocino State Hospital. Further mention will be made of this work.

NORWALK, LOS ANGELES CO., CAL.—Hospital septic tank, \$7,250. Engineer, State Engineer, Sacramento. Owner, State of California. Plans are being prepared for a septic tank at the Norwalk State Hospital. Further mention will be made of the work when bids are called.

Contracts Awarded

SEDRO-WOOLLEY, WASH.—State hospital group, 1 and 2 story, reinforced concrete, \$133,452.27. Architects, Heath & Gove, National Realty Bldg., Tacoma. Owners, State of Washington. Contractors, Warrack Construction Co., Downs Block, Seattle. Contract price, \$133,452.27. Note: contract was let on revised figures.

HOTELS.

SAN FRANCISCO—Hotel completion, 6 story and base. Class A construction, \$50,000. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owners, J. K. Prior Estate. Location, southwest corner of Eddy and Mason streets, covering an area of 137 1/2 feet square. Work will consist of altering first floor to contain 13 stores besides the hotel entrance. Upper floors will contain 158 rooms and baths. There will be interior finish of pine, plastering, electric work, steam heat, oil burning furnace, plumbing, painting, glass and glazing and patent store fronts. Exterior will be faced with cement and red pressed brick. Plans are being prepared.

AGUA CALIENTE, SONOMA CO., CAL.—Hotel resort, 1 and 2 story and base, frame, \$35,000. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, Agua Caliente Springs Resort. Main portion 128 by 34 feet with wings 88 by 34 feet. Will contain, office, lobby, ladies' parlor and 80 rooms with bath. Interior finish pine with some hardwood floors. Central heating system, special buildings for laundry and boiler equipment. Exterior covered with cement plaster. Clay tile roof. Plans being prepared.

EXETER, TULARE CO., CAL.—Hotel, 2 story and base, artificial stone. Cost not stated. Architect, none. Owner, D. A. Waechter, Exter. Location,

5th street. Will contain a number of single rooms and several public baths. Interior finish pine. Steam heat and hot water system. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

Contracts Awarded

RAINIER NATIONAL PARK, WASH.—Hotel, 1 and 2 story and base, reinforced concrete, \$75,000. Architects, Heath & Gove, National Realty Bldg., Tacoma. Owners, Savage-Scofield Co., et al. Contractors, Cornell Bros., Savage Bldg., Tacoma. Contract price, \$75,000.

LIBRARIES.

Contracts Awarded

PENDELTON, ORE.—Library, 1 story and base, hollow tile construction, \$31,200. Architects, Johnson & Mayer, Portland, associated with Architect Raymond W. Hatch, Pendleton. Owners, City of Pendleton. Contractors, Olson & Johnson, Missoula, Mont. Contract price, \$31,200.

IRRIGATION PROJECTS

COLUSA, COLUSA CO., CAL.—Earth work. Cost not stated. Engineer's name not given. Owners, Brown-Arnold Co., Colusa. The earth work for the canal and laterals on the Brown-Arnold rice project, one mile southwest of the town of Colusa, is now ready for bids. Intending bidders may call at Chas. de St. Maurice's office and examine the plans and specifications.

DALLS RESERVOIR SITE, STANISLAUS CO., CAL.—Race and curtain wall protection, reinforced concrete. Cost not stated. Engineer, Chief engineer, Modesto Irrigation District. Owners, Modesto Irrigation District. Bids will be opened on November 2nd for constructing reinforced concrete protecting race and curtain wall on the up-stream face of dam No. 1.

STOCKTON, SAN JOAQUIN CO., CAL.—Irrigation project, \$255,000. Engineer not selected. Owners, Tracy-Bethany Irrigation District. The people of the Tracy-Bethany district by a vote of 79 to 11 favored the formation of the west side irrigation district, comprising approximately 11,500 acres, and, at the same time, elected their officers. The directors and officers elected are S. A. Shearer, district one; Fred von Sostén, district two; Louis Parker, district three; Henry Frierichs, district four; Peter D. Schmidt, district five; Mrs. Dollie McGee, treasurer; George Parker, assessor; Cornelius Looney, tax collector. Rough estimates for pumping water on the lands of the district are placed at about \$285,000. One of the first important matters to be attended to will be the naming of an engineer to prepare plans and estimates for the district preparatory to submitting a bond issue to the voters of the district.

MADERA, MADERA CO., CAL.—Irrigation project. Cost not stated. Engineer's name not given. Owners, Madera Canal and Irrigation Co., Madera. The Madera Canal and Irrigation Co. has under consideration a project to build an irrigation dam across the San Joaquin River at Polasky or a short distance above Friant, near the mouth of Hildreth creek. The dam would

store part of the flood waters on the river and would supply water to irrigate. It is estimated, 120,000 acres of and chiefly in Madera County. The dam would be 250 feet high from bed rock and would back the water for 11 miles, covering about 1,000 acres. The level of the canal would be 400 feet above the sea, making it possible to irrigate much of the high plain land of Madera County. It is said that this site was chosen by Government engineers some time ago as the most feasible for a dam across the San Joaquin. The water would be diverted into Cottonwood creek, and the land near Borden, Berenda and Madera would be served.

Contracts Awarded.

MODESTO, STANISLAUS CO., CAL.—Canal lining, concrete, \$62,962.25. Engineer, Chief Engineer F. C. Herrmann, Modesto. Owners, Modesto Irrigation District. Contractor, James Willison, Half Moon Bay. Contract price, \$62,962.25.

RAILROAD CONSTRUCTION AND EQUIPMENT.

PORTLAND, ORE.—Railroad construction, \$6,000,000. Engineer's name not given. Owners represented by Robert E. Strahorn, Portland. According to announcement made by Robert E. Strahorn, a railroad, the cost of which will be about \$15,000 per mile, will be constructed into Eastern, Central and Southern Oregon, to extend for a distance of 400 miles. He proposes to construct a line from Bend to Clamath Falls; one branching from this line about Silver Lake and extending easterly to the rich Warner valley, and one branching from the north and south line about Millicum to connect with the line the Oregon Short line and O. W. R. & N. are building westward through Crane Creek Gap.

PORTLAND, ORE.—Elimination of grade crossing, \$750,000. Engineer, City Engineer, Portland. Owners, City of Portland. Final preliminaries leading up to the commencement of actual proceedings for the elimination of the O. W. R. & N. grade crossings from the head of Sullivan's Gulch to the city limits will be completed this week when the city formally will take over the road west of 32nd street from the county. This will be followed by the filing of the plans and specifications for the project.

Contracts Awarded

GRAY'S FLAT, PLUMAS CO., CAL.—Under tramway, \$35,536. Engineer's name not given. Owners, Spanish Peak Lumber Co. Contractors, United States Steel Products Co., New Jersey. Contract price, \$35,536.

RESIDENCES.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, C. A. Hall, 1318 14th avenue, S. F. Location, west side 14th avenue south of Balboa. Will contain six rooms, bath and sleeping porch. Interior finish pine with some white enamel. Hardwood floors. Open fire place, furnace heat and automatic water heater. Mantel tile or brick. Imitation tile in the bath room. Exterior covered with cement plaster. Plans

complete and work to be done by Day Labor.

SAN FRANCISCO—Residence alteration, 1 story, frame and brick, \$20,000. Architects, Greene & Greene, Pasadena. Owner, Mortimer Fleishhacker, 134 Fremont street, S. F. Location, 2113 Pacific avenue. Work will consist of entire new interior trim, hardwood and white enamel, new heating system and hot water supply, plumbing, painting, plastering and electric work. Some minor exterior alterations will also be made. Plans are complete and in the hands of the owner who is letting contracts.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, A. L. Calvert, 2131 Bruce street, Oakland. Location, east View street north of Mather. Will contain five rooms, bath and sleeping porch. Interior finish pine with some white enamel. Hardwood floors and open fire place. Mantel tile or brick. Bath room finished in imitation tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, C. H. McCoy, 2903 Shattuck avenue, Berkeley. Location, west Mariposa west of Los Angeles. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel and hardwood floors. Furnace heat and open fire place. Mantel tile or brick. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, Lloyd A. Haley, 1721 Sonoma avenue, Berkeley. Owner, J. G. Taylor. Will contain seven rooms, bath and sleeping porch. Interior finish pine with white enamel in the bed rooms. Hardwood floors and open fire places. Mantels tile and brick. Tile wainscot in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, N. L. Bishop, 2616 17th street, Sacramento. Location, Y street. Will contain six rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

STOCKTON, SAN JOAQUIN CO., CAL.—Residences, 2, 1 story and base, frame, \$2,000 each. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owners, Cye Moreing & Bros., Commercial Bank Bldg., Stockton. Location, Park View Tract. Will contain five rooms and bath each. Interior finish pine and redwood. Open fire places and the mantels. Exteriors covered with rustic. Plans being prepared. Work will be done by Day Labor.

SAN JOSE, SANTA CLARA CO., CAL.—Residence, 1 story and base, frame, \$3,000. Architect, none. Owner, W. M. Lewis, 211 South 15th street, San Jose.

Location, West 14th street. Will contain seven rooms and bath. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 3 story and base, frame, \$26,000. Architect, John H. Powers, 460 Montgomery street, S. F. Owner, Komolo A. Sharnboro. Location, northwest corner of Devisadero and Green streets. Will contain in the neighborhood of sixteen rooms, several baths and sleeping porches. Interior finish pine, hardwoods and white enamel. Hardwood floors. Central heating system, vacuum clearing and hot water system. Bath rooms finished in tile. Mantels tile and marble. Exterior covered with cement plaster. Plans nearly complete and figures to be called for at once.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,000. Architect, Louis Mastropasqua, 580 Washington street, S. F. Owner, W. Heffrin. Location, south Vallejo east of Taylor. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans being prepared.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, Chester H. Miller, Dalziel Bldg., Oakland. Owner, Harry C. Knight. Location, Havenscourt Boulevard. Will contain five rooms and bath. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and in the hands of owner. Work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Frank W. Burger, 858 52nd street, Oakland. Location, north Walnut east Renwick. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, E. L. Higgins, 5250 Niles avenue, Oakland. Location, west Thomas north Napa. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN LEANDRO, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$3,000. Architects, Hutchinson & McLean, 470 13th street, Oakland. Owner, Wilber S. Tupper. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Ex-

terior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, A. P. Anderson, 622 47th street, Oakland. Location, east Bryant south Ada. Will contain six rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, F. A. Kurtz, Hotel Oaks, Oakland. Location, west Vista north of Wellington. Will contain five rooms, bath and sleeping porch. Interior finish pine with some white enamel and hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residences, 25, 1½ and 2 story, frame, \$2,000 to \$5,000. Architect, none. Owners, syndicate headed by Charles M. Carlos, Park Gate Apartments, Oakland. Location, Hudson and Claremont. Dwellings will contain from five to eight rooms. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places, tile and brick mantels and furnace heat. Automatic water heaters. Bath rooms finished in tile. Exteriors covered with rustic, shingles and cement plaster. Work to be carried on by Day Labor under the direction of P. O. Boyd, 1461 Alice street, Oakland.

HILLSBOROUGH, SAN MATEO CO., CAL.—Residence, 2 story and base, brick and stone, \$150,000. Architect, Willis Polk, Hobart Bldg., S. F. Owner, W. B. Bourn. Location, near Hillsborough. Will contain 26 rooms, a number of baths, conservatory. Interior finish hardwood. Hardwood floors. Steam heat, oil burning system, vacuum cleaning, hot water system and refrigerating plant. Bath rooms finished in tile. Exterior faced with pressed brick and cut stone. Plans complete and figures being taken on general contract. Foundation work and excavating awarded.

FRESNO, FRESNO CO., CAL.—Residences, 2, 1 story and 1, 1 story, frame, \$2,750 and \$1,800. Architect, none. The following Day Labor jobs are reported as about to be started in Fresno: W. H. Ackerman, Fresno, 2, 2 story frame dwellings; G. W. Lightowler, 940 M street, 1 story frame dwelling.

SANTA ROSA, SONOMA CO., CAL.—Residence, 2 story and base, frame, \$3,500. Architects, Turton & Herbert, Santa Rosa Bank Bldg., Santa Rosa. Owner, F. L. Boedefeld. Will contain eight rooms, bath and sleeping porch. Interior pine with some elm panels and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile floor and wainscot in bath room. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

SAN FRANCISCO — Residence, 2 story and base, frame. Cost not stated. Architect, Henry Shermund, Mills Bldg., S. F. Owner, John P. Peterson.

Location, east Shrader south of Carmel. Will contain six rooms and bath. Interior finish pine. Hardwood floor in principal rooms. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owners, Boyd, Carlos & Co. Location, north Hudson east of Claremont. Will contain five rooms, bath and sleeping porch. Interior finished in pine with some white enamel. Hardwood floor. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, Harry C. Knight, 1725 Broadway, Oakland. Location, Havenscourt Boulevard. Will contain six rooms and bath. Interior finish pine with some white enamel. Hardwood floors and open fire place. Mantel tile or brick. Tile floor and wainscot in bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, R. K. Larsen, 1205 30th avenue, Oakland. Location, west 30th avenue north of East 12th street. Will contain five rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

VISALIA, TULARE CO., CAL.—Residence, 1 story and base, frame, \$5,500. Architect, Fred L. Swartz, Rowell Bldg., Fresno. Owner, Miss Mary Frances Chatten. Will contain seven rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire place and furnace heat. Bath rooms finished in tile. Automatic water heater. Mantels tile or brick. Exterior covered with cement plaster. Plans being prepared.

SAN JOSE, SANTA CLARA CO., CAL.—Residence, 1 story and base, frame, \$2,400. Architect, none. Owner, J. A. Wagner, 320 South 16th street, San Jose. Location, south Hollywood between 2nd and 3rd streets. Will contain six rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL.—Residence, 2 story and base, frame, \$15,000. Architect, John McCreedy, Hermosa Beach. Owner, Benj. H. Hiss, 1756 West 22nd street, L. A. Location, Manhattan Beach. Will contain 14 rooms, three baths and sleeping porch. Interior finish, pine, hardwood and white enamel. Hardwood floors. Central heating system, hot water supply and open fire places. Mantels tile or brick. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans being completed.

Contracts Awarded.

SANTA VENETIA, MARIN CO., CAL.—Residences, 10, 2 story and base, reinforced concrete, \$50,000. Architect's name not given. Owners, Santa Venetia Co. President Mabry McMahan, 204 Mutual Bank Bldg., S. F. Contractors, San Francisco Construction Co., S. F. Contract price, \$50,000. Note: Mr. McMahan states that early in 1916 his company will expend in the neighborhood of \$250,000 more in construction work at Santa Venetia.

PACIFIC GROVE, MONTEREY CO., CAL.—Residence, 1½ story and base, frame. Cost not stated. Architect's name not given. Owner, H. G. Jorgenson, Pacific Grove. Contractor, L. D. Brisbin, Pacific Grove. Contract price not stated.

SCHOOLS.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Normal school work. Cottage, frame, \$6,500. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Plans are being prepared for a frame steward's cottage at the Santa Barbara State Normal School. Further mention will be made of the work when bids are called.

LOS ANGELES, CAL.—School, 1 story and base, brick, \$17,000. Architects, Tuttle & Angel, Delta Bldg., L. A. Owners, Burbank Grammar School District. Will contain five class rooms, kindergarten and play rooms. Interior finish pine with maple floors. Central heating system, vacuum cleaning and modern school plumbing. Exterior faced with cement plaster. Plans complete and figures being taken. Bids close on October 30th.

BERKELEY, ALAMEDA CO., CAL.—School painting, etc. Cost not stated. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be opened on November 10th for painting and staining buildings at the California Institution for the Deaf and Blind at Berkeley. Plans can be secured from the State Dept. of Eng. at Sacramento. An official proposal appears in another column of this issue.

GOSHEN, TULARE CO., CAL.—School, 1 story and base, brick. Cost not stated. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owners, Goshen School District. Bids will be received on October 26th at 1 p. m. for constructing a four class room building. Exterior faced with pressed brick. Bids are to include heating and water system. Plans can be secured from the architect.

Contracts Awarded.

CUCAMONGA, SAN BERNARDINO CO., CAL.—School, 1 story and base, frame, \$15,238. Architects, Tuttle & Angel, Delta Bldg., L. A. Owners, Cucamonga School District. Contractor, A. L. Gribbling, 3320 North Griffin avenue, L. A. Contract price, \$15,238. Cass-Snurr-Damerel Co., L. A., heating and ventilating, \$2,545.

SEWERS, STREET WORK & WATER SYSTEMS.

SAN FRANCISCO—Roads, walks and gutters. Cost not stated. Engineer, Constructing Quartermaster's Office,

Fort Mason, S. F. Owners, United States Government. Bids will be opened on October 26th for the construction of roads, walks and gutters at the Letterman General Hospital in the Presidio of San Francisco. Plans can be secured from the Constructing Quartermaster's Office at Fort Mason. An official proposal appears in another column of this issue.

ORANGE, ORANGE CO., CAL.—Sewers. Cost not stated. Engineer, City Engineer, Orange. Owners, City of Orange. Plans and specifications for the construction of sewers on East Almond avenue, East Washington avenue, North Cypress street and West Palm avenue, have been approved by the City Council and bids will be called or immediately. Further information may be had from the City Engineer at Orange.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Plans and specifications for the excavation and construction along the line of certain portions of the right-of-way of the extension of the Morro Creek road, work covers excavation and filling, etc., between Station O and Station 262-00 were approved by the County Supervisors at their last meeting and bids have been ordered received until November 2d at 10 a. m. Further information may be had from the County Surveyor at San Luis Obispo.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Road fence, \$3,120. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. The lowest bid received for the construction of 9½ miles of fence along the State Highway was presented by the Boardman Construction Co., Santa Barbara at \$3,120. A contract will probably be awarded.

BAKERSFIELD, KERN CO., CAL.—Highway construction. Cost as follows. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Mesmer & Rice, Marsh-Strong Bldg., B. A., presented the lowest figure at \$3,900 for asphaltic top for a three-mile section on the Bellevue road, and at \$1,300 for paving Brundage Lane. Contracts have not been awarded.

BAKERSFIELD, KERN CO., CAL.—Sewer construction. Cost as follows. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. At the last meeting of the City Council Lloyd Stroud put in the lowest bid on work to be done in constructing sewer districts 27, 28 and 29 in East Bakersfield, but action in letting the contract was deferred for one week to investigate the reason for a higher bid per foot being placed for district 29 than for the other districts. Stroud's bids were \$730.49, \$185.02 and \$2,513.20 on the three contracts.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. Resolutions ordering work on Cypress avenue and Lux avenue, and on Magnolia and Orange avenues have been adopted by the Trustees and bids will shortly be called. The work consists of regrading and paving those streets and con-

structing sidewalks, curbs and gutters.

MORGAN HILL, SANTA CLARA CO., CAL.—Road construction. Cost not stated. Engineer, Henry B. Fisher, S. F. Owners, Town of Morgan Hill. At the last meeting the Town Trustees appointed Henry B. Fisher of San Francisco as engineer in charge of the improvement of Monterey street, between the improved parts of the State Highway to the north and south. Bids on this work will be called for shortly.

SAN JOSE, SANTA CLARA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, San Jose. Owners, City of San Jose. At the last meeting of the San Jose City Council the following action was taken on street improvements. Resolutions of intention ordering paving done at the crossing of Seventeenth street and Julian and several other unfinished portions of 17th street were read and adopted. A resolution accepting the bid of the San Jose Lumber Co. for redwood to be used on the bridge over the Coyote Creek in East San Jose was given a second reading and adopted. Only one bid, that of the Raich Improvement Co., was received for the work of putting in a concrete wing above the San Fernando street bridge over the Los Gatos creek was received. It was rejected as being too high. The estimate of the City Engineer on the work was \$350. M. Mortoya was awarded the work of putting in sidewalks and gutters around the Allen school property on South 10th street. His bid was 8c a square foot for the sidewalks and 46c a lineal foot for curbing and gutters. Motion was made and carried that property owners should be given 30 days in which to put in sidewalks, curbs and gutters on Prevost between Home and Jerome streets, Home between Delmas and Bird streets, Illinois between San Salvador and William.

SAN JOSE, SANTA CLARA CO., CAL.—Curtain wall, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications having been approved by the County Supervisors, bids have been ordered received for the following work. For the construction of a reinforced concrete curtain wall on Campbell Creek in the County of Santa Clara, and for the improvement of New avenue. Bids on the above work close November 1st, 11 a. m. Further information may be had from the County Surveyor at San Jose.

SAN JOSE, SANTA CLARA CO., CAL.—Light tower, steel construction. Cost not stated. Engineer, City Engineer, San Jose. Owners, City of San Jose. Bids are now being taken by the City Council for the reconstruction of the tower at the corner of Santa Clara and Market streets. The bids close October 25th. Further information together with plans and specifications may be had from the City Engineer at San Jose.

SONORA, TUOLUMNE CO., CAL.—Sewer construction. Cost not stated. Engineer, Town Engineer, Sonora. Owners, Town of Sonora. Trustee Doyle reported at the last meeting of the Trustees that he had gone over the town with the engineer and obtained complete data and approximate cost of

completing the sewer system. The Engineer was instructed to prepare plans for the work. Further information will be given on this work when bids are called.

SAN RAFAEL, MARIN CO., CAL.—Road improvement, \$9,000. Engineer, City Engineer, San Rafael. Owners, City of San Rafael. The City Trustees have announced that the San Joaquin toll road from Mary street to the city limits near the flood gate will be raised to three feet above high tide, graded and macadamized.

SAUSALITO, MARIN CO., CAL.—Street improvements. Cost not stated. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Bids will be opened on October 25th for grading of West street from Main to Valley and on Valley street from Fourth to West street. The construction of retaining wall at the intersection of West and Valley streets. The construction of timber highway bridge on West street from the southerly line of Main street to a point 100 feet southerly from said southerly line of Main street produced. The laying and construction of 40 feet of 30-inch vitrified, salt glazed, ironstone pipe in and across West street between Valley and Main streets.

BERKELEY, ALAMEDA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be received on October 26th for the improvement of Gilman street by grading to official grade, constructing concrete curbs and gutters, and that the main portions of the street be paved with oiled macadam. Also that 30-inch cast iron culverts be constructed.

GILROY, SANTA CLARA CO., CAL.—Fire alarm system. Cost not stated. Engineer, none. Owners, Town of Gilroy. Plans and specifications for the installation of a fire alarm system for this city have been accepted by the City Council and the Clerk has been instructed to advertise for bids on the proposed work.

BAKERSFIELD, KERN CO., CAL.—Road improvement. Cost not stated. Engineer, County Engineer, Bakersfield. Owners, Kern County. Bids will be received on November 1st for three miles of paving on Bellevue road near Bakersfield. Bids formerly received for this work have been rejected. Bids will also be received at the same time for concrete paving on Brundage Lane, H street to Union avenue. Former bids for this work were also rejected.

NAPA, NAPA CO., CAL.—Electrolier system, \$18,000. Engineer, City Engineer, Napa. Owners, City of Napa. At a recent meeting the Advisory Board of the City of Napa, the City Council, City Engineer and the City Attorney discussed the feasibility and advisability of establishing an electrolier lighting system in Napa. Although no definite action was taken it is thought the work will soon go under way.

VALLEJO, SOLANO CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Kilkenny, Vallejo. Owners, City of Vallejo. Plans prepared by City Engineer Kilkenny for the improvement of the intersection of Capitol and Branciforte streets have been adopted by the City Council and

bids for the work will soon be called for.

Contracts Awarded

VACAVILLE, SOLANO CO., CAL.—Street improvements, \$10,445.95. Engineer, Town Engineer, Vacaville. Owners, Town of Vacaville. Contractors, Bentley & Gates, Vacaville. Contract price, \$10,845.95.

SAN RAFAEL, MARIN CO., CAL.—Storm water sewer, \$1,161. Engineer, County Surveyor, San Rafael. Owners, Marin County. Contractors, W. J. Tobin Co., San Rafael. Contract price, \$1,161.

SANTA ANA, ORANGE CO., CAL.—Road pavement, \$7,274. Engineer, County Surveyor, Santa Ana. Owners, Orange County. Contractors, O. & C. Co., Fullerton. Contract price, \$7,274. County to furnish material.

SAN LEANDRO, ALAMEDA CO., CAL.—Furnishing rock and screenings. Cost not stated. Engineer, Town Engineer, San Leandro. Owners, Town of San Leandro. Contractors, D. U. Toffelmier and Niles Sand and Rock Co. Contract price not stated.

SALINAS, MONTEREY CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, Haggard & Parkhurst, Ruthven & Serrano and F. F. Moore, Monterey. Contract price not stated.

VISALIA, TULARE CO., CAL.—Sewer system, \$40,300. Engineer, City Engineer, Visalia. Owners, City of Visalia. Contractor, Michael Murphy, 1321 Milvia street, Berkeley. Contract price, \$40,500.

FRESNO, FRESNO CO., CAL.—Sewer construction. Cost as follows. Engineer, City Engineer, Fresno. Owners, City of Fresno. Contractors, Thompson Bros., 1514 H street, Fresno. Contract price, \$2,035 for 14-inch sewer in Ventura street and \$537 for 6-inch sewer in an alley in block 28.

STOCKTON, SAN JOAQUIN CO., CAL.—Storm water sewer, \$26,007.75. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, A. B. Munson & Son, Stockton. Contract price, \$26,007.75.

FOREST GROVE, ORE.—Sewer system, \$58,448. Engineers, J. B. and R. E. Koon, Board of Trade Bldg., Portland. Owners, City of Forest Grove. Contractors, Elliott & Scoggins, McKay Bldg., Portland. Contract price, \$58,448.

STORES AND OFFICES.

SAN FRANCISCO—Cafeteria alterations. Class C construction, \$5,000. Architect, Arthur A. Heineman, San Fernando Bldg., L. A. Owners, Palm Cafeteria Co., 945 Market street, S. F. The work will consist of changing the present store front, interior alterations, including plumbing, plastering and electric work and some tile work. Plans are complete and work will be done by Day Labor.

SAN FRANCISCO—Stores, 1 story and base, Class C construction, \$12,000. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner, Mrs. De Moulin. Location, northwest corner Van Ness avenue and McAllister street, covering an area of 60 by 110 feet. Will contain four stores. Interior finish pine with metal ceilings.

Patent store fronts, marble bases and exterior faced with pressed brick. Plans complete and contract to be awarded at once.

MARTINEZ, CONTRA COSTA CO., CAL.—Stores, 1 story and base, brick. Cost not stated. Architects, Oser Bros., 165 Post street, S. F. Owner, A. E. Blum. Location, Main and Castro streets, covering an area of 70 by 90 feet. Will contain nine stores. Interior finish pine. Patent store fronts. Exterior faced with pressed brick. Plans complete and figures being taken.

PORTLAND, ORE.—Stores, 1 or 2 story and base, reinforced concrete. Cost not stated. Architects, Whitehouse & Foulhoux, Wilcox Bldg., Portland. Owners, Brooklyn-Fields Co. Location, East 11th and 12th streets, covering an area of 220 by 212 feet. Bids are now being taken for both a one and two story structure. Complete information can be secured from the architects.

Contracts Awarded.

SAN FRANCISCO—Stores and offices, 3 story and base, Class A construction, \$175,000. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, California Street Realty Co. Contractor, James H. Hjul, 240 Montgomery street, S. F. General construction, \$175,000. The contractor is now taking subfigures.

SAN FRANCISCO—Store and offices alterations, 4 story and base, Class C construction, \$22,000. Architect, Charles Paff, Merchants' Exchange Bldg., S. F. Owners, Postal Realty Co. Contractors, O. Kurtz, plumbing and heating, \$2,782; B. C. Van Emon, elevator work, \$1,650; De Lew Electric Co., electric work, \$566; H. L. Peterson, concrete work, \$610; Edw. Soule, reinforcing bars, \$840; Hermann & Co., vault doors, \$520; N. Clark & Sons, terra cotta work, \$1,975; Mission Marble Works, marble and tile, \$175; Francis Tiltz, terrazzo work, \$325; Golden Gate Iron Works, structural iron, \$1,160.

SAN FRANCISCO—Stores and offices alterations, 18 story and base, Class A construction, \$130,000. Architect, J. R. Miller, Lick Bldg., S. F. Owners, City Investment Co. Contractors, McLeran & Peterson, Sharon Bldg. Contract price, \$130,000. Note: These alterations are to be done in the Claus Spreckels Building, formerly the Call Building.

SAN FRANCISCO—Store alterations. Class C construction, \$11,000. Architect, John H. Powers, 460 Montgomery street, S. F. Owners, A. G. Spaulding Bros. Contractor, F. M. Phillips, 718 Bryant street, S. F. Contract price, \$11,000.

NOTICES OF NON-RESPONSIBILITY.

Oct. 9, 1915—NW POLK AND CLAY. Ravelet Investment Co as to improvements on leased property....
Oct. 9, 1915—LOT 3 BLK 6439 Crocker Amazon Tet Sub No. 2. Crocker Estate Co as to improvements on leased property

ARCHITECT'S CERTIFICATE.

Oct. 8, 1915—Jas. W. Plachek has filed his certificate of architecture for San Francisco County.



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OFFICIAL PROPOSALS.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 978—Proposals for Steel Windows, Frame and Sash Traveling Crane, Annunciators, Buzzer Push Units, Rivets, Babbit Metal, Sheet Zinc, Oil Hose, Copper Tubing, Flexible Copper or Brass Conduit, Galvanized Pipe, Pipe Fittings, Force Cups, Shower Heads, Flush Pipe, Wash Tray Plugs, Waste Strainers, Valves, Cocks, Vitritined Pipe, Drain Tile, Shovels, Carbon Brushes, Burlap, Tablecloths, Towels, Record Books, Office Pins, Lye, Manganese Dioxide, Gasoline and Creosote Oil.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. October 27, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 978) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR EXCAVATION.

EXCAVATION—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the United States Reclamation Service, Grand Junction, Colo., until **2 o'clock p. m. November 4, 1915**, for about 340,000 yards of canal excavation. The work is situated in the vicinity of Loma and Mack, Colo. For particulars address the United States Reclamation Service, Grand Junction, Colo.; Denver, Colo., or Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 977—Proposals for Fuel Oil.—Annual Estimate for the Period Beginning January 1, 1916, and ending December 31, 1916.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. November 4, 1915**, at which time they will be opened in public, for furnishing the above mentioned oil. Blanks and general information relating to this circular (No. 977) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR OPERATING CYLINDERS.

OPERATING CYLINDERS—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the U. S. Reclamation Service, Washington, D. C., until **2 o'clock p. m. November 5, 1915**, for furnishing a set of six cast-steel hydraulic operating cylinders and appurtenances for slide gates for Keechelus dam, Yakima project, Washington, and a duplicate set for Sherburne Lakes dam, Milk River project, Montana. For particulars address the U. S. Reclamation Service, Washington, D. C. A. P. DAVIS, chief engineer.

NOTICE TO CONTRACTORS.

OFFICE CONSTRUCTING QUARTERMASTER, Fort Mason, Cal.—SEALED PROPOSALS will be received here until **11:00 A. M. October 25, 1915**, and then opened for improvements to roads, walks, gutters, etc., at Letterman General Hospital. Further information on application. (9)

PROPOSAL FOR BIDS.

SEALED BIDS will be received at the office of Lewis P. Hobart, Crocker Building, San Francisco, Cal., at or before **2:00 P. M. October 25, 1915**, for the elevators, electric wiring, plumbing, heating and ventilating, power plant and refrigerating plant for the building for the University Hospital at Fourth and Parnassus Aves., San Francisco, Cal., as per plans and specifications on file and obtainable after 9:00 A. M. October 12, 1915, at the Cashier's window in the Comptroller's Office of the University of California, Berkeley, Cal.

A deposit of \$50.00 will be required for each set of plans and specifications taken out, which deposit will be refunded upon return of said plans and specifications, accompanied by a regular bid for the work. No bids will be received unless accompanied by a certified check or bond in favor of the undersigned, equal to 10% of the bid, to secure execution of the contract by the successful bidder.

The right is reserved to reject any or all bids.
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA. (9)

PROPOSALS FOR PAINTING.

PAINTING—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be received at this office until **3 p. m. October 23, 1915**, and then opened, for painting the plastered walls and ceilings in the United States post office at Denver, Colo. Copies of the specification may be obtained at this office and drawings of the building may be seen at the office of the architects, Messrs. Tracy, Swartwout & Litchfield, No. 244 Fifth avenue, New York City; the superintendent's office, Denver, Colo., the office of the supervising superintendent, J. W. Roberts, No. 403 Post Office and Court House, San Francisco, Cal., and at the supervising architect's office, JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR GATE OPERATING MACHINERY.

GATE-OPERATING MACHINERY—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the U. S. Reclamation Service, Washington, D. C., until **2 o'clock p. m. October 20, 1915**, for furnishing the operating mechanism for two cylinder gates of 12-foot diameter for Sherburne reservoir, Milk River project, Montana, and a duplicate set for Keechelus reservoir, Yakima project, Washington. For particulars address the U. S. Reclamation Service, Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR CHAIN SHAFTS.

CHAIN SHAFTS—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals

will be received at the office of the U. S. Reclamation Service, Washington, D. C., until **2 o'clock p. m. November 8, 1915**, for furnishing chain shafts and chains for the rolling crest of Grand River diversion dam, Grand Valley project, Colorado, consisting of one safety chain, one chain shaft, one operating chain, and one guard chain, all for the 60-foot roller, and of six safety chains, six chain shafts, six operating chains and six guard chains for the six 70-foot rollers. For particulars address the U. S. Reclamation Service, Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 976—Proposals for Pneumatic Hoists, Hydraulic Jacks, Magnetic Chucks, Spring Steel, Pig Iron, Pig Lead, Malleable Iron, Castings, Bronze Bars, Nails, Twist Drills, Reamers, Pipe Wrenches and Parts, Gongs, Water Closets, Building Brick, Fire Brick, Fire Clay, Foundry Clay, Silica Grit, Silica Sand, Thumb Tacks, Mucilage, Wrapping Paper, Blueprint Paper, Putty, Sal Soda, Coal Tar, Sal Ammoniac, Carbon Bisulphide, Fish Oil, Alcohol, Varnish, Linseed Oil, Japan Varnish, Shellac, White Zinc, Red Lead, White Lead, Lampblack and Paints.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. October 20, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 976) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

STATE OF CALIFORNIA. DEPARTMENT OF ENGINEERING. NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **1 o'clock, noon, Monday, November 8, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of a building to be known as "Hay, Storage and Feed Barn," Stockton State Hospital Farm, near Stockton, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on the plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Hay, Storage and Feed Barn," Stockton State Hospi-

tal Farm, near Stockton, California."
(SIGNED) W. F. McCURE,
State Engineer. (*)
NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McCure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock noon, Wednesday, November 10, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete "Painting and Staining" of the Buildings at the California Institution for Deaf and Blind, Berkeley, California, in accordance with the specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Five (\$5.00) Dollars will be required on the specifications, the deposit to be returned immediately on the return of the specifications to the State Department of Engineering, Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McCure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for 'Painting and Staining' of the Buildings at the California Institution for the Deaf and Blind, Berkeley, California."
(SIGNED) W. F. McCURE,
State Engineer. (*)

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock P. M., on November 1, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State Highway as follows:

Imperial County across Myers Creek, (VII-imp.-12-A) a reinforced concrete bridge about 300 feet in length with one three hinged arch span of 170 feet.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers' Offices are located at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
ALSTIN E. FLETCHER,
Highway Engineer.
CHARLES C. CARLETON,
Acting Secretary.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McCure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, noon, Monday, November 8, 1915, said bids then and

there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of a building to be known as "Hay, Storage and Feed Barn," Stockton State Hospital Farm, near Stockton, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McCure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for 'Hay, Storage and Feed Barn,' Stockton State Hospital Farm, near Stockton, California."
(Signed) W. F. McCURE,
State Engineer.

E. R. Hoerchner

Attorney-at-Law

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LEASE.

Oct. 9, 1915—W STOCKTON 36 N Sacramento N 33-9xW 80. Chas Flood-berg to Frances T Brown. 5 years. \$10,395.

ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

RESIDENCE—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, C. A. Hall, 1318 14th avenue, S. F. Location, west side 14th avenue south of Balboa. Will contain six rooms, bath and sleeping porch. Interior finish pine with some white enamel. Hardwood floors. Open fire place, furnace heat and automatic water heater. Mantel tile or brick. Imitation tile in bath room. Exterior covered with cement plaster. Plans complete and work to be done by Day labor.

RESIDENCE ALTERATION—3 story same and brick, \$20,000. San Francisco. Architects, Greene & Greene, Pasadena. Owner, Mortimer Fleishacker, 131 Fremont street, S. F. Location, 2418 Pacific avenue. Work will consist of entire new interior trim, hardwood and white enamel, new heating system and hot water supply, plumbing, painting, plastering and electric work. Some minor exterior alterations will also be made. Plans complete and in the hands of the owner who is now letting contracts.

ROOFS, WALKS AND GUTTERS—not stated. San Francisco. Engineer, Constructing Quartermaster's Office, Fort Mason. S. F. Owners, United States Government. Bids will be opened on October 26th for the construction of roofs, walks and gutters at the new General Hospital in the presidio of San Francisco. Plans can be secured from the Constructing Quartermaster's Office at Fort Mason. Official proposal appears in another column of this issue.

APARTMENT HOUSE—3 story and base, frame, \$24,000. San Francisco. Architect, John H. Powers, 160 Montgomery street, S. F. Owner, John Miller, 160 Montgomery street. Location, southeast corner of Polk and Geary streets. Will contain two and a total of fourteen suites of two and three rooms. Interiors finished pine with some elm panels and hardwood floors. Steam heat, hot water system and oil burning system. All beds and private bath rooms. Bath rooms finished in tile. Patent fire fronts. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day labor.

APARTMENT HOUSE—3 story and base, frame, \$15,000. San Francisco. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner's name withheld. Location, 15th and Dolores streets. Will contain twelve suites of two and three rooms. Interiors finished in pine throughout. Some hardwood floors. Wall beds and private baths. Tile floors and wainscot in bath rooms. Exterior covered with cement plaster on metal lath. Plans prepared and bids to be called for at once.

COPPER SMELTER—\$1,000,000. Kellogg, Idaho. Engineers, Bradley, Bluff & Labrathe, Hobart Bldg., S. F. Owners, Bunker Hill and Sullivan Mining Co. Engineers Bradley, Bluff & Labrathe have been commissioned by the management of the Bunker Hill and Sullivan Mining Co. to prepare plans for a smelter plant in Kellogg, Idaho. Mr. Easton, manager of the mining company states that it is possible that the plant may be located in either Seattle or Portland as the freight rates on ore are very high. Further mention will be made of the work.

FLATS—3, 2 story and base, frame, \$3,500 each. San Francisco. Architect, C. R. Thayer, 20 Montgomery street, S. F. Owner, W. A. Goerick, San Rafael. Location, south Pacific west of Taylor. Each building will contain two flats of five and six rooms. Interior finish will be of pine and hardwood with some hardwood floors. Open fire places and tile or brick mantels. Imitation tile in bath rooms. Automatic water heaters. Exteriors covered with cement plaster and shiplap. Plans complete and bids to be taken by the owner and architect.

FLATS—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, John F. Haner, 3580 20th street, S. F. Location, west San Carlos north of 19th street. Will contain two flats of five and six rooms. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile mantels. Automatic water heaters. Bath rooms finished in imitation tile. Exterior covered with cement plaster and shiplap. Plans complete and work to be done by Day labor.

CLUB HOUSE—3 story and base, frame, \$30,000. San Francisco. Architect, H. C. Bauman, Hearst Bldg., S. F. Owners, Dorian Olympia Club. Location, northwest corner 32nd avenue and California street. Will contain club rooms, kitchen, dining room, special accommodations for golf players and living apartments. Interior finish pine and hardwoods with some hardwood floors. Central heating system and open fire places. Mantels tile and brick. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and figures being taken.

HOTEL COMPLETION—6 story and base. Class A construction, \$50,000. San Francisco. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owners, J. K. Prior Estate. Location, southwest corner Eddy and Mason streets, covering an area of 127½ feet square. Work will consist of altering first floor to contain 13 stores besides the hotel entrance. Upper floors will contain 158 rooms and baths. There will be interior finish of pine, plastering, electric work, steam heat, oil burning furnace, plumbing, painting, glass and glazing and patent store fronts. Exterior will be faced with cement

and red pressed brick. Plans are being prepared.

RESIDENCE—3 story and base, frame, \$26,000. San Francisco. Architect, John H. Powers, 160 Montgomery street, S. F. Owner, Romolo A. Sharboro. Location, northwest corner of Divisadero and Green streets. Will contain in the neighborhood of sixteen rooms, several baths and sleeping porches. Interior finish pine, hardwoods and white enamel. Hardwood floors. Central heating system, vacuum cleaning and hot water system. Bath rooms finished in tile. Mantels tile and marble. Exterior covered with cement plaster. Plans nearly complete and figures to be called for at once.

RESIDENCE—2 story and base, frame, \$2,000. San Francisco. Architect, Louis Mastropasqua, 580 Washington street, S. F. Owner, W. Heffrin. Location, south Vallejo east of Taylor. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans being prepared.

APARTMENT HOUSES—1, 3 and 1, 1 story and base, reinforced concrete, \$16,000 and \$22,000. San Francisco. Architects, O'Brien Bros, 240 Montgomery street, S. F. Owner's name withheld. Location, China Town District. The smaller building will contain 36 rooms and the larger 16 rooms, each arranged for three room suites with bath and wall beds. Interior finish pine. Steam heat and a hot water system. Exteriors faced with cement plaster. Plans being prepared.

APARTMENT HOUSE—3 story and base, frame, \$10,000. San Francisco. Architect, Heiman & Schwartz, Nevada Bank Bldg., S. F. Owner, A. Birrer, 1480 Sutter street, S. F. Location, north California west of Larkin. Will contain six suites. Interior finish pine with some elm panels and hardwood floors. Wall beds. Tile bath rooms. Exterior covered with rustic and cement plaster. Plans complete and owner to take figures.

RESIDENCE—2 story and base, frame. Cost not stated. San Francisco. Architect, Henry Shermund, Mills Bldg., S. F. Owner, John P. Peterson. Location, east Shadrer south of Carmel. Will contain six rooms and bath. Interior finish pine. Hardwood floors in principal rooms. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

CATERIA ALTERATIONS—Class C construction, \$5,000. San Francisco. Architect, Arthur A. Heineman, San Fernando Bldg., L. A. Owners, Palm Cafeteria Co., 945 Market street, S. F. The work will consist of changing the present store front, interior alterations, including plumbing, plastering and electric work and some tile work.

Plans are complete and work will be done by Day Labor.

STORES—1 story and base. Class C construction, \$12,000. San Francisco. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner, Mrs. De Moulin. Location, northwest corner Van Ness avenue and McAllister Sts., covering an area of 60 by 110 feet. Will contain four stores. Interior finish pine with metal ceilings. Patent store fronts, marble bases and exterior faced with pressed brick. Plans complete and contract to be awarded at once.

Contracts Awarded.

STORES AND OFFICES—3 story and base. Class A construction, \$175,000. San Francisco. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, California Street Realty Co. Contractor, James H. Hjul, 240 Montgomery street, S. F. General construction, \$175,000. The contractor is now taking subfigures.

STORE AND OFFICE ALTERATIONS—1 story and base. Class C construction, \$22,000. San Francisco. Architect, Charles Paff, Merchants' Exchange Bldg., S. F. Owners, Postal Realty Co. Contractors, O. Kurtz, plumbing and heating, \$2,782; B. C. Van Emon, elevator work, \$1,650; De Lew Electric Co., electric work, \$566; H. L. Peterson, concrete work, \$610; Edw. Soule, reinforcing bars, \$840; Hermann & Co., vault doors, \$520; N. Clark & Sons, terra cotta work, \$1,975; Mission Marble Works, marble and tile, \$775; Francis Tiltz, terrazzo work, \$235; Golden Gate Iron Works, structural iron, \$1,160.

STORE AND OFFICES ALTERATIONS—18 story and base. Class A construction, \$130,000. San Francisco. Architect, J. R. Miller, Lick Bldg., S. F. Owners, City Investment Co. Contractors, McElran & Peterson, Sharon Bldg. Contract price, \$130,000. Note: These alterations are to be done in the Claus Spreckels Bldg., formerly the Call Bldg.

STORE ALTERATIONS—Class C construction. \$11,000. San Francisco. Architect, John Powers, 460 Montgomery street, S. F. Owners, A. G. Spalding Bros. Contractor, F. M. Phillips, 718 Bryant street, S. F. Contract price, \$11,000.

Local Man Low On Mare Island Work.

Frank P. Walsh Will Probably be Awarded Contract For Big Oil Storage Station at Navy Yard.

(By Special Wire.)

WASHINGTON, D. C., Oct. 16th, 1915. —Frank P. Walsh, 244 Kearny street, San Francisco, presented the low bid at \$258,225 for furnishing and installing pipes, pumps, boilers, heaters, buildings and insulations for a complete oil storage station at the Navy Yard at Mare Island, California. No award was made.

Besides the work at Mare Island bids were received for similar oil storage stations at the Navy Yards at Puget Sound, Wash., San Diego, Cal., and at Norfolk, Va. The low bid covering the entire work was submitted by John W. Danforth Co., Buffalo, N. Y., at \$557,300. Segregated figures were also submitted by the same firm for work at each station except Mare Island. For the Puget Sound work the Danforth Co. bid \$312,300 with an alternate of \$286,500; San Diego, \$156,600 and Norfolk, \$194,700. A complete list of the bids will be published later.

OAKLAND AND ALAMEDA COUNTY

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, A. L. Calvert, 3131 Bruce street, Oakland. Location, east View street north of Mather. Will contain five rooms, bath and sleeping porch. Interior finish pine with some white enamel. Hardwood floors and open fire place. Mantel tile or brick. Bath room finished in imitation tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,000. Berkeley, Alameda Co., Cal. Architect, none. Owner, C. H. McCoy, 2903 Shattuck avenue, Berkeley. Location, west Mariposa west of Los Angeles. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel and hardwood floors. Furnace heat and open fire place. Mantel tile or brick. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame. Cost not stated. Berkeley, Alameda Co., Cal. Architect, Lloyd A. Haley, 1721 Sonoma avenue, Berkeley. Owner, J. G. Taylor. Will contain seven rooms, bath and sleeping porch. Interior finish pine with white enamel in the bed rooms. Hardwood floors and open fire places. Mantels tile and brick. Tile wainscot in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

APARTMENT HOUSE—2 story and base, frame, \$15,000. Oakland, Cal. Architect, J. Henry Boehr, Delger Bldg., Oakland. Owner, Nevada L. Rudolph. Location, southwest corner of Staten avenue and Belmont. Will contain ten suites of two and three rooms. Interior finish pine with some elm panels and hardwood floors. Wall beds and private bath rooms. Bath rooms finished in tile. Steam heat and hot water system. Exterior covered with cement plaster. Plans complete and in the hands of the owner who is letting all contracts.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, Chester H. Miller, Dalziel Bldg., Oakland. Owner, Harry C. Knight. Location, Havenscourt Boulevard. Will contain five rooms and bath. Interior finish pine and white enamel. Some hardwood floors. Open fire place and

tile or brick mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and in the hands of the owner. Work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, Frank W. Burger, 535 52nd street, Oakland. Location, north Walnut east Renwick. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, E. L. Higgins, 5250 Niles avenue, Oakland. Location, west Thomas north Napa. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$3,000. San Leandro, Alameda Co., Cal. Architects, Hutchinson & McLean, 470 13th street, Oakland. Owner, Wilber S. Tupper. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, A. P. Anderson, 622 47th street, Oakland. Location, east Bryant south Ada. Will contain six rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, F. A. Kurtz, Hotel Oaks, Oakland. Location, west Vista north of Wellington. Will contain five rooms, bath and sleeping porch. Interior finish pine with some white enamel and hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—25, 1½ and 2 story, frame, \$2,000 and \$3,000. Oakland, Cal. Architect, none. Owners, syndicate headed by Charles M. Carlos, Park Gate Apartments, Oakland. Location, Hudson and Claremont. Dwellings will contain from five to eight rooms. Interiors finished in pine, hardwood and white enamel. Hardwood floors, open fire places, tile and brick mantels and furnace heat. Automatic water heaters. Bath rooms finished in tile. Exteriors covered with rustic, shingles and cement plaster. Work to be carried on by Day Labor under the direction of P. O. Boyd, 1461 Alice street, Oakland.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owners, Boyd-Carlos Co. Location, north Hudson east of Claremont. Contain five rooms, bath and dining porch. Interior finished in white with some white enamel. Hardwood floor. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, Harry C. Knight, 1725 Broadway, Oakland. Location, Havenscourt Boulevard. Will contain six rooms and bath. Interior finish pine and some white enamel. Hardwood floors and open fire place. Mantel tile work. Tile floor and wainscot in bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, R. K. Larsen, 1205 Broadway, Oakland. Location, west avenue north of East 12th street. Contain five rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

PAINTING, ETC.—Cost not stated. Berkeley, Alameda Co., Cal. Architect, George B. McDougall, Sacramento. Owners, State of California. Will be opened on November 10th painting and staining buildings at California Institution for the Deaf and Blind at Berkeley. Plans can be secured from the State Department of Engineering at Sacramento. An official proposal appears in another column of this issue.

PAVING CONSTRUCTION—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be received on October 26th for the improvement of Gilman street by grading official grade, constructing concrete curbs and gutters and that the main portions of the street be paved with macadam. Also that 30-inch cast iron culverts be constructed.

Contracts Awarded.

FINISHING ROCK AND SCREENING—Cost not stated. San Leandro, Alameda Co., Cal. Engineer, Town Engineer, San Leandro. Owners, Town of San Leandro. Contractors, D. U. Toffler and Niles Sand and Rock Co. Contract price not stated.

SAN JOSE AND THE SANTA CLARA VALLEY

RESIDENCE—1 story and base, frame, \$2,000. San Jose, Santa Clara Co., Cal. Architect, none. Owner, W. E. Lewis, 211 South 15th street, San Jose. Location, West 14th street. Will contain seven rooms and bath. Interior finish pine and hardwood with white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

STREET IMPROVEMENT—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. Resolutions ordering work on Cypress avenue and Lax avenue and on Magnolia and Orange avenues were adopted by the Trustees and bids will shortly be called. The work consists of regrading and paving those streets and constructing sidewalks, curbs and gutters.

ROAD CONSTRUCTION—Cost not stated. Morgan Hill, Santa Clara Co., Cal. Engineer, Henry B. Fisher, S. P. Owner, Town of Morgan Hill. At the last meeting the Town Trustees appointed Henry B. Fisher as engineer in charge of the improvement of Monterey street between the improved parts of the state highway to the north and south. Bids on this work will be called for shortly.

STREET IMPROVEMENT—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, City Engineer, San Jose. Owners, City of San Jose. At the last meeting of the San Jose City Council the following action was taken on street improvements: Resolutions of intention ordering paving done at the crossing of Seventeenth street and Julian and several other unfinished portions of 17th street were read and adopted. A resolution accepting the bid of the San Jose Lumber Co. for redwood to be used in the bridge over the Coyote Creek in East San Jose was given a second reading and adopted. Only one bid, that of the Raisch Improvement Co., was received for the work of putting in a concrete wing above the San Fernando street bridge over the Los Gatos Creek was received. It was rejected as being too high. The estimate of the City Engineer on the work was \$350. M. Mortoya was awarded the work of putting in sidewalks and gutters around the Allen school property on South 10th street. His bid was \$6 a square foot for the sidewalks and 40c a lineal foot for curbing and gutters. Motion was made and carried that property owners should be given 30 days in which to put in sidewalks, curbs and gutters on Prevost between Home and Jerome streets, Home between Delmas and Bird streets, Illinois between San Salvador and William.

CURTAIN WALL—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications having been approved by the County Supervisors, bids have been ordered received for the following work. For the construction of a reinforced concrete curtain wall on Campbell Creek in the County of Santa Clara, and for the improvement of New avenue. Bids on the above work close November 1st, 11 a. m. Further information may be had from the County Surveyor at San Jose.

LIGHT TOWER—Steel construction. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, City Engineer, San Jose. Owners, City of San Jose. Bids are now being taken by the City Council for the construction of the tower at the corner of Santa Clara and Market streets. The bids close October 25th. Further information, together with plans and specifications may be

had from the City Engineer at San Jose.

MAUSOLEUM—1 story, granite and concrete, \$10,000. Home of Peace, San Mateo Co., Cal. Architects, Cunningham & Politeo, First National Bank Bldg., S. P. Owners, I. Cohn Estate. Will contain several receptacles. Interior finish Caen stone and plaster. Ornamental iron and bronze, art glass and modern plumbing. Exterior faced with granite. Plans being prepared.

RESIDENCE—2 story and base, brick and stone, \$150,000. Hillsborough, San Mateo Co., Cal. Architect, Willis Polk, Hobart Bldg., S. P. Owner, W. B. Bourn. Location, near Hillsborough. Will contain 26 rooms, a number of baths, conservatory. Interior finish hardwood. Hardwood floors. Steam heat, oil burning system and refrigerating plant. Bath rooms finished in tile. Exterior faced with pressed brick and cut stone. Plans complete and figures being taken on general contract. Foundation work and excavating awarded.

RESIDENCE—1 story and base, frame, \$2,000. San Jose, Santa Clara Co., Cal. Architect, none. Owner, J. A. Wagner, 320 South 16th street, San Jose. Location, South Hollywood between 2nd and 3rd streets. Will contain six rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FIRE ALARM SYSTEM—Cost not stated. Gilroy, Santa Clara Co., Cal. Engineer, none. Owners, Town of Gilroy. Plans and specifications for the installation of a fire alarm system for this city have been accepted by the City Council and the Clerk has been instructed to advertise for bids on the proposed work.

Contracts Awarded.

RESIDENCE—1½ story and base, frame. Cost not stated. Pacific Grove, Monterey Co., Cal. Architect's name not given. Owner, H. G. Jorgenson, Pacific Grove. Contractor, L. D. Brislin, Pacific Grove. Contract price not stated.

ROAD IMPROVEMENT—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractors, Haggard & Parkhurst, Ruthven & Serrano and F. F. Moore, Monterey. Contract price not stated.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

ROAD IMPROVEMENT—\$9,000. San Rafael, Marin Co., Cal. Engineer, City Engineer, San Rafael. Owners, City of San Rafael. The City Trustees have announced that the San Joaquin toll road from Mary street to the city limits near the flood gate will be raised to three feet above high tide, graded and macadamized.

STREET IMPROVEMENTS—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Bids will be opened on October 25th for grading of West street from Main to Valley and on Valley street from Fourth street to West street. The construction of a retaining wall at the inter-

section of West street and Valley street. The construction of timber highway bridge on West street from the southerly line of Main street to a point 100 feet southerly from said southerly line of Main street produced. The laying and construction of 40 feet of 30-inch vitrified, saltglazed, ironstone pipe in and across West street between Valley street and Main street.

RESIDENCE—2 story and base, frame, \$3,500. Santa Rosa, Sonoma Co., Cal. Architects, Turton & Herbert, Santa Rosa Bank Bldg., Santa Rosa. Owner, F. L. Hoedfeld. Will contain eight rooms, bath and sleeping porch. Interior pine with some elm panels and white enamel. Hardwood floors, open fire places and tile or brick mantels. The floors and wainscot in bath room. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

RESIDENCES—10, 2 story and base, reinforced concrete, \$50,000. Santa Venetia, Marin Co., Cal. Architect's name not given. Owners, Santa Venetia Co., President Mabry McMahan, 204 Mutual Bank Bldg., S. F. Contractors, San Francisco Construction Co., S. F. Contract price, \$50,000. Note: Mr. McMahan states that early in 1916 his company will expend in the neighborhood of \$250,000 more in construction work at Santa Venetia.

BATH HOUSE FILTER—Cost not stated. San Rafael, Marin Co., Cal. Engineer, City Engineer, San Rafael. Owners, City of San Rafael. Bids will be opened on Nov. 1st at 8 p. m. for furnishing and installing a Continental Pressure Filter or equal in the Municipal Baths.

HOTEL RESORT—1 and 2 story and base, frame, \$35,000. Agua Caliente, Sonoma Co., Cal. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, Agua Caliente Springs Resort. Main portion 128 by 34 feet with wings 88 by 34 feet. Will contain office, lobby, ladies' parlor and 80 rooms with baths. Interior finish pine with some hardwood floors. Central heating system, special buildings for laundry and boiler equipment. Exterior covered with cement plaster. Clay tile roof. Plans being prepared.

ELECTROLIER SYSTEM—\$48,000. Napa, Napa Co., Cal. Engineer, City Engineer, Napa. Owners, City of Napa. At a recent meeting the Advisory Board of the City of Napa, the City Council, City Engineer and the City Attorney, discussed the feasibility and advisability of establishing an electrolier lighting system in Napa. Although no definite action was taken it is thought the work will soon go under way.

STREET IMPROVEMENT—Cost not stated. Vallejo, Solano Co., Cal. Engineer, City Engineer Kilkenny, Vallejo. Owners, City of Vallejo. Plans prepared by City Engineer Kilkenny for the improvement of the intersection of Capitol and Branciforte streets have been adopted by the City Council and bids for the work will soon be called for.

STORES—1 story and base, brick. Cost not stated. Martinez, Contra Costa Co., Cal. Architects, Oser Bros., 165 Post street, S. F. Owner, A. E. Blum. Location, Main and Castro streets, covering an area of 70 by 90 feet. Will

contain nine stores. Interior finish pine. Patent store fronts. Exterior faced with pressed brick. Plans complete and figures being taken.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

IRRIGATION PROJECT—Cost not stated. Madera, Madera Co., Cal. Engineer's name not given. Owners, Madera Canal and Irrigation Co., Madera. The Madera Canal and Irrigation Co. has under consideration a project to build an irrigation dam across the San Joaquin River at Polasky or a short distance above Friant, near the mouth of Hildreth creek. The dam would store part of the flood waters of the river and would supply water to irrigate, it is estimated, 120,000 acres of land, chiefly in Madera County. The dam would be 230 feet high from bed rock and would back the water for 11 miles, covering about 4,000 acres. The level of the canal would be 400 feet above the sea, making it possible to irrigate much of the high plain land of Madera County. It is said that this site was chosen by Government engineers some time ago as the most feasible for a dam across the San Joaquin. The water would be diverted into Cottonwood creek, and the land near Borden, Berenda and Madera would be served.

HOTEL—2 story and base, artificial stone. Cost not stated. Exeter, Tulare Co., Cal. Architect, none Owner, D. A. Waechter, Exeter. Location, 5th street. Will contain a number of single rooms and several public baths. Interior finish pine. Steam heat and hot water system. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

EARTH WORK—Cost not stated. Colusa, Colusa Co., Cal. Engineer's name not given. Owners, Brown-Arnold Co., Colusa. The earth work for the canal and laterals on the Brown-Arnold rice project, one mile southwest of the town of Colusa, is now ready for bids. Intending bidders may call at Chas. de St. Maurice's office and examine the plans and specifications.

HIGHWAY CONSTRUCTION—Cost as follows. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Mesmer & Rice, Marsh-Strong Bldg., L. A., presented the lowest figure at \$3,900 for asphaltic top for a three-mile section on the Bellevue road, and at \$1,300 for paving Brundage Lane. Contracts have not been awarded.

SEWER CONSTRUCTION—Cost as follows. Bakersfield, Kern Co., Cal. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. At the last meeting of the City Council Lloyd Stroud put in the lowest bid on work to be done in constructing sewer districts 27, 28, and 29 in East Bakersfield, but action in letting the contract was deferred for one week to investigate the reason for a higher bid per foot being placed for district 29 than for the other districts. Stroud's bids were \$730.49, \$485.02 and \$2,513.20 on the three contracts.

RACE AND CURTAIN WALL PROTECTION—Reinforced concrete. Cost not stated. Dalles Reservoir Site, Stan-

islaus Co., Cal. Engineer, Chief Engineer, Modesto Irrigation District. Owners, Modesto Irrigation District. Bids will be opened on November 2nd for constructing reinforced concrete protecting race and curtain wall on the up-stream face of dam No. 1.

SEWER SYSTEM—\$40,500. Visalia, Tulare Co., Cal. Engineer, City Engineer, Visalia. Owners, City of Visalia. Contractor, Michael Murphy, 1321 Mission street, Berkeley. Contract price, \$40,500.

RESIDENCES—2, 2 story and 1, 1 story, frame, \$2,750 and \$1,800. Fresno, Fresno Co., Cal. Architect, none. The following Day Labor jobs are reported as about to be started in Fresno: W. H. Ackerman, Fresno, 2, 2 story frame dwellings. G. W. Lightowler, 940 M street, 1 story frame dwelling.

BRIDGES AND CULVERTS—Reinforced concrete. Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids will be opened on November 8th at 10 a. m. for grading, construction of bridges and culverts on Division 10, Section 7, Bakersfield-Mojave road.

BRIDGE—Concrete, \$1,750. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. Bids of Thompson Bros. and Noble & Noble were taken under advisement for the construction of the Mill Creek bridge. The former bid \$1,735 and the latter \$1,941.

OIL STORAGE TANKS—Cost not stated. Hanford, Kings Co., Cal. Engineer, Eng. Dept. Union Oil Co., S. F. Owners, Union Oil Co. The City Trustees at their last meeting granted a permit to W. L. Matlock, a special agent of the Union Oil Company, for the erection of tanks to hold petroleum products in the city limits on lots 1 to 8 in block 80 or lots 14, 15 and 16 in block 81. Three steel tanks with a capacity of 20,000 gallons will be built, and will be equipped with all modern safety devices to guard against fire.

RESIDENCE—1 story and base frame, \$5,500. Visalia, Tulare Co., Cal. Architect, Fred L. Swartz, Rowell Bldg., Fresno. Owner, Miss Mary Frances Chatten. Will contain several rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire place and furnace heat. Bath rooms finished in tile. Automatic water heater. Mantels tile or brick. Exterior covered with cement plaster. Plans being prepared.

SCHOOL—1 story and base, brick. Cost not stated. Goshen, Tulare Co., Cal. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owners, Goshen School District. Bids will be received on October 26th at 1 p. m. for constructing a four class room building. Exterior faced with pressed brick. Bids are to include heating and water system. Plans can be secured from the architect.

ROAD IMPROVEMENT—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Engineer, Bakersfield. Owners, Kern County. Bids will be received on November 1st for three miles of paving on Bellevue road near Bakersfield. Bids formerly received

for this work have been rejected. Bids will also be received at the same time for concrete paving on Brundage Lane, 11 street to Union avenue. Former bids for this work were also rejected.

SEWER CONSTRUCTION—Cost as follows. Fresno, Fresno Co., Cal. Engineer, City Engineer, Fresno. Owners, City of Fresno. Contractors, Thompson Bros., 1514 H street, Fresno. Contract price, \$2,025 for 11-inch sewer in Ventura street and \$527 for 6-inch sewer in an alley in block 28.

RETAINING WALLS—Reinforced concrete. Cost not stated. Fresno, Fresno Co., Cal. Engineer, County Surveyor, Fresno. Owners, Fresno County. Bids will be received by the Board of Supervisors up to 2 p. m. of November 1st, 1915, for the construction of four concrete retaining walls for the bridge across Kings River near Sanger, in accordance with plans and specifications on file in the office of the Board.

Contracts Awarded.

WAREHOUSE ADDITION—1 story, brick, \$10,500. Calwa, Fresno Co., Cal. Architect, John H. Powers, 460 Montgomery street, S. F. Owners, Fresno Bonded Warehouse Co. Contractor, John Miller, 460 Montgomery street, S. F. Contract price, \$10,500.

BRIDGES—Reinforced concrete, \$4,538. Modesto, Stanislaus Co., Cal. Engineer, County Surveyor, Modesto. Owners, Modesto County. Contractors, F. F. Reames and R. N. Simpson, Modesto. Contract price, \$4,538.

CANAL LINING—Concrete, \$62,962.25. Modesto, Stanislaus Co., Cal. Engineer, Chief Engineer F. C. Herrmann, Modesto. Owners, Modesto Irrigation District. Contractor, James Willison, Half Moon Bay. Contract price, \$62,962.25.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA.

RESIDENCE—1 story and base, frame, \$2,500. Sacramento, Cal. Architect, none. Owner, N. L. Bishop, 2615 U street, Sacramento. Location, Y street. Will contain six rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 1 story and base, frame, \$2,000 each. Stockton, San Joaquin Co., Cal. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owners, Cye Moreing & Bros., Commercial Bank Bldg., Stockton. Location, Park View Tract. Will contain five rooms and bath each. Interior finish pine and redwood. Open fire places and tile mantels. Exteriors covered with rustic. Plans being prepared. Work will be done by Day Labor.

BRIDGE—Reinforced concrete, \$2,706. Sacramento, Cal. Engineer, City Engineer Frank C. Miller, Sacramento. Owners, City of Sacramento. Bids are now being taken by the City Park Board for the construction of a bridge in Del Paso Park, to cost approximately \$2,300. Two sets of plans will be offered bidders, one by City Engineer Frank C. Miller and the other by Jenkins & Wells. Further information

may be had from the City Engineer at Sacramento.

BRIDGE—Reinforced concrete. Cost not stated. Ukiah, Mendocino Co., Cal. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. At the last meeting of the City Trustees only one bid was received by the board for the construction of a wooden bridge across Orr Creek at Oak street. Walter R. Dickie offered to do the work for \$1,150 this amount including grading and filling, with driven piles for \$1,075 with piles on mud sills. Action on awarding a contract was laid over until October 11th. Trustee Charlton recommended that bids be called for the construction of a concrete bridge at the same location, in accordance with the plans prepared by the City Engineer. It is said that the cost of a concrete bridge will run about \$3,000. Plans and specifications may be had from the City Engineer at Ukiah.

LEVEE CONSTRUCTION—\$30,000. Galt, Sacramento Co., Cal. Engineer's name not given. Owners, Allen Estate. The Allen Estate for the past few weeks have working on a new levee on their place known as the old Hicks ranch. Approximately two miles of levee work has been completed of the three miles to be done. The levee is from five to seven feet high.

SEWER CONSTRUCTION—Cost not stated. Sonora, Tuolumne Co., Cal. Engineer, Town Engineer, Sonora. Owners, Town of Sonora. Trustee Doyle reported at the last meeting of the Trustees that he had gone over the town with the engineer and obtained complete data and approximate cost of completing the sewer system. The engineer was instructed to prepare plans for the work. Further information will be given on this work when bids are called.

IRRIGATION PROJECT—\$285,000. Stockton, San Joaquin Co., Cal. Engineer not selected. Owners, Tracy-Bethany Irrigation District. The people of the Tracy-Bethany district by a vote of 79 to 11 favored the formation of the west side irrigation district, comprising approximately 11,500 acres, and, at the same time, elected their officers. The directors and officers elected are: S. A. Shearer, district one; Fred von Sostem, district two; Louis Parker, district three; Henry Frerichs, district four; Peter D. Schmidt, district five; Mrs. Dollie McGee, treasurer; George Parker, assessor; Cornelius Looney, tax collector. Rough estimates for pumping water on the lands of the district are placed at about \$255,000. One of the first important matters to be attended to will be the naming of an engineer to prepare plans and estimates for the district, preparatory to submitting a bond issue to the voters of the district.

STEWART'S COTTAGE—1 story and base, frame, \$15,000. Ukiah, Mendocino Co., Cal. Architect, State Architect George B. Mcbougall, Sacramento. Owners, State of California. Plans are being prepared for a steward's cottage and additions to the buildings at the Mendocino State Hospital. Further mention will be made of this work.

Contracts Awarded.

BRIDGES—Cost as follows. Eureka, Humboldt Co., Cal. Engineer, County Surveyor, Eureka. Owners, Humboldt

County. Contractor, Mercer-Fraser Co., Eureka, trestle bridge, \$22,200. D. C. Farnell, Eureka, culvert, \$372.

BRIDGES—Reinforced concrete, \$1,045.76. Ukiah, Mendocino Co., Cal. Engineer, County Surveyor, Ukiah. Owners, Mendocino County. Contractor, T. J. Hyman, Ukiah. Contract price, \$1,045.76.

LUMBER TRAMWAY—\$35,536. Gray's Flat, Plumas Co., Cal. Engineer's name not given. Owners, Spanish Peak Lumber Co. Contractors, United States Steel Products Co., New Jersey. Contract price, \$35,536.

STORM WATER SEWER—\$26,007.75. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, A. B. Munson & Son, Stockton. Contract price, \$26,007.75.

LOS ANGELES AND SOUTHERN CALIFORNIA.

SEWERS—Cost not stated. Orange, Orange Co., Cal. Engineer, City Engineer, Orange. Owners, City of Orange. Plans and specifications for the construction of sewers on East Almond avenue, East Washington avenue, North Cypress street and West Palm avenue have been approved by the City Council and bids will be called for immediately. Further information may be had from the City Engineer at Orange.

ROAD CONSTRUCTION—Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Plans and specifications for the excavation and construction along the line of certain portions of the right-of-way on the extension of the Morro Creek road, work covers excavation and filling, etc., between Station O and Station 262-0, were approved by the County Supervisors at their last meeting, and bids have been ordered received until November 2 at 10 a. m. Further information may be had from the County Surveyor at San Luis Obispo.

ROAD FENCE—\$3,120. Santa Barbara, Santa Barbara Co., Cal. Engineer, County Surveyor, Santa Barbara. Owner, Santa Barbara County. The lowest bid received for the construction of 9½ miles of fence along the State Highway was presented by the Boardman Construction Co., Santa Barbara, at \$3,120. A contract will probably be awarded.

BANK AND OFFICES—4 story and base, Class A construction. Cost not stated. Los Angeles, Cal. Architect, John Parkinson, Security Bldg., L. A. Owners, Security National Bank. Location, Spring street adjoining present Security Bldg. First floor occupied by bank, upper floors arranged for offices. Steel frame, hollow tile partitions, concrete floors, metal window sash and frames, ornamental iron and bronze. Interior finish hardwoods, ornamental plaster and metal trim. Marble and tile wainscot. Special bank fixtures and vaults. Exterior faced with granite. Plans complete and figures being taken.

BRIDGES—4, reinforced concrete. Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, W. M. Thomas, Hibernian Bldg., L. A. Own-

ers, Santa Barbara County. Engineer W. M. Thomas has been commissioned to prepare plans and specifications for four bridges to be erected on the State Highway under the recent bond issue. The bridges will be located as follows: One overhead bridge crossing near Bell canyon; a reinforced concrete span over El Capitan creek; and two reinforced concrete bridges over Gaviota creek between Gaviota gorge and the ocean.

BRIDGE—Reinforced concrete. Cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. The Board of Supervisors has authorized the County Clerk to advertise for bids for the construction of a bridge across Ellsworth Barranca in Road District No. 5, in accordance with plans and specification prepared by the County Surveyor.

MOTION PICTURE PLANT—1 story, frame, \$35,000. Los Angeles, Cal. Architects, W. M. Shumway & Co., 5057 Hollywood Boulevard, L. A. Owner, Thomas Dixon. Location, Sunset Boulevard. The building will include indoor and outdoor staging, office buildings, dressing rooms, factory buildings, etc. Plans are being prepared.

CLINIC BUILDING—2 story and base, reinforced concrete. Cost not stated. Los Angeles, Cal. Architect, A. B. Benton, 114 North Spring street, L. A. Owners, Parent Teachers' Association. Location, Castelar street, covering an area of 25 by 120 feet. Will contain offices for dentists and physicians, operating room for minor cases and dispensary. Interior finish pine. Steam heat and modern plumbing. Exterior faced with cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$15,000. Los Angeles, Cal. Architect, John McCreedy. Hermosa Beach. Owner, Benj. H. Hiss, 1756 West 22nd street, L. A. Location, Manhattan Beach. Will contain 14 rooms, three baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Central heating system, hot water supply and open fire places. Mantels tile or brick. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans being completed.

NORMAL SCHOOL WORK—Cottage, frame, \$6,500. Santa Barbara, Santa Barbara Co., Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Plans are being prepared for a frame steward's cottage at the Santa Barbara State Normal School. Further mention will be made of the work when bids are called.

SCHOOL—1 story and base, brick, \$17,000. Los Angeles, Cal. Architects, Tuttle & Angel, Delta Bldg., L. A. Owners, Burbank Grammar School District. Will contain five class rooms, kindergarten and play rooms. Interior finish pine with maple floors. Central heating system, vacuum cleaning and modern school plumbing. Exterior faced with cement plaster. Plans complete and figures being taken. Bids close on October 30th.

HOSPITAL SEPTIC TANK—\$7,250. Norwalk, Los Angeles Co., Cal. Engi-

neer, State Engineer, Sacramento. Owners, State of California. Plans are being prepared for a septic tank at the Norwalk State Hospital. Further mention will be made of the work when bids are called.

Contracts Awarded.

JETTY WORK—Cost as follows. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractors, Grace & Bernieri, Spreckels Bldg., S. F. Contract price, 26-foot piles, \$10.80; 28-foot piles, \$11.65; 30-foot piles, \$12.40; barbed wire per 100 lbs. \$5.50.

ROAD PAVEMENT—\$7,274. Santa Ana, Orange Co., Cal. Engineer, County Surveyor, Santa Ana. Owners, Orange County. Contractors, O. & C. Co., Fullerton. Contract price, \$7,274. County to furnish material.

RESIDENCE—2 story and base, frame, \$25,894. San Marino, Los Angeles Co., Cal. Architect's name not given. Owners, E. H. and H. E. Moulton. Contractors, The Foss Designing and building Co., 100 East Colorado street, L. A. Contract price, \$25,894.

SCHOOL—1 story and base, frame, \$15,238. Cucamonga, San Bernardino Co., Cal. Architects, Tuttle & Angel, Delta Bldg., L. A. Owners, Cucamonga School District. Contractor, A. L. Gribbling, 3320 North Griffin avenue, L. A. Contract price, \$15,238. Cass-Smurr-Damerel Co., L. A., heating and ventilating, \$2,545.

PORTLAND AND OREGON.

WAREHOUSE—2 story and base, reinforced concrete, \$25,000. Eugene, Ore. Architect, J. R. Ford, Eugene. Owners, Allen & Lewis, Eugene. Will cover an area of 80 by 122 feet. Construction will be either reinforced concrete or hollow tile. Tin roof. Furnace heat and electric elevator will be installed. Interior finish rough and pine. Exterior cement plaster. Plans complete and figures being taken.

RAILROAD CONSTRUCTION—\$6,000,000. Portland, Ore. Engineer's name not given. Owners represented by Robert E. Strahorn, Portland, according to an announcement made by Robert E. Strahorn, a railroad, the cost of which will be about \$15,000 per mile, will be constructed into Eastern, Central and Southern Oregon, to extend for a distance of 400 miles. He proposes to construct a line from Bend to Klamath Falls; one branching from this line about Silver Lake and extending southeasterly into the rich

Warner Valley, and one branch from the north and south line about Millican to connect with the line of Oregon Short Line and O.-W. R. & are building through Crane Creek G.

ELIMINATION OF GRADE CROSSING—\$750,000. Portland, Ore. Engineer, City Engineer, Portland. Owners, City of Portland. Final proceedings leading up to the commencement of actual proceedings for the elimination of the O.-W. R. & N. grade crossings from the head of Sullivan Gulch to the city limits will be completed this week, when the city will formally take over the Barr road west of 32nd street from the county. This will be followed by the filing of plans and specifications for the project.

STORES—1 or 2 story and base, reinforced concrete. Cost not stated. Portland, Ore. Architects, Whitehouse & Foulhoux, Wilcox Bldg., Portland. Owners, Brooklyn-Fields Co. Location, East 11th and 12th streets, covering an area of 220 by 212 feet. Bids are now being taken for both a one and two story structure. Complete information can be secured from the architects.

Contracts Awarded.

GARAGE—2 story and base, brick, \$30,000. Portland, Ore. Architect Jacobberger & Smith, Board of Trade Bldg., Portland. Owner, Gay Lombard. Lessee Oregon Motor Car Co. Contractor, James P. Taylor, Macleay Bldg., Portland. Contract price, \$30,000.

SEWER SYSTEM—\$58,448. Forest Grove, Ore. Engineers, J. B. and R. Koon, Board of Trade Bldg., Portland. Owners, City of Forest Grove. Contractors, Elliott & Scoggins, McKibbin Bldg., Portland. Contract price, \$58,448.

SEATTLE AND WASHINGTON

Contracts Awarded.

HOTEL—1 and 2 story and base, reinforced concrete, \$75,000. Rainier National Park, Wash. Architects, Heath & Gove, National Realty Bldg., Tacoma. Owners, Savage-Scofield Co., et al. Contractors, Cornell Bros., Savage Bldg., Tacoma. Contract price, \$75,000.

STATE HOSPITAL GROUP—1 and 2 story, reinforced concrete, \$133,452.27. Sedro - Woolley, Wash. Architect Heath & Gove, National Realty Bldg., Tacoma. Owners, State of Washington. Contractors, Warrack Construction Co. Downs Block, Seattle. Contract price, \$133,452.27. Note: Contract was let on revised figures.

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San Francisco

Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

San Francisco

No.	Owner	Contractor	Amt.
2006	Century Club	Victor	1166
2007	Greenock	Franz	2442
2008	McCormick	Johnson	1087
2009	Allred	Allred	1950
2010	Lakerty	McDonough	1000
2011	Turner	Turner	1800
2012	Stanley	Stanley	1000
2013	Mancuso	Mancuso	1000
2014	Hall	Hall	3000
2015	Anderson	Anderson	2400
2016	Same	Same	2400
2017	Same	Same	2400
2018	Same	Same	2400
2019	Palm Cafeteria	Owner	5000
2020	Windmiller	Terrill	3150
2021	Mix	Barz	5000
2022	Hamberger	Branch	994
2023	Jaccard	McKenzie	1345
2024	Helpers of Soul	McCarthy	2850
2025	Cong Church	Bryant	4950
2026	Powers	Hantzsch	14605
2027	Pacific Gas	Butte	4795
2028	Stewart	Palmer	8343
2029	Sunset	Home Mfg	7750
2030	Lehrke	Sullivan	585
2031	Same	Diestel	4739
2032	Same	Peters	315
2033	Same	Stone	712
2034	Nolan	Nolan	1000
2035	Tackaberry	Martin	3610
2036	Marty	Holdener	3150
2037	Foxarty	Cavaglieri	2500
2038	Sammer	Wilkie	2050
2039	Dana	Scott	1260
2040	MacDonald	Booker	1680
2041	Braun	Ratto	4180
2042	Goerick	Goerick	3500
2043	Same	Same	3500
2044	Same	Same	3500
2045	Vella	Vella	650
2046	Bacigalupi	Owner	400
2047	Levin	Woerner	550
2048	Camaz	Leitert	450
2049	Banks	Hatch	400
2050	Farker	Carson	400
2051	Hellman	Hillington	400
2052	Breslauer	Moroncelli	400
2053	Lind	Bergensen	400
2054	Skaller	Elig	400
2055	New Method	Owner	1000
2056	United Drug	Duval	1000
2057	Pacific Lead	Lynch	20000
2058	S. P. Lumber	Owner	8000
2059	Torre	Torre	750
2060	Walter	Nicholls	400
2061	Jovineck	Coburn	450
2062	Shotwell	Kern	400
2063	Schaltenbrandt	Owner	400
2064	Ritter	Coburn	450
2065	Bates	King	400
2066	McDermott	Johnston	400
2067	Ticheno	Collins	400
2068	Gray	Gray	400
2069	Horne	Horne	2500
2070	Suey Wing	Howard	10000
2071	Pedette	Larry	2500
2072	Bacon	Wieslander	2000
2073	Martin	Little	2000
2074	Neilsen	Spencer	2350
2075	Meyer	Gilmour	1852

Correction in Location

FRAME COTTAGE			
2871	E. ELEVANTH AVE 125 N Law-		
ton.	All work for four-room framé		
cottage with garage.			
Owner.....Louis Lamotte, Elvarano,			
California.			
Architect...None.			
Contractor...Geo. H. Old, Pittsburg, Cal.			
Filed Oct. 5, '15. Dated Sept. 15, '15.			
Plans & specifications approved.....\$ 50			
Lumber ordered.....100			
Foundation walls in.....150			
Floors laid.....200			
Roof on.....200			
Outside painted.....200			
Plumbing roughed in.....150			

1st coat plaster on.....	150
Completed and accepted.....	125
Usual 35 days.....	425

TOTAL COST, \$1750

Bond, \$900. Surety, R. H. Old. Limit,	
90 days. Forfeit, \$100. Plans and	
specifications filed.	

GAS HEATING SYSTEM

(2906) SW FRANKLIN AND SUTTER	
Complete present incomplete gas	
heating system in building.	

Owner.....Century Club of California	
Architect...Julia Morgan, Merchants'	

Exchange Bldg., S. F.	
Contractor..Victor Engineering Co.,	
325 Guerrero, S. F.	
Filed Oct. 9, '15. Dated Sept. 30, '15.	

Usual 35 days.....	\$1166
TOTAL COST, \$1166	
Bond, \$1166. Surety, Thos. C. Gray.	
Limit, 60 days. Forfeit, \$25. Plans	
and specifications, none.	

FRAME RESIDENCE

(2907) N OCEAN AVE 100 E Otsego	
Ave 30-5½x200; Lot 4 Blk 18 Allred	
Tract. All work except brick work	
for two-story and basement frame	
residence.	

Owner.....Robert Greenock, Jr., 412	
Andover, San Francisco.	
Architect...Mel I. Schwartz, Nevada	
Bldg Bldg., S. F.	

Contractor..Val Franz & Son, 185	
Stevenson, San Francisco.	
Filed Oct. 9, '15. Dated Oct. 9, '15.	

Roof boards on.....	\$610.50
Brown coated.....	610.50
Completed and accepted.....	610.50
Usual 35 days.....	610.50

TOTAL COST, \$2442.00

Bond, \$1221. Sureties, Fred P. Fischer	
and Wm. Chatham. Limit, 45 days	
after Oct. 11. Forfeit, none. Plans and	
specifications filed.	

ALTERATIONS

(2908) SE STEINER AND HAYES S 50	
NE 106-9. Alterations and additions	
to a two-story frame building.	

Owner.....T. A. McCormick.	
Architect...C. O. Clausen, Hearst Bldg	
San Francisco.	

Contractor..J. Harold Johnson, 740 9th	
Ave., San Francisco.	
Filed Oct. 9, '15. Dated Oct. 8, '15.	

White coated.....	\$406
Completed and accepted.....	406
Usual 35 days.....	275

TOTAL COST, \$1087

Bond, none. Limit, 60 days. Forfeit,	
\$3. Plans and specifications filed.	

FRAME DWELLING

(2909) NW FLOOD AND GENESEE.	
One-story and basement frame dwlg.	
Owner.....C. S. Allred, 150 Onondago	
San Francisco	

Architect...None.	
Day's work.	
COST, \$1950	

ALTERATIONS

(2910) NO. 12 MARSHLEY. Alter dwlg.	
Owner.....Mary V. Lafferty & Grace	
A. Cunco, Premises.	

Architect...None.

Contractor...McDonough & Costello, 92	
College Ave., S. F.	

COST, \$1000

FRAME DWELLING

(2911) S OAKDALE 125 E Mendell.	
One-story and basement frame dwlg.	
Owner.....Geo. Turner, 1613 Jerrold,	
San Francisco.	

Architect...None.	
Day's work.	
COST, \$1400	

FRAME DWELLING

(2912) E BERLIN 125 S Silliman. One	
story and basement frame dwelling.	
Owner.....J. Stanley, 155 Berlin,	
San Francisco.	

Architect...None.	
Day's work.	
COST, \$1000	

FRAME STORE

(2913) NW MISSION 82 NE Noreiga.	
One-story frame store.	
Owner.....G. Mancuso, 5166 Mission,	
San Francisco.	

Architect...O. Evans, 1197 Naples,	
San Francisco.	
Day's work.	
COST, \$1000	

FRAME DWELLING

(2914) W ELEVENTH AVE 125 S Bal-	
boa. Two-story and basement frame	
dwellg.	
Owner.....C. A. Hall, 1318 5th Ave.,	
San Francisco.	

Architect...None.	
Day's work.	
COST, \$5000	

FRAME DWELLING

(2915) E SEVENTEENTH AVE 250 S	
Geary. Two-story and basement	
frame dwelling.	
Owner.....J. Anderson, 423 16th Ave.,	
San Francisco	

Architect...None.	
Day's work.	
COST, \$2100	

FRAME DWELLING

(2916) E SEVENTEENTH AVE 225 S	
Geary. Two-story and basement	
frame dwelling.	
Owner.....J. Anderson, 123 16th Ave.,	
San Francisco	

Architect...None.	
Day's work.	
COST, \$2400	

FRAME DWELLING

(2917) E SEVENTEENTH AV 200 S	
Geary. Two-story and basement	
frame dwelling.	
Owner.....J. Anderson, 423 16th Ave.,	
San Francisco	

Architect...None.	
Day's work.	
COST, \$2400	

FRAME DWELLING

(2918) E SEVENTEENTH AVE 175 S	
Geary. Two-story and basement	
frame dwelling.	
Owner.....J. Anderson, 423 16th Ave.,	
San Francisco	

Architect...None.	
Day's work.	
COST, \$2100	

ALTERATIONS

(2919) S MARKET 365 SW Fifth. Alter front, add mezzanine floor and finish interior for cafeteria.

Owner.....Palm Cafeteria Co., 945 Market, San Francisco.

Architect...Arthur S. Heineman, San Fernando Bldg., Los Angeles.

Day's work. COST, \$5000

FRAME RESIDENCE

(2920) SE KIRKHAM & FOURTEENTH Ave S 50xE 95. All work for two-story and basement frame residence.

Owner.....Mr. M. Windmiller, 931 Kirkham, San Francisco.

Architect...W. A. and C. C. Terrill Contractor...W. A. & C. C. Terrill, 3631 17th, San Francisco.

Filed Oct. 11, '15. Dated Oct. 9, '15.
Frame up\$1288
Rough plaster on.....1287
Completed and accepted.....1287
Usual 35 days.....1287

TOTAL COST, \$5150

Bond, \$2575. Sureties, C. C. W. Hahn and C. J. Hillard, Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

(2921) LOT 32 BLK 2983 Claremont Court. All work for two-story and basement frame residence.

Owner.....Mabel R. Mix, Stratford Hotel, San Francisco

Architect...Welsh & Carey, Merchants' National Bank Bldg., S. F.

Contractor...Barz & Hughes, 1914 Hayes, San Francisco.

Filed Oct 11, '15. Dated Oct. 9, '15.
Frame up\$1000
Brown coated1250
Standing finish on.....750
Finished and completed.....750
Usual 35 days.....1250

TOTAL COST, \$5000

Bond, \$2500. Sureties, J. D. Crawford and E. P. Hulme, Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(2922) NO. 148 BEULAH. Alterations to building.

Owner.....Hamberger Polhemus Co., 149 California, S. F.

Architect...G. A. Applegarth, Claus Spreckels Bldg., S. F.

Contractor...J. Branch, 1080 Sanchez, San Francisco.

Filed Oct. 13, '15. Dated Oct. 11, '15.
On 1st of each month.....75%
Usual 35 days.....25%

TOTAL COST, \$994

Bond, none. Limit, as fast as possible. Forfeit, none. Specifications only filed.

ALTERATIONS AND ADDITIONS

(2923) N McALLISTER 232-234 E Arguello Blvd. E 52-10½XN 137-6. All work for alterations and additions to buildings.

Owner.....Louise Jaccard, 2718 McAllister, San Francisco.

Architect...E. S. Jaccard.

Contractor...K. H. McKenzie, 2783 McAllister, San Francisco.

Filed Oct. 13, '15. Dated Oct. 7, '15.
Foundations and underpinning under both houses\$300
Completed500
Usual 35 days.....545

TOTAL COST, \$1345

Bond, \$700. Surety, New Amsterdam Casualty Co. Limit, 30 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS AND ADDITIONS

(2924) NW HAIGHT AND LAGUNA W 60XN 137-6. Alterations and additions when completed will be conservatory and ambulatory on garden level and janitors apartment on street level.

Owner.....The Helpers of the Holy Souls, Premises.

Architect...Welsh & Carey, Merchants National Bank Bldg., S. F.

Contractor...McCarthy & Walker, 422 Eureka, San Francisco.

Filed Oct. 13, '15. Dated Oct. 11, '15.
On 1st and 15th of each month 75%
Usual 35 days.....25%

TOTAL COST, \$2850

Bond, \$1425. Sureties, P. J. Sullivan Jr. and I. Friedman, Limit, 40 days. Forfeit, none. Plans and specifications filed.

FRAME CHURCH.

(2925) — TENTH AVE about 75 S Judah. All work for one-story and basement frame church building.

Owner.....The Congregational Church Extension Society, 10th Ave and Judah, S. F.

Architect...Jas. W. Plachey, Acheson Bldg., Berkeley.

Contractor...A. W. Bryant, 1372 9th Ave., San Francisco.

Filed Oct. 13, '15. Dated Oct. 4, '15.

Frame up\$1237.50
Roof on and building enclosed 1237.50
Completed and accepted.....1237.50
Usual 35 days.....1237.50

TOTAL COST, \$4950.00

Bond, none. Limit, 50 days. Forfeit, none. Plans and specifications filed.

FRAME FLATS

(2926) E TENTH AVE 100 N California N 25XE 120. All work for two-story frame flats.

Owner.....Jno. J. and Lena M. Powers 178 10th Ave., S. F.

Architect...None.

Contractor...M. G. Hantzsche and Fred O. McKay, 525 31st Ave., San Francisco.

Filed Oct. 13, '15. Dated Sept. 27, '15.

2nd story joists set.....\$ 888.45
Roof on & building enclosed 888.45
Brown coated888.45
Accepted888.40
Usual 35 days.....1151.25

TOTAL COST, \$14,605.00

Bond, \$2300. Sureties, Jno. H. McKay and Henry J. Kessel, Limit, 90 days after Oct. 1. Forfeit, none. Plans and specifications filed.

ELECTRIC WORK

(2927) S SUTTER 115-9 E Powell S 137-6XE 45-6. Electric work for 8-story Class "A" building.

Owner.....Pacific Gas & Electric Co., 445 Sutter, San Francisco.

Architect...Edgar A. Mathews, 251 Post, San Francisco.

Contractor...Butte Eng. & Elec. Co., 683 Howard, San Francisco.

Filed Oct. 13, '15. Dated Oct. 11, '15.

Roughing in of conduits for basement, 1st, 2nd and 3rd floors....\$1195
On completion of conduits on remaining floors1200
Usual 35 days.....1200

TOTAL COST, \$4795

Bond, \$2400. Surety, New Amsterdam Casualty Co. Limit, with diligence. Forfeit, none. Plans and specifications filed.

BRICK NICKELODEON, ETC.

(2928) S TWENTY-FOURTH 225 W N 50x114. All work for one-story brick nickelodeon and stores.

Owner.....N. Stewart, 4041 24th, S. F.

Architect...None.

Contractor...P. A. Palmer, Monadnock Bldg., San Francisco.

Filed Oct. 13, '15. Dated Sept. 14, '15.
On 1st and 15th of each month 75%
Usual 35 days.....25%

TOTAL COST, \$33

Bond, \$4172.50. Surety, New England Equitable Ins. Co. Limit, forfeit, none. Plans and specifications filed.

NOTE:—Plans by Emery M. Frash Claus Spreckels Bldg.

INTERIOR WOOD WORK, ETC.

(2929) NOS. 945 AND 947 MARKET. Interior wood trim, dumb waiter and hoist trim, except kitchen, interior fan room and cellar for store room premises known as Long's Market.

Owner.....Sunset Cafeteria Co., Pre

Architect...Arthur S. Heineman, San Fernando Bldg., Los Angeles.

Contractor...Home Manufacturing Co., 543 Brannan, San Francisco.

Filed Oct. 13, '15. Dated Oct. 13, '15.

On October 29, 1915.....\$1000

Payments of 60% as work delivered at building1937

On completion1937
Usual 35 days.....1937

TOTAL COST, \$7750

Bond, \$3875. Surety, New England Equitable Insurance Co. Limit, days. Forfeit, none. Plans and specifications filed.

NOTE:—1st report Oct. 13th, No. 29

FRAME STORE AND FLAT

(2930) W CONNECTICUT 175 S 1 W 190XS 25. Lathing, plaster etc., for two-story and basement frame (2) stores and flat.

Owner.....Gus F. Lehrke, 627 Tennessee, San Francisco.

Architect...H. C. Baumann, Chronicle Bldg., San Francisco.

Contractor...D. F. Sullivan, 175 Henn San Francisco.

Filed Oct. 14, '15. Dated Sept. 23,

Brown coated\$1151.25

Plastering completed & accepted1151.25
Usual 35 days.....1151.25

TOTAL COST, \$

Bond, none. Limit, without del Forfeit, none. Plans and specifications filed.

(2931) CONCRETE FORMS, LUMBER mill work, stairs, labor, hardware, etc., iron work, rough hardware, sheet metal and patent glass, glazing, marble, tile, terrazzo, etc., on above.

Contractor...Diestel & Jones, 1740 F San Francisco.

Filed Oct. 14, '15. Dated Sept. 10, '15.

Roof rafters in place.....\$1151.25

Brown coated1151.25

Standing finish on1151.25

Completed and accepted.....1151.25
Usual 35 days.....1151.25

TOTAL COST, \$4795

Bond, \$2400. Surety, Massachusetts Bonding & Insurance Co. Limit,

Forfeit, none. Plans and specifications filed.

22) ELECTRICAL WORK ON above.
Contractor...Gus J. Peters, 1119 Broderick, San Francisco.

Filed Oct. 14, '15. Dated Sept. 21, '15.
Conduits installed\$185
Completed and accepted..... 80
Usual 35 days..... 50
TOTAL COST, \$315
Bond, none. Limit, without delay. Forfeit, none. Plans and specifications filed.

23) CONCRETE AND CEMENT work on above.
Contractor...E. W. Stone, 122 Eagle, San Francisco.

Filed Oct. 14, '15. Dated Sept. 27, '15.
All forms filled with concrete...\$350
Completed and accepted..... 229
Usual 35 days..... 193
TOTAL COST, \$772
Bond, \$386. Sureties, A. B. Smith and J. Gray. Limit, without delay. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE
(234) S EIGHTEENTH AVE 175 S Anza S 25xW 120. All work for five-room frame residence.
Owner.....Wm. P. Nolan.
Architect...None.

Contractor...William P. Nolan & Co.
Filed Oct. 14, '15. Dated Oct. 8, '15.
Masters on\$1000
Brown coated 1000
Completed 1000
Usual 35 days..... 1000
TOTAL COST, \$4000
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications, none.

FRAME STORE AND FLAT
(235) SW SEVENTEENTH AVE & Geary S 25 S 52-C N 25 E 32-6. Excavation, concrete, carpenter, mill, sheet metal, glazing, plaster, plumbing, etc., for two-story frame store and flat.
Owner.....H. E. Tackaberry, 1112 Broadway, San Francisco.
Architect...Fredk. D. Boese, Call Bldg., San Francisco.
Contractor...Wm. Martin, 110 Jessie, San Francisco.

Filed Oct. 14, '15. Dated Oct. 13, '15.
Frame up & rough plumbing in \$900
Brown coated 900
Completed and accepted..... 900
Usual 35 days..... 910
TOTAL COST, \$3610
Bond, \$1805. Surety, Pacific Coast Casualty Co. Limit, 80 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING
(236) — ARMY 75 E Bryant. All work except light fixtures for one and one-half-story and basement frame dwelling.
Owner.....J. F. Marty, 11 Leese, S. F. Architect...None.
Contractor...F. A. Holdener, 3715 Mission, San Francisco.

Filed Oct. 14, '15. Dated —
Rough carpenter work done and roof on\$537 50
When plastered 537 50
Completed and accepted..... 537 50
Usual 35 days..... 537 50
TOTAL COST, \$2150 00

Bond, none. Limit, 60 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE
(237) N TWENTY-NINTH 180 E Castro 25x114. All work for two-story frame residence.
Owner.....Jos. P. Fogarty, 564 29th, San Francisco.
Architect...Plans by Contractor.
Contractor...G. Cavaglieri, 593 Potrero Ave., San Francisco.

Filed Oct. 14, '15. Dated Oct. 9, '15.
Frame up\$625
Brown coated 625
Completed and accepted..... 625
Usual 35 days..... 625
TOTAL COST, \$2500
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS
(238) S MARKET 45-10 W Spear, designated as Hotel Lincoln. All work for alterations to seven-story and basement building.
Owner.....Sommer & Kaufman, 338 Market, San Francisco.
Architect...Cunningham & Politeo, 1st National Bank Bldg., S. F.

Contractor...Frank A. Wilkie.
Filed Oct. 14, '15. Dated Oct. 13, '15.
1st and 15th of each month.... 75%
Usual 35 days..... 25%
TOTAL COST, \$2050
Bond, \$1013. Sureties, Isaac Cohn and Martin Lydin. Limit, 30 days. Forfeit, \$50. Plans and specifications filed.

STEAM BOILER, ETC.
(239) W EAST, bet. Mission and Howard; No 132 East. Steam boiler, fuel oil storage tank and fuel oil burners for hotel building.
Owner.....Harvey H. Dana.
Architect...None.
Contractor...Scott Company, 243 Minna, San Francisco.

Filed Oct. 14, '15. Dated Oct. 14, '15.
Material delivered\$630
Completed and accepted..... 315
Usual 35 days..... 215
TOTAL COST, \$1260
Bond, \$630. Surety, New Amsterdam Casualty Co. Limit, 40 days. Forfeit, none. Plans and specifications filed.

FRAME LAUNDRY
(240) E LANGTON 125 S Howard 25 x80; No. 9 Langton. All work for two-story frame laundry.
Owner.....Mrs. B. S. MacDonald also known as Belle S. MacDonald, 1100 11th Ave., S. F.
Architect...None.
Contractor...James Booker, 12 Wolfe, San Francisco.

Filed Oct. 14, '15. Dated Aug. 13, '15.
Frame up\$120
Plastering completed 420
Completed and accepted..... 420
Usual 35 days..... 420
TOTAL COST, \$1650
Bond, \$1650. Sureties, Jas. and John Hansen. Limit, 30 days from issuance of permit. Forfeit, none. Plans and specifications filed.

FRAME STORES
(241) W VALENCIA 60 N 17th. All work except plumbing, electric wiring, stairs, finish hardware, shades and light fixtures and removing the center concrete walls and debris for

one-story and basement frame (3) storea.

Owner.....J. and Fred Braun, 730 Guerrero, San Francisco.
Architect...Ernest U. Essman, 24th & Church, San Francisco.
Contractor...Ratto & Ratto, 232 Hartford, San Francisco.

Filed Oct. 14, '15. Dated Oct. 14, '15.
Frame up and roof on.....\$1045
Enclosed and front completed.. 1045
Completed and accepted..... 1045
Usual 35 days..... 1045
TOTAL COST, \$4150
Bond, none. Limit, 25 days from Oct. 18. Forfeit, \$5. Plans and specifications filed.

FRAME FLATS
(242) S PACIFIC 165 W Taylor. Two-story and basement frame (2) flats.
Owner.....W. A. Goerlicke, San Rafael, Cal.
Architect...O. R. Thayer, 20 Montgomery, San Francisco.
Day's work. COST, \$3500

FRAME FLATS
(243) S PACIFIC 231 W Taylor. Two-story and basement frame (2) flats.
Owner.....W. A. Goerlicke, San Rafael, Cal.
Architect...O. R. Thayer, 20 Montgomery, San Francisco.
Day's work. COST, \$3500

FRAME FLATS
(244) S PACIFIC 189 W Taylor. Two-story and basement frame (2) flats.
Owner.....W. A. Goerlicke, San Rafael, Cal.
Architect...O. R. Thayer, 20 Montgomery, San Francisco.
Day's work. COST, \$3500

FRAME DWELLING
(245) NO. 1445 McKINNON. One-story and basement frame dwelling.
Owner.....John Vella, 1450 McKinnon, San Francisco.
Architect...None.
Day's work. COST, \$650

ALTERATIONS
(246) NO. 441 FAIR OAKS. Alter and add to dwelling.
Owner.....P. Bacigalupi, 612 Broadway, San Francisco.
Architect...J. A. Poporato, 619 Washington, San Francisco.
Day's work. COST, \$400

BAKE OVEN
(247) NO. 3781 MISSION. Build bake oven for bakery.
Owner.....S. H. Levin, Premises.
Architect...None.
Contractor...G. L. Woerner, 3560 18th, San Francisco.
COST, \$550

REPAIRS
(248) NW BRVANT AND STERLING. Repair fire damage.
Owner.....B. J. Curtaz & Sons, 108 Front, San Francisco.
Architect...None.
Contractor...E. T. Leiter & Sons, 251 Post, San Francisco.
COST, \$450

ALTERATIONS
(249) NO. 511 SIXTEENTH AVE. Raise and repair dwelling.

Owner.....Alice Banke, Premises.
 Architect...None.
 Contractor...H. L. Hatch, 4439 Geary,
 San Francisco.
 COST, \$400

ALTERATIONS
 (2950) NO. 3331 JACKSON. Alter for
 garage.
 Owner.....C. H. Parker, Premises.
 Architect...None.
 Contractor...Carson & Sons, 219 32nd
 Ave., San Francisco.
 COST, \$400

ADDITION
 (2951) NO. 1509 GREENWICH. Add
 for garage room.
 Owner.....I. W. Hellman Jr., 2020
 Jackson, San Francisco.
 Architect...None.
 Contractor...S. Billington, 1564 Bush,
 San Francisco.
 COST, \$400

BRICK FOUNDATION
 (2952) NO. 925 Valencia. Brick founda-
 tion and bulkhead.
 Owner.....Mrs. Ricka Breslauer, 990
 Geary, San Francisco.
 Architect...None.
 Contractor...John Moroncelli, 11 Ben-
 nington, San Francisco.
 COST, \$400

FRAME STORE ROOM
 (2953) E CHENERY 35 N Roanoke.
 One-story frame store room.
 Owner.....Alex Lind, 457 Chenery,
 San Francisco.
 Architect...None.
 Contractor...O. Bergensen, 94 Arbor,
 San Francisco.
 COST, \$400

REPAIRS
 (2954) NO. 801 STOCKTON. Repair
 apartment house.
 Owner.....Skaller Levy Co., 119 Palm
 Ave., San Francisco.
 Architect...None.
 Contractor...U. S. Eligh, 47 Octovia,
 San Francisco.
 COST, \$400

ADDITION
 (2955) NO. 425 SANCHEZ. Add 25x75
 feet to shed.
 Owner.....New Method Laundry.
 Architect...None.
 Day's work. COST, \$1000

ALTERATIONS
 (2956) SE FIRST AND NATOMA.
 Erect partitions, stairs and toilet
 rooms.
 Owner.....United Drug Co., 615 Un-
 derwood Bldg., S. F.
 Architect...None.
 Contractor...Oliver Duval & Son, Dalziel
 Bldg., Oakland.
 COST, \$1000

BRICK WAREHOUSE
 (2957) N KING 425-4% E Third.
 Three-story and basement brick
 warehouse.
 Owner.....Pacific Lead & Oil Works,
 155 Townsend, S. F.
 Architect...P. J. Angries.
 Contractor...P. J. Lynch, 110 Jessie,
 San Francisco.
 COST, \$26,000

FRAME SHED
 (2958) N JEFFERSON, bet. Mason &
 Taylor. One-story frame shed.
 Owner.....S. F. Lumber Co., 2701 Ma-
 son, San Francisco.
 Architect...None.
 Day's work. COST, \$800

ADDITION
 (2959) W GRANT AVE 100 S Bay. Add
 one-story for warehouse.
 Owner.....G. B. Torre & Sons, Prem.
 Architect...None.
 Day's work. COST, \$750

ALTERATIONS
 (2960) SE O'FARRELL & STOCKTON
 (4th floor). Alter for store.
 Owner.....Walter & Nicholls, Prem.
 Architect...Bernard J. Joseph, 447
 Montgomery, S. F.
 Day's work. COST, \$400

REPAIRS
 (2961) NO. 809 VERMONT. Repair
 fire damage.
 Owner.....Frank Jovinck, Premises.
 Architect...None.
 Contractor...Chas. Coburn, 4030 24th,
 San Francisco.
 COST, \$450

REPAIRS
 (2962) NOS. 842-45 KEARNY. Repair
 fire damage.
 Owner.....Mrs. Minnie Shotwell, Care
 E. T. Osborn, 519 California
 San Francisco.
 Architect...None.
 Contractor...Chas. J. Kern Co., 3885 18th
 San Francisco.
 COST, \$400

ALTERATIONS
 (2963) NO. 3745 TWENTY-FIRST.
 Alter stairs, etc.
 Owner.....M. F. Schaltenbrandt, 4051
 20th, San Francisco.
 Architect...None.
 Day's work. COST, \$400

REPAIRS
 (2964) NO. 755 WEBSTER. Repair
 fire damage.
 Owner.....Alvert Ritter, Premises.
 Architect...None.
 Contractor...Chas. Coburn, 7030 24th,
 S. F.
 COST, \$450

ALTERATIONS
 (2965) SW POWELL & BROADWAY.
 Alter interior of store.
 Owner.....G. E. Bates, 333 Kearny,
 San Francisco.
 Architect...None.
 Contractor...W. S. King.
 COST, \$400

ALTERATIONS
 (2966) NO. 120 GUERRERO. Alter for
 garage.
 Owner.....Mr. McDermott, Premises.
 Architect...None.
 Contractor...Johnston Co., 1766 12th
 Ave., San Francisco
 COST, \$400

BRICK FOUNDATION, ETC.
 (2967) SW JACKSON & WEBSTER.
 Brick foundation and concrete floor.
 Owner.....A. K. Ticheno, Wells Fargo
 Bldg., San Francisco.
 Architect...None.
 Contractor...J. Collins, 581 Waller, S. F.
 COST, \$400

ALTERATIONS
 (2968) NO. 2445 PACIFIC AVE. Alter
 garage
 Owner.....Captain Gray, 2447 Pacific
 Ave., San Francisco.
 Architect...None.
 Day's work. COST, \$400

FRAME DWELLING
 (2969) E THIRD AVE 130 S Balboa.
 One-story and basement frame dwlg.
 Owner.....C. A. Horne, 728 35th Ave.
 San Francisco.
 Architect...Willis Polk & Co., Hobart
 Bldg., San Francisco.
 Day's work. COST, \$2500

ADDITION
 (2970) W GRANT AVE 89-6 N Wash-
 ington. Add one-story brick to
 present building.
 Owner.....Suey Wing Co.
 Architect...None.
 Contractor...F. H. Howard, Geary and
 Buchanan, S. F.
 COST, \$10,000

FRAME DWELLING
 (2971) SE BAY SHORE (Crocker Tct)
 One-story and basement frame dwlg.
 Owner.....B. Pedette, 222 Raymond
 Ave., San Francisco.
 Architect...None.
 Contractor...T. H. Parry, 222 Raymond
 Ave., San Francisco.
 COST, \$2500

FRAME STORE AND FLATS
 (2972) SE LINCOLN WAY 107-6 W
 47th Ave. Two-story frame store
 and (2) flats.
 Owner.....R. M. Bacon, 133 Halleck,
 San Francisco.
 Architect...None.
 Contractor...J. D. Wieslander, 4102 Gil-
 bert, Oakland.
 COST, \$3000

ALTERATIONS
 (2973) N JACKSON 65 E Scott. Ex-
 tend dwelling, veneer exterior with
 brick, remove present roof and attic
 and replace with new attic and roof;
 alter rooms and stairs of interior.
 Owner.....Mrs. Camillo Martin.
 Architect...E. E. Young, 251 Kearny,
 San Francisco.
 Contractor...M. A. Little, 1347 4th Ave.,
 S. F.
 COST, \$10,000

FRAME DWELLING
 (2974) N GEARY 326 E 6th Ave.
 One-story and basement frame dwlg.
 Owner.....A. W. Neilsen, 10 12th Ave.,
 San Francisco.
 Architect...E. J. Spence, 537 25th Ave.
 (non-certificated).
 Contractor...Spence & Walshall, 537
 25th Ave., San Francisco.
 COST, \$2350

FRAME FLATS
 (2975) N GROVE 82-6 E Octavia. All
 work for two-story and basement
 frame flats.
 Owner.....Wm. M. Meyer and Mary
 E. Carroll, 2312 Folsom,
 San Francisco.
 Architect...J. E. McCarthy.
 Contractor...Geo. D. Gilmour, 2376
 Howard, San Francisco.
 Filed Oct. 15, '15. Dated Oct. 14, '15.
 Frame up\$1220

Brown coated 1220
Completed and accepted 1220
Usual 35 days 1223
TOTAL COST, \$4883
nd, none. Limit, 50 days. Forfeit,
ne. Plans and specifications filed.

COMPLETION NOTICES

San Francisco

CORDED ACCEPTED
9, 1915—E SIXTEENTH AVE
23-6 S California S 30xE 120.
Hilton Meyer to Jas H Pinkerton,
Oct. 8; Gaspard, McKay Co.....
9, 1915—CALIFORNIA 137-6 E
ones — 137-6XS 137-6. Towne
ealty Co to Fibrestone & Roofing
o
9, 1915—S CLINTON PARK 260
Y Guerrero W 22-6XS 75-6. Jno L
and M Corbett to Edw F Helms...
.....Oct. 4, 1915
9, 1915—E SANSOME; No. 154
ansome. Eyre Invst Co to Frank M
arden & Co.....Oct. 6, 1915
11, 1915—W TWENTIETH AVE
31 N California 25x120. Adolph
and Anne Hergott to whom it may
concern.....Oct. 11, 1915
11, 1915—W ELEVENTH 100 N
arrison 20x34-3 (irregular).
Dureka Iron & Wire Works to Pet-
erson & Person.....Oct. 9, 1915
11, 1915—NO. 154 SANSOME.
Springfield F and M Insurance Co
r Springfield Fire & Marine Ins.
o to T H Meek Co.....Oct. 7, 1915
11, 1915—LOT 24 BLK 1159 S
Golden Gate Ave 137-6 E Central
Eve 27-6XS 137-6. Frank P
adams to whom it may concern...
.....Oct. 11, 1915
13, 1915—SE WASHINGTON &
evisadero S 27-8xE 110. M J
Kelley to whom it may concern...
.....Oct. 13, 1915
13, 1915—S LOMBARD 183-6 W
earny W 22xS 107-6. Enes Fran-
eschl to J Del Favero & A Pordon
.....Oct. 8, 1915
13, 1915—W NINTH AVE 100 S
Gorlegia 25x120. James Bursott to
Antone Petersen.....Oct. 5, 1915
13, 1915—E TWENTY-EIGHTH
ave 175 N Geary N 25x120. G E
Truden and E and Laura Dahl to
E Cruden and E Dahl.....Oct. 11, 1915
14, 1915—N LAWTON near 9th
ave P Algot Nelson to whom it
may concern.....Oct. 11, 1915
14, 1915—E TENTH AVE 225 N
Cabrillo N 25xE 120. A E Wilkens
o A Dahlberg.....Oct. 13, 1915
14, 1915—E EIGHTEENTH AVE
25 S Geary S 25xE 120. John Gray
o Theo Hamill.....Oct. 13, 1915
14, 1915—W EIGHTEENTH AVE
25 N Judah 100x120; No. 1375 11th
ave D W Sawyer to A Weber and
F Shaw.....Oct. 11, 1915
14, 1915—W ELEVENTH AVE
20 S Balboa 25x95. C A Hall to
whom it may concern.....Oct. 12, 1915
14, 1915—LOT 3 BLK 18 C. S.
Allred Sub Blks 17 and 18 West
2nd Map No 1. Clifford S Allred to
whom it may concern.....Oct. 14, 1915
14, 1915—W EIGHTEENTH AVE
75 S Anza S 25xW 120. Wm P
Nolan to whom it may concern....

Oct. 14, 1915
Oct. 15, 1915—W TWENTY-FOURTH
Ave 100 N Kirkham N 25xW 120;
W 24th Ave 125 N Kirkham N 25x
W 120; W 24th Ave 150 N Kirkham
N 25xW 120. Alfred C and Eliza-
beth A Trittenbach to L Bern-
stein, Oct. 12; J Prout.....Oct. 12, 1915
Oct. 15, 1915—E KEARNY 34 S Green
S 22-9XE 60. P Gazzanico and C De
Leone to F C Amoroso.....Oct. 14, 1915
Oct. 15, 1915—S TWENTY-THIRD
155 E Valencia E 30xS 80. Mar-
garet Wallace to O K Holt.....
.....Oct. 15, 1915
Oct. 15, 1915—NE EGBERT AVE 250
SE Hawes SE 50xNE 100; Blk 514
Bay View Hd. Raymond and
Honorie Bauchou to Michele Os-
toreroOct. 15, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

Oct. 8, 1915—W TENTH AVE 100 S
Balboa S 25xW 120. Pacific Wood-
working Co vs Alice C Bollier,
Robert McLelland and Messrs Mc-
Lelland & McLelland.....\$52.60
Oct. 9, 1915—NE CHURCH & ARMY
N 51-6xE 96. N Mamo vs John G
and Elizabeth Trapp.....\$103
Oct. 11, 1915—S TURK 57-6 E Polk
E 30xS 85. L A Hufschmidt Mfg Co
vs J M Boscus and Jesse D Hanna
.....\$62.35
Oct. 11, 1915—NE ARMY & CHURCH
N 51-6XE 96. J Bardl, \$93.80; Harry
Barman, \$167 vs John G and Eliza-
beth Trapp and John Cerdia.....
Oct. 13, 1915—NE EXCELSIOR AVE
50 SE Madrid SE 25xNE 100. C Mc-
Call, \$13; J H Kruse, \$134.10 vs C A
Ware and H T Butler.....\$53.35
Oct. 13, 1915—NE CHURCH & ARMY
N 51xE 96. A Sockelof vs John G
and Elizabeth Trapp & John Cerdia
.....\$43.80
Oct. 13, 1915—W WISCONSIN 25 S
20 S 25xW 100. Robert Selman
vs Katherine McDonald.....\$138.50
Oct. 13, 1915—W FORTY-FOURTH
Ave 230 S Anza S 42-6 W 170 NE
42-6 E 161.26. Macdonald Lumber
Co vs Mrs M A Webster and The
Pacific Plastering Co.....\$47.17
Oct. 13, 1915—NE EXCELSIOR AVE
50 SE Madrid SE 25xNE 100. P A
Smith Co vs H T Butler, J H Hardy
and Camilla A Ware.....\$53.35
Oct. 14, 1915—NE CHURCH & ARMY
N 51-6xE 96. F W Thurston vs
John G and Elizabeth Trapp and
Jno Cerdia\$68.90
Oct. 14, 1915—S NEY 150 E Congdon
E 25xS 110. E G Lawrence vs Alice
and Gus Jelm and J J Short....\$55.35

RELEASE OF LIENS

Oct. 8, 1915—E THIRTY-FIRST AVE
127 N Clement E 170xN 23. New
Era Marble & Concrete Co to Mrs
J Wilcox, Mrs E M Adair and T Roy
Murray
Oct. 8, 1915—E THIRTY-FIRST AVE
100 N Clement N 25 E 167-7 S
25-1 1/4 W 170-5. M Stulsalt Co to
Mrs E M Adair, Julia Wilcox and
Claude D Wilcox, T Roy Murray
and Phillip Wesendunk
Oct. 14, 1915—S FELL 100 E Steiner

E 47-6XS 137-6. Vulcan Iron Wks
to Isabelle J Murray.....
Oct. 14, 1915—N TWENTY-FIRST 35
E Treat Ave E 25xN 100. Redwood
Manufacturers Co to Chas J Grisez,
H R Pickens and San Francisco
Land & Title Co.....

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Amt.
2114	Thomas	Anderson	400
2115	Calvert	Calvert	2500
2116	Fake	Fake	400
2117	Soule	Soule	66000
2118	Ferguson	Veirs	1000
2122	Maher	MacGregor	3210
2123	Faletti	Almquist	400
2124	Mead	Blabon	7000
2125	Kelso	Bruecker	1000
2126	Veirs	Veirs	400
2127	Giovanni	Pogliani	400
2128	Western Union	Allen	450
2129	Mullane	Larmer	1000
2130	Jacobs	Monroe	700
2131	Horn	Kelman	2000
2132	Bloom	Cords	2975
2133	Hill	Hart	2500
2134	Higgins	Higgins	2500
2135	McClure	Schnebl	400
2136	Sinclair	Sinclair	400
2137	Lewis	Lewis	400
2138	Waite	Harris	400
2139	Deluechl	Valente	1525
2140	Price	Price	2500
2141	Nelson	Nelson	1700
2142	Marquis	Marquis	2000
2144	Burger	Burger	2000
2146	Sinclair	Reddick	55
2147	Peppin	Peppin	1800
2148	Anderson	Anderson	1850
2149	Raleigh	Higgins	1900
2150	Cooney	Hammarberg	1600
2151	Kurtz	Kurtz	2500
2152	Barnet	Griffin	6200
2153	Anderson	Anderson	2500
2154	Long	Prang	4500
2155	Gaylord	MacGregor	4550
2157	Smith	Wisled	1750
2158	Boyd	Carlos	2400
2159	Bennett	Quigley	4500
2160	Sall	Johnson	2200
2161	Knight	Knight	2500
2162	Larsen	Larsen	2000
2163	White	Borle	600
2164	Jurgens	Pac T & T	1800
2165	Moffitt	Marble	45750
2169	Same	Clinton	45750
2170	Same	Doell	4450
2171	Same	Stable	2063
2172	Same	Peterson	1700

ADDITION

(2114) NO. 2029 SEVENTH AVE., Oak-
land. Addition.
Owner.....F. Thomas, Premises.
Architect.....None.
Contractor.....John Anderson, 1424
Broadway, Oakland.
COST, \$400

DWELLING

(2115) E VIEW 275 N Mather, Oak-
land. One-story 5-room dwelling.
Owner.....A. L. Calvert, 1748 Broad-
way, Oakland.
Architect.....None.
Day's work. COST, \$2500

SHED

(2116) S FIRST, bet. Broadway and
Franklin, Oakland. Shed.
Owner.....Wm. Fake.
Architect.....None.
Day's work. COST, \$400

DWELLING

(2118) E NINETY-SIXTH AVE 30 S
Sherdy, Oakland. One-story 4-room
dwelling.
Owner.....Geo. Ferguson, 1928 96th
Ave., Oakland.
Architect.....None.

Contractor...E. E. Wells

COST, \$1000

DWELLING

(2122) SW HOLLYWOOD AND 13TH Ave., Oakland. Two-story 7-room dwelling.

Owner.....A. W. and A. H. Maher, 470 13th, Oakland.

Architect...None.

Contractor...C. M. MacGregor, 470 13th, Oakland.

COST, \$3210

ADDITION

(2123) NO. 533 FORTY-SIXTH, Oakland. Addition.

Owner.....Jack Faletti, Premises.

Architect...None.

Contractor...Almquist & Barbagelata, 464 43rd, Oakland.

COST, \$400

DWELLING

(2124) N CHABOT ROAD 370 W Elsie, Oakland. Two-story 10-room dwlg.

Owner.....Elwood Mead, 2424 Virginia, Oakland.

Architect...None.

Contractor...C. N. Blabon, 3424 Chauncy, Oakland.

COST, \$7000

ALTERATIONS

(2125) NE SEVENTH AND WILLOW, Oakland. Alterations.

Owner.....Keiso & Becker, Oakland.

Architect...None.

Contractor...J. Henry Bruecker, 1326 E-12th, Oakland.

COST, \$1000

ALTERATIONS

(2126) NO. 334 SIXTY-THIRD, Oakland. Alterations.

Owner.....F. E. Veris, Premises.

Architect...None.

Contractor...W. Bushlin, 593 62nd, Okd.

COST, \$400

DWELLING

(2127) S SIXTY-FIFTH 100 W San Pablo, Oakland. One-story three-room dwelling.

Owner.....C. Giovanni, Premises.

Architect...None.

Contractor...J. Pogliano, 1192 Auson Ave., Oakland.

COST, \$400

WAREHOUSE

(2128) FOOT SIXTH AVE., Oakland. One-story warehouse.

Owner.....Western Union Telegraph Company.

Architect...None.

Contractor...M. Allen, 829 52nd, Oakland.

COST, \$450

STORE

(2129) S FOOTHILL BLVD. 128 W 73d Ave., Oakland. One-story store.

Owner.....T. Mullane, Oakland.

Architect...None.

Contractor...Edw. Larmer, 470 Boulevard Way, Oakland.

COST, \$1000

ALTERATIONS

(2130) NO. 1304 E-FOURTEENTH, Oakland. Alterations.

Owner.....Barney Jacobs, 1101 Broadway, Oakland.

Architect...None.

Contractor...J. W. Monroe, 650 61st, Oakland.

COST, \$700

DWELLING

(2131) W THIRTY-EIGHTH AVE 290 N San Juan, Oakland. One and one-half-story 7-room dwelling.

Owner.....C. H. Horn, 3510 E-14th, Oakland.

Architect...None.

Contractor...Wm. Kleeman.

COST, \$2000

FRAME DWELLING

(2132) PTN LOT 52 MAP Bowie Ppty, Piedmont. All work for two-story frame dwelling.

Owner.....Abraham Bloom, S. F.

Architect...None.

Contractor...Alfred Cords, 1st Nat'l Bank Bldg., Oakland.

Filed Oct. 11, '15. Dated Oct. 5, '15.

Frame up\$625

Brown coated625

Completed625

Usual 35 days...Deed Trust for \$1575

TOTAL COST, \$2975

Bond, none. Limit, 60 days. Forfeit, none. Plans and specifications filed.

BRICK GARAGE

(2133) FORTY-FIFTH AVE AND E-14th, Oakland. One-story brick garage.

Owner.....George Hill, 1629 45th Ave., Oakland.

Architect...None.

Contractor...N. H. Hart, 1724 24th Ave., Oakland.

COST, 2500

DWELLING

(2134) W THOMAS 440 N Napa, Oakland. One-story 6-room dwelling.

Owner.....E. L. Higgins, 5250 Miles Ave., Oakland.

Architect...None.

Day's work.

COST, \$2500

ALTERATIONS

(2135) NO. 625 TWENTY-NINTH, Oakland. Alterations.

Owner.....David McClure, University Club, San Francisco.

Architect...None.

Contractor...Schnebly, Hostrawser & Pedgrift, 6th and Jackson, Oakland.

COST, \$400

ALTERATIONS

(2136) NO. 612 THIRTY-FIRST, Oakland. Alterations.

Owner.....Arrabel Sinclair, Premises.

Architect...None.

Day's work.

COST, \$400

DWELLING

(2137) NO. 928 FIFTY-SIXTH, Oakland One-story 4-room dwelling.

Owner.....M. H. Lewis, 557 45th, Okd.

Architect...None.

Day's work.

COST, \$400

ALTERATIONS

(2138) NO. 515 THIRTY-THIRD, Oakland. Alterations.

Owner.....Mary A. Waite, Walnut Creek.

Architect...None.

Contractor...D. F. Harris, 1303 Carri-son, Berkeley.

COST, \$400

DWELLING

(2139) N FIFTY-NINTH 50 W Fre-

mont, Oakland. One-story 4-room dwelling.

Owner.....L. Delucchi, 5382 Vallejo, Oakland.

Architect...None.

Contractor...M. E. Valente, 5382 Vallejo, Oakland.

COST, \$1525

DWELLING

(2140) N INYO 200 N Marin Ave., Albany. One-story 5-room dwelling.

Owner.....Price Bros, 5723 Oak Grove Ave., Albany.

Architect...None.

Day's work.

COST, \$2500

DWELLING

(2141) N SONOMA 50 E Ordway, Albany. One-story 5-room dwelling.

Owner.....Nelson Security & Investment Company.

Architect...None.

Contractor...Patrick Bros.

COST, \$2700

DWELLING

(2142) W FORTY-FIRST AVE 200 N Carrington, Oakland. One-story 4-room dwelling.

Owner.....E. M. Marquis, 2827 Russell, Oakland.

Architect...None.

Day's work.

COST, 1500

DWELLING

(2144) N WALNUT 50 E Renwick, Oakland. One-story 5-room dwlg.

Owner.....Frank W. Burger, 853 52d, Oakland.

Architect...None.

Day's work.

COST, \$2000

RAISE BUILDING

(2146) REAR LOT 612, Thirty-first St. Oakland. All work for raising building.

Owner.....Mabel Sinclair.

Architect...None.

Contractor...J. W. Reddick, 2505 Market, San Francisco.

Filed Oct. 13, '15. Dated Oct. 4, '15'

Payments not given.....

TOTAL COST, \$5

Bond, limit, forfeit, plans and specifications, none.

DWELLING

(2147) S LAVERNE 105 E 55th Ave. Oakland. One-story 5-room dwlg.

Owner.....J. B. Peppin, San Leandro.

Architect...None.

Day's work.

COST, \$1800

DWELLING

(2148) N BROOKDALE 125 W Fruitvale Ave., Oakland. One-story 5-room dwelling.

Owner.....J. W. Anderson, Arbor Av.

Architect...None.

Day's work.

COST, \$1800

DWELLING

(2149) W CONGRESS AVE 200 Ygnacio, Oakland. One and one-half-story five-room dwelling.

Owner.....F. I. Raleigh, 90th Ave. Olive, Oakland.

Architect...None.

Contractor...W. H. Higgins, 2477 94 Ave., Oakland.

COST, \$19

DWELLING
(2150) S FORTY-SECOND 114 E Lusk, Oakland. One-story five-room dwlg. Owner.....Catherine T. Cooney, 4208 Lusk, Oakland.
Architect...None.
Contractor...A. Hammarberg, 3758 Piedmont Ave., Oakland.
COST, \$1600

DWELLING
(2151) W VISTA AVE 65 N Wellington, Oakland. One-story 5-room dwlg. Owner.....F. A. Kurtz, Hotel Oaks, Oakland.
Architect...None.
Day's work. COST, \$2500

APARTMENTS
(2152) E CHESTNUT 300N 16th, Oakland. Two-story 11-room apartments. Owner.....M. Barnett, 1632 Chestnut, Oakland.
Architect...None.
Contractor...C. M. Griffin, 746 5th Ave., Oakland.
COST, \$6200

DWELLING
(2153) E BRYANT AVE 700 S Ada, Oakland. One-story 5-room dwlg. Owner.....A. P. Anderson, 622 47th, Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING
(2154) N PERRY 100 E Jean, Oakland. Two-story 7-room dwelling. Owner.....Mrs. A. V. Long, 1027 Adeline, Oakland.
Architect...None.
Contractor...C. J. Pfrang, 5457 Claremont Ave., Oakland.
COST, \$1500

FRAME DWELLING, ETC.
(2155) LOT 12 BLK "A" Map Piedmont Knoll, Oakland. All work for two-story frame dwelling and garage. Owner.....G. E. and Eva L. Gaylord, 1225 Poplar, Oakland.
Architect...None.
Contractor...C. M. MacGregor, 470 13th, Oakland.
Filed Oct. 14, '15. Dated Oct. 13, '15.
Frame up\$1145.25
Brown coated 1145.25
Completed and accepted..... 1145.25
Usual 35 days..... 1145.00
TOTAL COST, \$4580.75
Bond, \$2291. Sureties, J. F. Smith and A. Scott. Limit, 90 days. Forfeit, 100. Plans and specifications filed.

DWELLING
(2157) LOT 7 BLK 9, Melrose Heights, Oakland. All work for one-story dwelling. Owner.....Herbert S. Smith, 1540 Broadway, Oakland.
Architect...None.
Contractor...Gordon J. Wiser, Oakland.
Filed Oct. 13, '15. Dated Oct. 7, '15.
Frame up 1/4
Plastered 1/4
Completed and accepted..... 1/4
Usual 35 days..... 1/4
TOTAL COST, \$1750
Bond, \$900. Sureties, Chas. S. Schuyler and J. E. Settles. Limit, forfeit, none. Plans and specifications filed.

DWELLING
(2158) N HUDSON 200 E Claremont Ave., Oakland. One-story five-room dwelling. Owner.....Boyd, Carlos & Co.
Architect...None.
Day's work. COST, \$2400

DWELLING
(2159) SE LAKESHORE & SANTA Ray Ave., Oakland. Two-story 7-room dwelling. Owner.....C. D. Bennett, 125 Moss Ave., Oakland.
Architect...None.
Contractor...Chas. E. Quigley, 771 Rand Ave., Oakland.
COST, \$1500

DWELLING
(2160) W CORONADA AVE 200 N 51st, Oakland. One-story 6-room dwlg. Owner.....Clara Maria Sall, 1647 Woolsey, Berkeley.
Architect...None.
Contractor...Carl Oscar Johnson, 5466 Manila Ave., Oakland.
COST, \$2200

DWELLING
(2161) E HAVENSCOURT BLVD 250 S Flora, Oakland. One-story five-room dwelling. Owner.....Harry C. Knight, 1725 Broadway, Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING
(2162) W THIRTIETH AVE 100 N E-12th, Oakland. One-story 5-room dwelling. Owner.....R. K. Larsen, 1205 30th Ave., Oakland.
Architect...None.
Day's work. COST, \$2000

DWELLING
(2163) NO. 1109 LINDEN, Oakland. One-story 3-room dwelling. Owner.....Mrs. H. White, Premises.
Architect...None.
Contractor...C. A. Borle, 2117 Buena Vista Ave., Alameda.
COST, \$600

ALTERATIONS
(2164) NO. 1220 BROADWAY, Oakland. Alterations (tile floor, telephone booths, etc.) Owner.....Chas. Jurgens Co., 373 13th Oakland.
Architect...None.
Contractor...Pacific Telephone & Telegraph Co., 1673 Mission, San Francisco.
COST, \$1800

CLASS "A" THEATRE
(2168) S ELEVENTH 123 E Broadway E 175xS 100, Oakland. Marble work for Class "A" theatre. Owner.....James Moffitt Estate Co., 1st National Bank, S. F.
Architect...Cunningham & Polito, 1st National Bank Bldg., S. F.
Contractor...Vermont Marble Co., 244 Brannan, San Francisco.
Filed Oct. 15, '15. Dated Sept. 22, '15.
On 1st and 15th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$2000
Bond, none. Limit, 40 days. Forfeit, \$100. Plans and specifications filed.

(2169) EXCAVATING, CONCRETE work, reinforcement, prism, tile, dampproofing, granite, side walk doors and setting terra cotta on above. Contractor...Clinton Constr. Co., Mutual Bank Bldg., S. F.
Filed Oct. 15, '15. Dated Sept. 23, '15.
Payments same as above.....
TOTAL COST, \$15,750
Bond, \$22,875. Sureties, L. A. Norris and W. B. Brinker. Limit, 5 1/2 months. Forfeit, \$100. Plans and specifications filed.

(2170) PLUMBING, SEWER, SWEET ejector and vacuum cleaning pipes on above. Contractor...Carl T. Doell, 167 21st, Oakland.
Filed Oct. 15, '15. Dated Sept. 23, '15.
Payments same as above.....
TOTAL COST, \$1450
Bond, \$2225. Surety, Fidelity & Deposit Co. Limit, 45 days. Forfeit, \$100. Plans and specifications filed.

(2171) ORNAMENTAL IRON, STAIR, ladders and brass rails on above. Contractor...Stobbe & Romak, 374 4th, Oakland.
Filed Oct. 15, '15. Dated Sept. 29, '15.
Payments same as above.....
TOTAL COST, \$2065
Bond, \$1034. Surety, Massachusetts Bonding & Insurance Co. Limit, 40 days. Forfeit, \$100. Plans and specifications filed.

(2172) EXTERIOR AND INTERIOR painting on above. Contractor...Martin Peterson, Oakland.
Filed Oct. 15, '15. Dated Sept. 29, '15.
Payments same as above.....
TOTAL COST, \$1700
Bond, \$850. Surety, Massachusetts Bonding & Insurance Co. Limit, 40 days. Forfeit, \$100. Plans and specifications filed.

Building Contracts Awarded Berkeley.

2119	Poppy Film	Owner	400
2120	Scherill	Riddell	5250
2121	McCoy	McCoy	3000
2142	Madden	Tupper	1500
2145	Atkins	Henderson	10000
2156	Atkins	Henderson	11500
2165	Lind	Ala Co Bldrs	1200
2166	Denman	Engler	500
2167	Johnson	Johnson	1800

(Correction in Location)
(2095) S SHASTA 650 E Tamalpais, Berkeley. Alter rock crusher into 4-story dwelling. Owner.....J. M. Mackie, 1358 Seenic, Berkeley.
Architect...J. Holberg Reimers, 2125 Shattuck Ave., Berkeley.
Day's work. COST, \$4000

(Correction in Owner's Name)
WAREHOUSE
(2117) SW TWENTY-SECOND & SAN Pablo Ave., Oakland. Seven-story reinforced concrete warehouse. Owner.....Martin Bekins, 1150 Broadway, Oakland.
Architect...Edw. Soule & Co., Rialto Bldg., San Francisco.
Day's work. COST, \$66,000

(2119) W SAN PABLO AVE 30 S Jones
Berkeley. Shed.
SHED
Owner.....Poppy Film Co., 1500 San
Pablo Ave., Berkeley.
Architect...None.
Day's work. COST, \$400

DWELLING
(2120) W TAMALPAIS 400 N Shasta,
Berkeley. Two-story 5-room dwlg.
Owner.....Rudolph Seherill.
Architect...David Harris, Los Angeles
Contractor...Riddell Bldg. Service Cor-
poration, 2247 Telegraph
Ave., Berkeley.
COST, \$5250

DWELLING
(2143) W HILLEGASS 150 N Stuart,
Berkeley. One-story 4-room dwlg.
Owner.....Mrs. Margaret Evelyn Mad-
don, 2720 Hillegass, Bkly.
Architect...None.
Contractor...Thad M. Tupper, 2310 Rus-
sell, Berkeley.
COST, \$1500

DWELLING
(2145) E ALVARADO, head Vicente
Road, Berkeley. Two-story 10-room
dwelling.
Owner.....G. H. Atkins, Insurance
Exchange Bldg., S. F.
Architect...Vickery, Atkins & Torrey,
Sutter near Powell, S. F.
Contractor...W. D. Henderson, Monad-
nock Bldg., S. F.
COST, \$10,000

FRAME DWELLING

(2156) ALVARADO ROAD, being Lots
6, 7 and 8 Blk 5 Map Hotel Clare-
mont Tract, Berkeley. All work for
two-story, basement and attic frame
dwelling.
Owner.....G. Herbert Atkins, 311 Cali-
fornia, San Francisco.
Architect...Vickery, Atkins & Torrey,
Sutter near Powell, S. F.
Contractor...W. D. Henderson, Monad-
nock Bldg., San Francisco.
Filed Oct. 14, '15. Dated Oct. 9, '15.
Foundation completed\$ 750
Frame up1500
Ready for plaster1500
Plastered1500
Mill work installed1500
Completed and accepted1875
Usual 35 days2875
TOTAL COST, \$11,550
Bond, \$5750. Surety, Maryland Casu-
alty Co. Limit, 156 days after Oct. 8.
Filed, none. Plans and specifications
filed.

DWELLING
(2165) E HOLLY 116.32 N Cedar, Ber-
keley. One-story 4-room dwelling.
Owner.....Ray O. Lind, 2608 Derby,
Berkeley.
Architect...None.
Contractor...Alameda County Home
Bldrs., 1st National Bank
Bldg., Berkeley
COST, \$1300

ADDITION
(2166) NO. 2818 RUSSELL, Berkeley.
Addition.
Owner.....Dr. Denman, Berkeley.
Architect...None.

Contractor...Louis Engler, 2721 Haste,
Berkeley.

COST, \$500

DWELLING

(2167) N ALCATRAZ AVE 100 W Sacra-
mento, Berkeley. One-story five-
room dwelling.
Owner.....W. and O. Johnson, 3225
Adeline, Berkeley.
Architect...None.
Day's work. COST, \$1800

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED

AMOUNT

Oct. 9, 1915—NW HAAS AVE 358.15
NE E-14th 155x260, San Leandro.
Leo J Saxton to F L Burnett.....
.....Oct. 9, 1915
Oct. 11, 1915—LOT —, Pleasant Valley
Court, Okd. H B Parratt to Harry
C Knight.....Oct. 5, 1915
Oct. 11, 1915—NO. 132 DRACENA AVE
Piedmont. C W Dickey, Agent for
C H Dickey to Sampson & Doane.....
.....Oct. 2, 1915
Oct. 11, 1915—LOT — BLK "E"
Amended Map Moss Tract, Okd.
Manuel Silveira Duarte to B F
Kopf.....Oct. 4, 1915
Oct. 13, 1915—E FIFTY-FIRST AVE
235 N Boulevard Ave 50x115 (ir-
regular), Okd. Henry Coxon to
George Alliers.....Sept. 28, 1915
Oct. 13, 1915—LOT 29 BLK 2 Map
Thousand Oaks Station Tract, Oak-
land Tp. Henry J Lederer to Harry
C Smith.....Oct. 7, 1915
Oct. 13, 1915—NO. 416 RUTH AVE;
488 NW 35th Ave being Lot 32 Blk
"B," Central Terrace, Okd. Mrs B
C Swaggert by Bert Swaggert to
White.....Oct. 9, 1915
Oct. 14, 1915—W TELEGRAPH AVE
125 S Ashby Ave 50x135, Bkly. J H
Wright to J Henry Boehrer and
Alfred Legault.....Oct. 13, 1915
Oct. 15, 1915—W ELLSWORTH 100 N
Bancroft Way N 50xW 136.21, Bkly
Charlotte Herbert to Dolder &
Derrickson.....Completed —
Oct. 15, 1915—E ½ LOT 1 BLK 18
Map Blvd Park, Okd. Amanda C
Friberg to Charles J Friberg.....
.....Oct. 12, 1915
Oct. 15, 1915—LOT 37 BLK "B" Map
4th Ave Park, Okd. Anna V Rob-
bins to whom it may concern.....
.....Oct. 15, 1915
Oct. 15, 1915—LOT 1 BLK "B" Map
4th Ave Park, Okd. Paul E Wood-
burn to whom it may concern.....
.....Oct. 15, 1915
Oct. 15, 1915—LOT 9 BLK 6 Brook-
dale Terrace, Okd. A H Trathen
and Robert Davies to O G Smith.....
.....Oct. 15, 1915
Oct. 15, 1915—S E-TWENTYFIFTH 105
W 24th Ave S 100xW 35, Okd. Mrs
Clara M Sadler to A Ahlback.....
.....Oct. 7, 1915

LIENS FILED

ALAMEDA COUNTY.

Oct. 9, 1915—NW 333 LOT 4 Map Re-
vised Map J Levi, Sr Tct, Oakland.
California Paint Co vs A L Young

and J C O'Connor.....\$98.1
Oct. 9, 1915—LOT 17 Map Kelton Ter-
race, Okd. California Paint Co vs
A L Young and J C O'Connor.....\$49.4
Oct. 13, 1915—NE 38.34 and NE 107.73
Lot 14 Map Ardsley Heights, being
Reshdvn Ptn Blk G & H Bella Vista
Park, Okd. Bruce Lumber & Mill
co vs W R Oakley and C J Plunkett
.....\$113
Oct. 13, 1915—LOTS 14 AND 15 Map
Ardsley Heights, Okd. Robert
Howden vs W R Oakley, W R and
Civilla J Plunkett.....\$5
Oct. 13, 1915—LOTS 14 AND 15 Map
Ardsley Heights, Oakland. H L
Manning vs W R Oakley, W R and
Civilla J Plunkett and D Buckley
.....\$123.5

BUILDING CONTRACTS.

SANTA CLARA COUNTY.

ADDITION

JULIAN AND GUADALUPE STS., San
Jose. Addition and alterations.
Owner.....Anderson & Barngrove
Co., Premises.
Architect...None.
Day's work. COST, \$400

COTTAGE

W FOURTEENTH ST., bet. San Sal-
vador and Williams Sts., San Jose
Seven-room cottage.
Owner.....W. M. Lewis, 211 S-15th
St., San Jose.
Architect...None.
Day's work. COST, \$300

COTTAGE

COE AVE., bet Bird and Delmas, San
Jose. Five-room cottage.
Owner.....Joseph Kenyon.
Architect...None.
Contractor...R. C. Herschbach, Pal-
Haven, San Jose.
COST, \$135

ALTERATIONS

NO. 44 S-NINTH ST., San Jose. Altera-
tions.
Owner.....Mrs. E. Donovan, Premise
Architect...None.
Contractor...W. R. Latta, 432 N-11th
St., San Jose.
COST, \$130

REPAIRS

KEYS, bet. 11th and 12th Sts., San Jose.
Repairs.
Owner.....Frank Pedro, Premises.
Architect...None.
Contractor...A. Texaro, 9th and Marth
Sts., San Jose.
COST, \$45

ADDITION

GREGORY AND SAN SALVADOR STS.
San Jose. Addition.
Owner.....Frank Coule, Premises.
Architect...None.
Day's work. COST, \$40

ALTERATIONS

SE THIRD AND WILLIAM STS., Sa
Jose. Alterations.
Owner.....I. T. Bridges, Premises.
Architect...None.
Day's work. COST, \$40

REMODELING

SAN ANTONIO, bet. First and Mark
Sts., San Jose. Remodeling.

wner.....C. Kuhn, 214 Garden City
Bank Bldg., San Jose.
rchitect...T. Lenzen, 110 S-Second
St., San Jose.
ntractor...P. E. Peterson.
COST, \$5000

REPAIRS
FIRST AND ST. JAMES STS., San Jose.
Repairs, etc.
wner.....Osen & McFarland, Prem.
rchitect...None.
ntractor...R. O. Summers, 17 N-First
St., San Jose.
COST, \$1000

OTTAGE
N-SIXTH, bet. St. James and St.
John Sts., San Jose. Six-room cottage.
wner.....Dan O'Connell, 6th and St.
James Sts., San Jose.
rchitect...None.
ntractor...E. L. Wolf, 131 Coe Ave.,
San Jose.
COST, \$2500

OTTAGE
HOLLYWOOD, bet. Second and Third
Sts., San Jose. Six-room cottage.
wner.....J. A. Wagner, 320 S-16th
St., San Jose.
rchitect...None.
y's work.
COST, \$2000

COMPLETION NOTICES.

SANTA CLARA COUNTY.

RECORDED ACCEPTED
pt. 24, 1915—TENTH ST., bet Santa
Clara and St. John Sts., San Jose.
E H Baker to A A Church, Sept. 22, '15
pt. 25, 1915—NEAR COR SEVENTH
and Keyes Sts., San Jose. C M
Lorigan to whom it may concern...
Sept. 24, 1915
pt. 25, 1915—UNIVERSITY OF
Pacific Campus, San Jose. College
of the Pacific to Johnston Co....
Sept. 21, 1915
pt. 27, 1915—NEAR COR. RACE
and San Fernando Sts., San Jose.
W H Culligan to D A Chartier....
Sept. 18, 1915
pt. 28, 1915—NR COR. SIXTEENTH
and Empire, San Jose. Pearl Page
to L I Kelly.....Sept. 28, 1915

LIENS FILED.

SANTA CLARA COUNTY.

RECORDED AMOUNT
pt. 27, 1915—SW SANTA TERESA
and Julian, San Jose. Glenwood
Lumber Co vs Florence Clayton...
\$367.20

BUILDING CONTRACTS.

SAN MATEO COUNTY.

FRAME RESIDENCE
N LOT 15 BLK 8, Town of Burlingame.
All work for one-story frame
residence.
wner.....L. Lalanne, 3319 Sacramento
St., San Francisco.
rchitect...Fabre & Bearwald, Merchants' National Bank Bldg
San Francisco.
ntractor...Arthur Elvin, 3834 23d St.,
San Francisco.
ed Sept. 30, '15. Dated Sept. 25, '15.
Frame up.....\$194

Brown plastered 494
When accepted 494
Usual 35 days..... 493
TOTAL COST, \$1975
Bond, \$985. Sureties, Edward Bangle
and Frank Elvin. Limit, 90 days. Forfeited, \$5. Plans and specifications filed.

FRAME RESIDENCE

PTN LOTS 15 AND 16 BLK 8, Town of
Burlingame. Excavating, grading,
concrete, brick, carpenter and mill
work, tin and galvanized iron work,
stairs, roofing, glazing, rough hardware,
lathing and plastering, tiling,
etc., for one-story frame residence.
Owner.....L. Lalanne, 3319 Sacramento
St., San Francisco.
Architect...Fabre & Bearwald, Merchants' National Bank Bldg
San Francisco
Contractor...Arthur Elvin, 3834 23d St.,
San Francisco.
Filed Sept. 30, '15. Dated Sept. 25, '15.
Frame up and roof sheathed...\$194
Brown plastered 494
When completed 491
Usual 35 days..... 493
TOTAL COST, \$1975
Bond, none. Limit, 90 days. Forfeited,
\$5. Plans and specifications filed.

FRAME RESIDENCE

LOT 1 BLK 19 Western Addition to
San Mateo, San Mateo. All work for
one-story frame residence.
Owner.....Frederick & Jane Parkin,
San Mateo.
Architect...Thomas M. Edwards, Burlingame.
Contractor...W. S. Leadley, San Mateo.
Filed Oct. 14, '15. Dated Oct. 11, '15.
Frame up\$300
When plastered 300
When completed 320
Usual 35 days..... 329
TOTAL COST, \$1219
Bond, \$625. Sureties, Eliza A. Hopper
and Frederick P. Callesen. Limit, 60
days. Forfeited, \$2 per day. Plans and
specifications filed.

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED ACCEPTED
Oct. 9, 1915—LOT 16 BLK 5, Dingee
Park, Redwood City. Oscar A
Sahlberg to Gustave Waller.....
Oct. 9, 1915
Oct. 13, 1915—PTN LOT 9 BLK 6,
Western Addition Town of San
Mateo. William S Leadley to Wm
S Leadley.....Oct. 9, 1915
Oct. 14, 1915—CAROLANDS, Hills-
borough. Harriett Pullman Caro-
lan to McFell Elec Co....Oct. 11, 1915
Oct. 14, 1915—CAROLANDS, Hills-
borough. Harriett Pullman Caro-
lan to Stockholm & Allyn.....
Oct. 11, 1915
Oct. 14, 1915—LOT 29 BLK 59, Easton
Addition to Burlingame No. 7, Burlingame.
Elizabeth H Spangler to
Edwin L Croop and Jas J Keegan
.....Oct. 13, 1915
Oct. 14, 1915—LOT 13 BLK 20, Redwood
Highlands, Redwood City.
Redwood Highlands Co to whom it
may concern.....Oct. 13, 1915
Oct. 14, 1915—LOT 13 BLK 31, Redwood
Highlands, Redwood City.
Redwood Highlands Co to whom
it may concern.....Oct. 13, 1915

BUILDING CONTRACTS.

CONTRA COSTA COUNTY.

LUNGALOW

TORNEY & MERITHEW ADDITION to
Town of Martinez. All work for
erection and finishing of building
upon their property (bungalow).

Owner.....Mr. and Mrs. Frank Murray,
Estudillo near Robinson,
Martinez.

Architect...None.

Contractor...Luke Bulger & Son, Castro,
and Green, Martinez.

Filed Oct. 4, '15. Dated Sept. 1, '15.
Concrete finished, chimney built,
frame of building up and rafters
on\$589.25
Mill work on outside, all rustic
on, windows in and shingles on
..... 589.25
Lather and plastered with two
coats and 1 coat paint on outside
..... 589.25
Usual 35 days..... 589.25
TOTAL COST, \$2357.00

Bond, limit, forfeited, none. Plans and
specifications filed.

FRAME BUILDING

LOT 7 BLK 21, Boulevard Tract, Richmond.
All work for two-story and
basement frame building.

Owner.....Luigi Galletta, Richmond.

Architect...Louis Mastropasqua, 580
Washington, San Francisco

Contractor...G. Moricom and G. Passerling.

Filed Oct. 11, '15. Dated Oct. 7, '15.
Frame up and roof on.....\$1237.50
1st coat plaster on..... 1237.50
Completed and accepted..... 1237.50
Usual 35 days..... 1237.50
TOTAL COST, \$4950.00

Bond, \$2475. Sureties, F. Berti and M.
Capierra. Limit, within 90 days. Forfeited,
none. Plans and specifications
filed.

FRAME BUILDING

NW COR. BLK 318, facing Ferry St.,
Martinez. Foundation work, carpenter
work, plumbing, painting,
electric, plastering, hardware, tile,
grading, lathing, glazing, sheet
metal work for two-story plastered
frame building.

Owner.....Frank Prosser, 211 Ferry
St., Martinez.

Architect...James T. Narbett, 704

Macdonald Ave., Richmond

Contractor...C. D. Mohr, 530 66th St.,
Oakland.

Filed Oct. 5, '15. Dated Sept. 2, '15.
Foundation completed and frame
completed\$1825
Enclosed ready for exterior and
interior plaster..... 1825
Plastering finished and outside
ready for 2nd coat of paint..... 1825
Completed and accepted..... 1825
Usual 25 days..... 1825
TOTAL COST, \$9750

Bond, \$4875. Surety, C. D. Mohr. Limit,
within 75 days. Forfeited, none. Plans
and specifications filed.

DWELLING

S 1/2 LOTS 1 AND 2 BLK 110, Frazer
Addition to City of Martinez. All
work for one-story five-room and
bath frame dwelling as per plans and
specifications.

Owner.....Louise F. and H. M. Bush,
Alhambra Precinct, Mar-
tinez.
Architect...None.
Contractor..Hall & Smith, Martinez.
Filed Sept. 29, '15. Dated Sept. 28, '15.
Frame up and roof on.....\$532.33 1/2
Interior plaster on.....532.33 1/2
Usual 35 days.....532.33 1/2
TOTAL COST, \$1600.00
Bond, none. Limit, 40 working days.
Forfeit, none. Plans and specifications
filed.

FRAME BUNGALOW

E 175 FEET from line-of Blk 19, as in
Official Map of City of Pittsburg. All
work for six-room frame bungalow.
Owner.....B. P. Lanteri, Pittsburg.
Architect...None.
Contractor..Nickell & Old, Pittsburg.
Filed Sept. 29, '15. Dated Sept. 21, '15.
Frame up\$71.25
Plaster on71.25
Completed and accepted.....71.25
Usual 35 days.....71.25
TOTAL COST, \$345.00
Bond, \$1750. Sureties, C. Cautiello and
A. V. McFaul. Limit, within 45 days.
Forfeit, none. Plans and specifications
filed.

COMPLETION NOTICES

MARIN COUNTY.

RECORDED	ACCEPTED
Oct. 14, 1915—ROSS VALLEY PARK, San Anselmo. Joelle R. Allen to E A Trobeck & Co.....Oct. 8, 1915	
Oct. 14, 1915—YOLANDO COURT, San Anselmo. L C Elgin to L E Warden.....Oct. 4, 1915	
Oct. 2, 1915—SAN RAFAEL. Harrison Dibblee to J A Kappenmann..... .....Sept. 25, 1915	
Oct. 5, 1915—SAN ANSELMO. L P Gloudon to L E Warden.....Oct. 4, 1915	

LIENS FILED.

MARIN COUNTY.

RECORDED	AMOUNT
Oct. 14, 1915—SAN RAFAEL. Hogan Lumber Co vs A Heydenaber and S Smith.....\$1636.30	

COMPLETION NOTICES.

CONTRA COSTA COUNTY.

RECORDED	ACCEPTED
Oct. 2, 1915—PUMPING STATION NO. 10, Sec 8 21 S, R 3 E Mt. D B M; Bryon Pumping Station No. 11, Sec 25 11 E R E at Brentwood, Cal. Valley Pipe Line Co to Frank Hud- son and Butler E Shaw.....Sept. 23, 1915	
Oct. 7, 1915—ASSOCIATED OIL CO'S Ppty at Avon, Cal. Associated Oil Co to Western Pipe & Steel Co..... .....Sept. 22, 1915	

BUILDING CONTRACTS.

FRESNO COUNTY.

DWELLING
LOT 12 BLK 3, Alta Vista Tract, Fres-
no. Dwelling.
Owner.....W. H. Ackerman.
Architect...None.
Day's work. COST, \$2750

DWELLING
LOT 5 BLK 3, Alta Vista Tet., Fresno.
Dwelling.
Owner.....W. H. Ackerman.
Architect...None.
Day's work. COST, \$2750

ADDITION
NO. 715 H STREET, Fresno. Addition
to dwelling.
Owner.....M. H. Cowan.
Architect...None.
Contractor..E. E. Otis, 1011 O St.,
Fresno. COST, \$1800

DWELLING
NO. 2327 STANISLAUS ST., Fresno.
Dwelling.
Owner.....G. W. Lightowler et al, 340
M St., Fresno.
Architect...None.
Day's work. COST, \$1800

DWELLING
LOTS 25 AND 26 BLK 2, Forthcamp
Addition No. 2, Fresno. Dwelling.
Owner.....C. Samuelson, 367 J St.,
Fresno.
Architect...None.
Day's work. COST, \$3400
Garage on above, \$75.

DWELLING
LOTS 28 AND 29 BLK 1 Buena Vista
Tract, Fresno. Dwelling.
Owner.....Williams.
Architect...None.
Contractor..J. R. Church, 1221 U St.,
Fresno. COST, \$1250

DWELLING
LOTS 8, 9, AND 10 BLK 168, Fresno.
Dwelling.
Owner.....David S. Ewing, 1921 San
Joaquin St., Fresno.
Architect...None.
Contractor..Frank Rehorn, 1050 S St.,
Fresno. COST, \$7000

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED	ACCEPTED
Oct. 6, 1915—BLK 29 Hazelwood Tet., Fresno. City of Fresno School Dis- trict to D A Evans.....Oct. 6, 1915	
Oct. 5, 1915—LOTS 4 AND 5 BLK 11, Alhambra Tract, Fresno. Jos Mar- nacci et al to J L Daly.....Oct. 5, 1915	
Oct. 2, 1915—LOTS 7 AND 8 BLK 9, Alhambra Tract, Fresno. Sarah J Corley to E H Horner and A Johnson.....Sept. 26, 1915	
Oct. 1, 1915—N 41 FEET LOT 12 BLK 2 Meadow Brook Tract, Fresno. C L Fink to C V Smith.....Sept. 27, 1915	
Oct. 2, 1915—S 209 FEET (except W 242 feet) of Lot 10 in Sec 27, 14-24, Fresno. Citrus Cove Grammar School District to Thos Pinner..... .....Sept. 25, 1915	

LIENS FILED.

FRESNO COUNTY.

RECORDED	AMOUNT
Oct. 8, 1915—LOT 10 BLK 237, Fresno. Fresno Lumber Co vs Peter and Jacob Fries.....\$57	
Oct. 8, 1915—LOT 26 Griffith Villa	

Add'n, Fresno. J S Tannahill vs
G Annabella, A S and Martin Shipp
.....\$121
Oct. 9, 1915—LOTS 11 TO 14 BLK 64,
Fresno. D F Griffin vs T C White
and Pease, Bundy, Taylor Co.....\$33.
Oct. 2, 1915—LOTS 1 TO 4 McKinley
Heights, Fresno. Wormser Furni-
ture Co vs Helen G Kleiser.....\$78
Oct. 2, 1915—LOTE 1 TO 4 McKinley
Heights, Fresno. W F Bowen and
H C Davis vs Helen G Kleiser.....\$316

BUILDING CONTRACTS

SACRAMENTO COUNTY.

FRAME DWELLING
LOT 524 W AND K No. 19, Sacramento.
One-story frame dwelling.
Owner.....Tony Corey, 1612 Dana
Way, Sacramento.
Architect...None.
Day's work. COST, \$2000
FRAME DWELLING
LAT 126 GLENN ORCHARD NO. 2,
Sacramento. One-story frame dwlg.
Owner.....P. Girolini, Bartlett and
Clymon Ave., Sacramento.
Architect...None.
Contractor..H. A. Palm, 302 40th St.,
Sacramento. COST, \$1500

ALTERATIONS
N 1/2 LOTS 7 AND 8, T, U, 21st and 22nd
Sts., Sacramento. Make billiard room
in basement of residence.
Owner.....Philip S. Driver, 2019 21st
St., Sacramento.
Architect...None.
Contractor..Gus A. Wendt. COST, \$700

ALTERATIONS
NO. 508 OAK AVE on N 1/2 of W 20
feet of Lot 7 Blk J, K, 5th and 6th
Sts., Sacramento. Remodel interior
of building.
Owner.....Bertha Campbell, Caro-
Reed & Elliott, Raymond
H. Hess, Lessee, 508 Oak
Ave., Sacramento.
Architect...None.
Day's work. COST, \$600

BOOTHES, ETC.
NO. 519 J ST, Sacramento. Tempora-
ry booths and platform.
Owner.....Hellboom Estate, 611 Ja-
son St., Sacramento.
Architect...None.
Day's work. COST, \$400

ELECTRIC SIGN
NO. 627 K ST., on E 50 feet Lots 5 and
6, J, K, 6th and 7th Sts., Sacramento.
Electrical sign.
Owner.....Claus & Kraus, 1700 I St.,
Sacramento.
Architect...None.
Contractor..Brumfield Elec. Sign Co,
18 7th St., San Francisco. COST, \$300

REPAIRS
NO. 1018 N ST., on E 15 feet Lot 2 and
W 1/2 Lot 3 Blk N, O, 10th and 11th
Sts., Sacramento. Repair building
Owner.....Mrs. A. B. Knauer, Mon-
terey, Cal.
Architect...None.
Contractor..Joe Pausbach, 1020 25th
St., Sacramento. COST, \$500

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George Nelson, C. E., Editor.

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W. D. Manville, News Editor.

October 27, 1915

Leading Articles in this Issue:

Probable and Presumptive Life of Concrete Structure Made From Modern Cements.

By Bertram Blount, London, England.

Magnesite.

By Fletcher Hamilton, State Mineralogist.

Structural Materials in California.

By Fletcher Hamilton, State Mineralogist

American Builders' Congress.

Staff Article

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San Francisco, October 27, 1915

Fifteenth Year, No. 43

Probable and Presumptive Life of Concrete Structure Made From Modern Cement.

By BERTRAM BLOUNT, London, England.

Some concrete casually made by empirical means has in some cases stood the test of 2000 years or more. It is useless to enquire as to the proportion which went to pieces.

Today we know with some approach of precision how to make concrete, and according to the exercise of our knowledge, our structures will last as long as there is any need for their existence, or it is the fate of all modern structures to be torn down and replaced within periods reckoned not by hundreds of years but by units of ten.

Since the time when Portland cement became accepted as one of the principal materials of construction, doubts were felt as to its permanence, these doubts in the beginning were thoroughly justified. A material prepared in the crudest way, with wholly inadequate knowledge and that picturesque method of control, known as rule of thumb, and from its nature and constitution, resembling a slow but highly effective explosive, would be sure to its genesis and properties if it failed to provide a plentiful crop of disasters—and this it did.

Nowadays the situation is very different, not because modern cement is able any more than is any other structural material, but because the properties, uses and limitations of cement are fairly well understood, and a reasonable amount of care is exercised in its employment. It would be wrong to assume that our present knowledge and skill are sufficient to relieve us of anxiety and occasional calamity in erecting structures intended to be permanent, but we are no longer in the position of speculators in a rather unbalanced stock, expectant of a fall.

In order to discuss the question of the probable life of concrete structures made with modern cement, it is necessary to consider the chief causes which terminate that life. I have drawn up a list of such causes, which, though not necessarily exhaustive, may serve as a guide to an orderly sequence in the present paper. For convenience in this list, ordinary concrete is catalogued separately from reinforced concrete, although, of course, in the majority of cases what affects one affects the other; the probable life of reinforced concrete is that of the concrete and the reinforcement severally

and jointly, its characteristics as a material sui generis influencing in one direction or another its capability of continuing existence.

There is, of course, no such thing as a permanent structure of whatever material it may be made, and the present enquiry is limited to the consideration of how far concrete may be regarded as subpermanent. I do not think that anybody here will deny its right to rank with the most resistant structural materials known, and there are many—and I include myself—who believe that it stands very high in that rank if applied with knowledge to its proper purposes. The list of possible causes of destruction, mentioned above, is as follows:

A. Ordinary concrete as distinguished from reinforced concrete.

- (1) bad cement,
- (2) bad aggregate,
- (3) bad proportions,
- (4) bad mixing,
- (5) bad workmanship,
- (6) bad design,
- (7) external violence,
- (8) fair wear and tear,
- (9) action of saline solutions,
- (10) action of acids,
- (11) electrolysis.

B. Reinforced concrete.

All the foregoing causes of destruction are operative towards reinforced concrete as well as plain concrete. In addition there are:

- (1) corrosion of reinforcement direct or by electrolysis,
- (2) cracking due to monolithic character or possibly to stresses between the concrete and the reinforcement.

The term "modern cement," which forms part of the title of this paper, should rule out bad cement, but unfortunately it does not. The best modern cement made of suitable raw materials, intimately mixed, thoroughly burnt and finely ground, is as dependable a material as can be prepared until the time comes when all cement is made by fusing the constituents in a sort of super-blast-furnace, a method tried some years ago in the United States, and one which I have long regarded as the rational advance on the present rotary process. But these conditions of excellence are not always fulfilled.

Chiefly because of the endeavor to obtain large outputs of cements per unit of plant, the control of proportions is sometimes inaccurate, the burning not uniform and the grinding not only coarser than is desirable but "gritty." Such cement fails in respect of the first quality absolutely essential to the stability of any structure of which it forms part—it is not sound. Quite useless is it to say that such unsound cement has been used and the structures made with it are standing; the point of interest is how many have fallen down. Further there is the pregnant question whether a buyer will not insist on a material which is certain to be free from vice, or whether for the convenience of the seller he will trust to luck. Generally, the man who pays can and will get what he wants. It may be confidently said that given careful manufacture, rigid inspection and thorough testing to a searching specification, modern cement can be obtained free from all inherent vice, and that structures of which it forms part will not be brought to a premature end by internal treachery.

Bad aggregate is a fruitful source of trouble, and, simple as it is in a specification to say that the aggregate shall be "suitable clean, sharp, well washed," and so on, it is not always easy to get such an aggregate at a reasonable price. Local material must almost always be used, and it may be of the most diverse description. The one property, which is indispensable, is that it must be chemically stable under the conditions in which it is to be used. It does not follow absolutely that the aggregate shall be stable per se, though it is much better that it should be, there are materials which oxidise, or which weather, that may on occasion act as a serviceable aggregate, but only urgent necessity will sanction their use. Thus, in general, rocks containing pyrites should be avoided, but it would be pedantic to reject a granite or a hard limestone on the sole ground that specks of pyrites are present. Not merely the amount and size of the enclosed pyrites should be considered, naturally a rock containing marcasite is ipso facto suspect. In such cases, petrological methods of examination should be used. Similarly,

slags, such as copper slag containing much ferrous silicate, may well be used if their silica content is high enough; generally, such slags lie in dumps, and have so lain for years, and their behaviours during exposure to weather is a great guide. The same remark applies to blast furnace slag. Analysis is very helpful if the results are carefully interpreted, but the behaviour of the material on the dump is even better. I have seen a considerable quantity of concrete destroyed by the use of a slag aggregate containing calcium sulphate derived from calcium sulphide in a fairly basic slag, and in this instance analysis would have detected the destructive agent, and saved much trouble and expense. Speaking generally, substances containing sulphates or sulphides, capable of oxidation under working conditions, are so dangerous that their use should not be tolerated, and the need of this restriction can be better realized when it is remembered that 1% of SO_3 , calculated on the aggregate, may mean 5% or more on the cement. Perhaps, of all the materials used as aggregate, the most dangerous is coke breeze. Mind, I do not say injurious, I say dangerous. The danger lies in the fact that some samples contain an abundance of sulphates, and, on account of the porous nature of the breeze, these are readily extracted, and do their deadly work on the cement. No sample of breeze should be used as an aggregate unless it has been analyzed and tested. Unless the strictest supervision of this kind is exercised, disaster is courted. Aggregate may be mechanically as well as chemically bad, but exactly how to define that badness is not easy. Such obvious defects as softness, cracks or excessive smoothness need no more than mention, but how far a "dirty" aggregate carries its own condemnation, is a more difficult matter to decide. It may safely be said that clayey matter round the coarser lumps will prevent a proper bond, but the effect of a moderate amount of clayey matter in the sand is not necessarily harmful. Like most practical things, it is eminently a matter to be settled by trial, and test cubes of the proposed aggregate compared with similar cubes of some aggregate recognized as a standard, such as granite chips and clean sand, will decide the point. Four other causes of short life for a concrete structure, viz., bad proportions, bad mixing, bad workmanship and bad design, call for little comment except this, that evil as are all these for ordinary concrete, they are ten times worse for reinforced concrete, because, while ordinary concrete is generally used in considerable masses, a structure of reinforced concrete is a more delicate affair in which all four sources of mischief have a greater say. Particularly is this the case in respect of bad proportions and bad workmanship. All reinforced concrete should be as nearly impervious as can be contrived, as it is of the utmost importance to protect the reinforcement; and although it is true that iron is protected in an alkaline medium, yet reliance should not be placed on that alone; it is far sounder practice to make concrete of all kinds, and especially reinforced concrete, as nearly watertight as is practically possible.

The life of concrete structures may be shortened by causes which are external to itself. The violence of wind, wave and earthquake, the effect of the subsidence of the soil, in fact, all those things which in legal phraseology are called "the acts of God," because they are incomprehensible, will destroy any structure however well made. But, in practical affairs, one does not legislate for the infinite, and is content to make structures so good that ordinary violence will have little effect. The simplest and most important case is that of making harbors which must resist all these natural forces. Thanks to our harbor engineers, a fair degree of success has been attained, largely empirically. Putting aside for the moment the question of the quality of the cement, over which they had little control, they understood in some degree that the concrete must be strong and dense, and, by proportioning the aggregate, obtained a material which complied fairly with these requirements. But accurate measurements of voids and the knowledge that ordinary good concrete of about 1:6 may, and often does, contain 30% of voids, have not been so generally utilized as to prevent failures which are traceable to erosion and corrosion by the sea. It is not enough that a block of concrete should be strong; it must be as nearly as possible impervious and impenetrable. As I have said above, the need for these qualities in reinforced concrete is vastly more urgent; reinforced concrete has a vulnerable skeleton, and its exoskeleton must be perfect. Fair wear and tear is only a mild case of external mechanical violence, and need not be further considered.

A particular form of external violence is the action of fire in any serious conflagration. It has been frequently stated that concrete structures are substantially fireproof, and, as far as inflammability is concerned, this is true, but it must be remembered that set cement is a substance containing combined water and carbonic acid, and that these are expelled at a comparatively moderate temperature. It might be naturally supposed that a structure exposed to fire would be seriously weakened by the decomposition of the essential cementitious constituents, and this surmise is of course correct. But for all that, the amount of deterioration is less than one would think likely, and the appended table shows the results of a few experiments made on a cement mortar in the usual proportions of 3 to 1 by weight.

Test pieces were heated for 1 hour at the following temperatures:

	% Loss	
Tem- perature.	calcu- lated.	ture. on Ce- ment.
100..	5.32..	No appreciable effect.
200..	14.12..	" " "
300..	16.68..	" " "
400..	16.56..	" " "
500..	17.96..	" " "
600..	21.92..	Sound—weak at edges.
700..	22.24..	Sound—friable.
800..	25.68..	Sound—distinctly friable.
900..	25.08..	Sound—distinctly friable.
1000..	24.56..	Sound—very weak.
1100..	25.40..	Sound—very weak.

In no case, even at the highest temperature, were there any signs of disintegration or flying, and no mechanical loss occurred during the test.

Composition of test pieces, 3 standard sand to 1 Portland cement by weight. Age 3 months.

It will be seen that up to a temperature of 500 degrees C. there is no appreciable alteration, and even beyond that the test pieces show considerable stability, a circumstance which is reassuring from the point of view of that most important question of fireproof construction. Before accepting such a conclusion unreservedly, however, it must be remembered that the tenderest members of reinforced concrete are the steel reinforcements, and that if the heat penetrates the envelope of concrete sufficiently to soften the steel, the destruction of the building will occur exactly as in the case of an ordinary steel frame building.

Shortening of the life of concrete by chemical action of external origin, which for the purpose of a list I have put under three headings, may be conveniently considered under one. A great number of investigators, including many honored names, from the time of the pioneers Vicat and Michaelis to the time of those living, to whom it would be an impertinence to refer, have applied themselves to determine what is the probable or presumptive life of concrete, and, on account of the practical importance of the problem, have chiefly concerned themselves with the action of one saline solution. The destruction of concrete by seawater has always been, since the days when Portland cement first began to be used, a matter of much concern to engineers engaged in maritime works, and, even as lately as 30 years ago, much confusion of mind existed. Thus, because magnesia was found to be a predominant constituent of various incrustations and exudations on sea work, the erroneous conclusion was drawn that it was derived from the cement, and anxiety was felt concerning what could be considered the permissible limit for magnesia in cement. Of course, it is now common knowledge that the magnesia found has been formed from the seawater by the action on it of the lime of the cement, and that the small quantities of magnesia normally present in Portland cement of good quality are without influence in these cases of injury. I do not propose to deal in detail with the destructive action on cement of magnesium salts and calcium sulphate in seawater, as the mechanism of the reactions in which they take part has been thoroughly studied by many able chemists, and their work is part of our general knowledge, but I propose to state shortly what my own analyses and experiments have led me to regard as the chief causes of the premature injury and shortened life of sea works made of concrete, and, in the first instance, I will deal with ordinary concrete.

It may be accepted that the heaviest and most important work is block work, and in this case the cement has ample time to harden before it is exposed to the sea. From consideration of expense, it is sometimes desired to use a comparatively poor mixture, but

cannot help thinking that the saving is dearly bought. In fact, the one indispensable condition for a long life or work exposed to the sea is the imperviousness and imperviousness of the concrete, and this is difficult to secure unless the cement is used liberally. It is impossible to fix a proportion, as that will depend on the aggregate. Every case must be judged by itself, for voids determined experimentally and enough cement used to fill them. Whenever a good form of puzzolanic material, such as trass and the like, is available should certainly replace a part of the sand, for its use in forming a calcium silicate with the lime, normally free during the setting of Portland cement, is undoubtedly of value, much inducing to the obtaining of that imperviousness which is a necessary condition for sound and lasting work. It could not be overlooked that any puzzolanic material can fulfill two functions. If coarsely ground, it acts partly as an aggregate like sand, and it is only when ground as finely as cement itself that its full activity as a cementitious material comes into play. There is no objection to the use of coarse puzzolana if the supply is abundant locally, but, if it has to be brought from a distant place, it is evidently uneconomical to use part of it for a purpose equally well fulfilled by an artificial material like sand. In some cases, it might be desirable to grind the puzzolana and cement together to equal fineness. This plan has been adopted by many engineers as being equivalent to an adulteration of cement, but this view I hold to be taken if the mixture is sold under its own name, and the proportions of the two materials are stated. Many attempts have been made to gain imperviousness by the addition of the most various materials, such as alum salts, soap and fatty mineral oil, but, though some of these are of use under special circumstances, they have not as yet shown themselves suitable for the heavy sea work being dealt with; at present there is nothing better than ordinary concrete made with the most carefully selected and graded aggregate, with the addition of trass if local conditions allow, and an ample proportion of cement. Concrete made thus can only be attacked on the surface, and its deterioration by percolation is well-nigh impossible. To state its probable life would be a rash attempt; in my view it should last indefinitely, at least until the harbor or other maritime work had become obsolete.

When concrete has to be cast *in situ* continuously for setting undisturbed is sometimes but poor, as compared with that of the blockwork, but the same principles held good, with the one addition that the setting time should be minimum which will allow the material being got into position without disturbing or working it after setting begun. Seawater is by far the most dangerous saline solution, and contains the salts, magnesium salts and sulphates, which are most harmful to concrete.

What has been said of it applies to most other saline solutions which are likely to be harmful, and the precautions already mentioned

apply to such cases. Of course, there are special instances of injury by such salts as sulphate of iron or the mixed metallic sulphates found in mine waters, but the nature of their attack is similar, and they are of too special a character to warrant more than mention in a paper dealing with the life of concrete structures in general. There is a common belief that salts in the act of crystallizing may expand and thus injure a structure of which they occupy the interstices. I have determined the amount of expansion of three typical, easily soluble salts and find the following results:

(1) Supersaturated solution of sodium sulphate. Expansion on crystallizing, 1.45% by volume.

(2) Saturated solution of magnesium sulphate. Contraction on crystallizing, 0.11% by volume.

(3) Supersaturated solution of sodium thiosulphate. Contraction on crystallizing, 0.37% by volume.

I do not think that much importance need be attached to the view that concrete is injured materially by the crystallization of salts in its crevices, for the crystals—even when they do connote an increase of volume—are mechanically weak, and can exercise but little disruptive effect. It is the chemical action of saline solutions which is to be feared and guarded against.

Destruction of concrete by acids, and by this term acid salts are included, stands on a different footing. Obviously, strong acids turned to waste from a chemical works will destroy so calcareous a material as cement, and if the acid is sulphuric acid, destruction will proceed after the acid has been neutralized. But there are less obvious, though very real, causes of destruction. Many putrescent matters, such as sewage, will give off gases containing sulphur, and these, under suitable conditions, will oxidize and produce sulphurous acid, and, ultimately, sulphuric acid; or, alternately, will form sulphides, such as calcium sulphide or ferrous sulphide, which in due course, oxidize to the corresponding sulphates and injure or destroy any cement with which they may come in contact. It has been observed that with sewage of this kind flowing through concrete pipes the invert may be unaffected, while the arch is seriously attacked. The explanation generally accepted is that hydrogen sulphide, or some gaseous organic sulphide, is generated from the liquid, and coming in contact with the upper part of the pipe forms sulphides, which are oxidized to sulphates by the air above the level of the liquid. As the source of the sulphides is continuous, attack by the latter proceeds, with the result that the part of the pipe which is not immersed may suffer severe corrosion. To predict the life of such a pipe is evidently impossible. It is impracticable to prevent access of air and to turn the whole sewer into a septic tank, and the only reasonable course is to use some other kind of pipe where the conditions mentioned are known or suspected, or to face the expense and trouble of occasional repairs.

Closely connected with corrosion of concrete by acids, actual or potential,

is attack by electrolysis. All cement contains a small quantity of alkali, and this is an excellent electrolyte and will serve to convey such a current as may be straying from a lighting or power circuit. Instances have been recorded of destruction of concrete by such stray currents, and in this case, again, prediction of a probable life of the structure is clearly impossible. But stray currents are not in the same category as wind and wave and earthquake and their invasions should be prevented by proper insulation. To regard them as inevitable, like the rain, is not the attitude of mind of the electrical engineer, and it is to him that we must look for prevention. Suggestions to make the concrete waterproof, where there is a possibility of electrical leakage, are, however, well worth consideration, and in such cases, which should be rare, a sheath of some asphaltic material, such as is used for damp-proof courses, would be serviceable. But it cannot be too clearly said that this is a wrong principle to go on; it should not be necessary to protect concrete from stray currents, because those errant currents should be kept in their narrow channel.

The quality of cement for reinforced concrete must be at least as good as that for ordinary concrete, and, if possible, should be better. This is not because the latter should not be as near perfection as the maker can achieve, but because Portland cement for reinforced concrete is, as it were, a pioneer of progress, and what is a special brand for such purposes today will be the ordinary commercial article tomorrow. Turning to steel, as the other partner of the association, one may say that no better example of the advantage of that scientific direction which is now applied to Portland cement could be found than in the case of the steel, and it is significant that the metal, the more difficult of the two to manufacture, was being made of good and uniform quality before chemical principles were recognized and acted on in the manufacture of Portland cement. Thanks to the fact that for some forty years the regulation of the composition has been in the hands of the chemist, little is left to be desired in the modern commercial product. Of course, cases have occurred, and will occur, of careless manufacture and inspection where brittle and inferior material has found its way into the work, but they are not numerous and only rank with such failures as arise in all structures. Good as modern mild steel is, it may be properly asked whether, in some cases at least, steel of a higher grade and greater tensile strength may be advantageously used, and I think that most of us will assent to this. This applies to ordinary structures and is, of course, obligatory for such buildings as safe deposits where the metal must not only have a good tensile strength, but be so hard as to be practically undrillable.

Turning now to reinforced concrete one may say that all the causes of attack, and consequently shortened life, which have been discussed under the heading of ordinary concrete, are valid equally with reinforced concrete, and, in addition, there are some other

causes peculiar to reinforced concrete. In practice the reinforcement consists of steel in some form, and is subject to the same corrosion as steel in other structures. By a very fortunate circumstance, cement is an alkaline substance and the metal, iron, in an alkaline medium does not rust. These comforting facts do not warrant the deduction that the steel reinforcement is immune from corrosion. That is true only if it is completely enclosed with concrete which is fully in contact with it and is free from fissures, a cogent reason for the use of concrete, for reinforced work, of a higher grade than that generally necessary. It is highly desirable that the concrete should not only be without fissures, but should be impervious. The advantages in preventing the percolation of any saline or corrosive substance are so great that the extra trouble and cost are well repaid.

The question of the probable life of reinforced concrete has formed one of the topics of a Committee of the Institution of Civil Engineers, of which the writer has the honor to be a member. At the request of the committee I contributed a memorandum in February, 1910, which runs as follows:

"There are two matters affecting the stability and permanence of reinforced concrete which appear to me to be of special importance

"The first is the risk of destruction of the cement in the concrete, and of corrosion of the steel constituting the reinforcement; the second, the stresses due to expansion of the concrete and the steel, and to the difference in the value of the co-efficient for the two materials.

"The likelihood of the attack of the cement itself depends on the same conditions as determine whether ordinary concrete—unreinforced—is attacked, but as the thickness of the concrete over the reinforcement is usually small, it is evident that even more care must be bestowed on the avoidance of those conditions than in the case of concrete in large masses, where the surface of attack is relatively smaller. With regard to the steel, the risk of corrosion is primarily dependent on the continued access of water to the steel. Mere moisture left in the concrete after its preparation, or any stationary water, is of small consequence, because that water soon becomes saturated with lime and forms an alkaline medium excellently adapted for the preservation of steel. But continued access of water, involving anything approaching a flow of water, will remove this preservative lime, and cause the customary rusting of steel exposed to water. It follows that the concrete of armored concrete must be practically impervious. This need for imperviousness has been recognized in practice by making the concrete rich in cement, but, as far as I know, no measurements of the permeability of the mixtures ordinarily employed have been published. Such experiments as I have carried out have been directed to a different end, and have been made with mixtures of cement and standard sand, and go to show that, though at first pervious, such mixtures soon be-

come moderately watertight. Similar experiments with concrete composed of cement, sand, and small stones, such as ordinarily used for reinforced concrete, would be useful. Impermeability of reinforced concrete, whilst desirable in all cases, becomes of great importance in structures immersed in fresh water, and imperative for those in sea water.

"The co-efficient of expansion by mild steel is well known the figures generally accepted being 0.0000069 per degree Fahrenheit. That of concrete varies somewhat with the composition, but for a 1:2:4 mixture is usually taken at 0.0000055 per degree F. For a mixture of 1 of Portland cement to 1 of sand, have found 0.0000053 per degree F. wet and 0.0000073 per degree F. dry. These values are so similar that stresses resulting from their difference are small. But the stresses due to the two materials regarded as a whole in a structure hindered from expansion may be considerable, and should certainly be computed in cases where the structure is exposed to a large range of temperature. Further, there are no data (so far as I have been able to ascertain) concerning the alteration of length of concrete which takes place by alteration of wetness and dryness. If this, as seems probable, is considerable, serious stresses may arise, both in a structure not free to expand and between the concrete and its reinforcement. Experimental investigation of this question appears to me to be desirable."

After five years, I think that this brief summary states not unfairly the conditions which influence the stability of reinforced concrete, and indicates the directions in which precautions should be taken. Since that time many experiments have been made, but they are not so conclusive as might be wished. At the instance of the Committee of the Institution of Civil Engineers, referred to above, experiments were made at the National Physical Laboratory with a view to determine the rate of percolation and the alteration of strength, but the results are irregular and will not serve as a useful guide. It is highly desirable that a full set of tests should be made to obtain reliable data on these two points, viz., rate of percolation and alteration of strength of reinforced concrete; and, in both cases, the test pieces must be prepared by an operative accustomed to such work, and carrying it out as it would be carried out in practice under proper supervision. As far as I know, no reliable data obtained by experiment, as distinct from observation, are extant, showing whether reinforcing steel will corrode; and here again, a full set of tests should be made. Casual observations of the condition of the metal in reinforced concrete which has been exposed to severe natural conditions are of the utmost value, but we want something more than that. We want definite facts which will tell us what is the prospect of life of reinforced concrete properly and carefully, but not meticulously, made, when it is exposed to the most drastic conditions which it will be called upon to endure in practice; and one of the governing factors is the non-rusting of the steel. *A priori*,

there should be no rusting, but argument *a priori* is the most dangerous form of nonsense I know of. In matters of this material importance, it is not sufficient to come to a conclusion on general principles alone, but the must be used in conjunction with experimental data as accurately obtained over as long a period as practical requirements allow. And he let me plead for long time tests. True that they may be useless and solete before their term is out, 20 years, 50 years it may be, not much in the life of a structure, but the trouble and cost of making them is trifling, and sometimes their results are priceless. Let us build for posterity in this matter; it is easy for them to discard our juvenile ideas, but now and then they flourish something good like the "Principia" an older Book. With the knowledge of this date, it seems fairly certain that little fear need be felt of steel reinforcement rusting when well embedded in good non-pervious concrete of adequate thickness, even when the structure is exposed to seawater or other saline solutions, but the case altered when the concrete is exposed to electrolysis. As has been mentioned above, cases have been observed of the destruction of ordinary concrete by electrolysis, and the risk of injury that is small compared with the likelihood of destruction of reinforced concrete by the same cause. The advantage of an alkaline medium may disappear, and the steel reinforcement serving as a positive electrode may be attacked by all the negative ions of the electrolyte. Corrosion will be rapid, and the stresses exerted by iron rusting are known to be large, though they have never been computed. It must be remembered that it is not necessary for there to be a direct electrical leak from the inside to the outside of the concrete. Wherever the current flows there must be a drop of potential, and as the joints between the metallic members are electrically poor, it is certain that at all those points corrosion must occur. In a modern structure honeycombed by electric leakage most serious results may occur from such unsuspected cause, and the mischief may be wrought secretly and effectively, quite nullifying any reasonable life of the structure.

There is another fact which tends to limit the life of a structure made of reinforced concrete. One of the great advantages of this material is its homogeneity. A properly designed and made structure is as much of a piece as if it were a casting, and, like casting, experiences internal stresses. These can be minimized or provided for by careful design, but there is a process equivalent to annealing, which they can be removed. Instances are on record where cracking has happened in long continuous lengths or in large thin walls or panels, whilst assuming material and work to be free from fault, must have been caused by internal stresses. There is always some stress, and the amount may be increased by part of the structure being wet and another part dry, and it is just on this point that very little exact information is available. Because, in a happy accident, the co-efficients

expansion of steel and concrete are nearly identical, it has been too hastily assumed that stresses between the two are negligible, the fact being overlooked that wetting steel has no effect on its size, and wetting concrete is a well marked effect. It must not be thought for one minute that I am an alarmist, but it is right to point out cause of trouble which may escape consideration, if a generalization, in the main good and sound, is accepted without reservation. Thorough investigation, using large test pieces over long period and under perfectly determined conditions, would be of the most value, and would afford us data dispelling the somewhat casual observations on which too much reliance has hitherto been placed.

That this knowledge is of much more an academic importance will be admitted when the construction of dams of reinforced concrete is considered. In a dam, every element of destruction of the kind which has been discussed must be studied and prevented. Concrete must be watertight, for any percolation through pores or cracks will be much more injurious than a similar leakage through an ordinary concrete or masonry dam. The very core of the structure will be attacked, and its ruin is only a question of time. The fact that a dam is a monolith, and may be a huge one, with a crest which is slim and delicate compared with the base, and that it lies, not on one side, dry on the other, with fluctuating height of wetness and a varying load, enforces the absolute necessity of knowing precisely what internal stresses must be met.

The chief causes which go to shorten the life of structures made of concrete and reinforced concrete having been viewed, it remains to consider how these causes are effective, and, if possible, to fix a fair average term of life for such structures.

Of all the causes of destruction, by far the most important is corrosion by saline solutions, and it is the most insidious, as the structure exposed to the action of the solution—whether a harbor or a sewer—may be covered by the attacking liquid, and difficult to examine. For such structures, impermeability is imperative. Reliance on any form of silting up, taking up, covering by organic growths, is mere laziness. The material must be free from crevices which are microscopic and disconnected. Anything approaching a channel is undoubtedly mischievous, and may be fatal. The axiom has been arrived at painfully and with heavy cost in the hard school of experience before reinforced concrete was thought of, and is doubly axiomatic—one may be pardoned the term—the concrete has in its heart a core sensitive core, protected, it may be by a layer only two or three inches thick. At the risk of being tedious, I reiterate that the permanence of concrete depends on its inviolability, and that any condition which limits this limits its life almost to a paean.

All other causes which tend towards destruction sink into insignificance beside this, but for all that they must not be ignored, and, without attempt-

ing to arrange them in order, I am inclined to think the next worse, closely approaching the severity of attack of saline solutions, is the injury caused by aggregates of the class of coke breeze, containing sulphates or potential sulphates. From the very nature of the material, and from the use to which it is put, namely, to make light floors, ceilings and partition walls, it is clear that it cannot be impervious, and it follows that whatever water reaches one of its surfaces will speedily make its way to the interior. Where water can go, air can follow, and the assumption that sulphides are fairly harmless falls to the ground, because they are in the most favorable condition to become sulphates, and the fate of the structure is then settled.

Next in order of sinister magnitude is the injury caused by electrolysis. It is true that the cases recorded are at present few, but it must be remembered that the transmission of large currents at high pressures is a comparatively modern thing, that large structures of reinforced concrete are comparatively modern things, and the progressive spirits cannot hope to see buildings only five years old fall like the walls of Jericho. It may soothe their natural impatience to reflect that although the structures and the electrical power are fairly new, yet human blundering is fairly ancient and to be relied upon, and on that ground alone, it is reasonable to suppose that failures induced or exaggerated by electrolytic action will become fairly common, particularly, when there is a steel core to attack and an electrolyte additional to those alkali salts which naturally occur in any normal cement.

It has been necessary to indicate all those causes of injury for destruction which are to be reckoned with as affecting the life of concrete structures made with modern cement, and the impression conveyed may be that all such structures are also liable to decay as to be almost ephemeral. But this paper is not a jeremiad. I have sought to state the very worst against the prospect of life of concrete and its younger brother; I have purposely taken the role of the devil's advocate, and I have striven to seek out and blazon all the faults and vices proper to cement as we know it. And what does this assault amount to? In the first place, that there exists causes of destruction, internal and external, which, if uncontrolled, will certainly destroy any structure, even where its design is impeccable, and that its life is at the mercy of these causes, and though its death may be lingering, it is certain. In the next, that all such causes, except extreme external violence, can be controlled, and their effect nullified by knowledge, care, and skill exercised in the directions mentioned and discussed above; and, as a necessary result, by the practical elimination of nearly all these attacking forces, security and something like permanence will be attained.

I began this paper by saying that there is no such thing as a permanent structure, and I end by stating that in my opinion, a pyramid, a bridge, an aqueduct, a harbor, a coliseum or a cathedral made in concrete or ferro-concrete, well and honestly enough, will vie in life with the mighty struc-

tures of antiquity which are left to us, their limitation of life lying not in themselves, but in the changing needs of human life.*

*Paper read before the International Engineering Congress September, 1915, San Francisco.

"THE INFLUENCE OF TEMPERATURE UPON THE STRENGTH OF CONCRETE."

By A. B. McDaniel,

has been issued as Bulletin No. 81 of the Engineering Experiment Station of the University of Illinois. This bulletin presents a study of the data obtained from three series of tests of concrete cubes and cylinders. These specimens were stored under temperature conditions varying from 25 degrees to 90 degrees F., and were tested at various ages up to twenty-eight days. Curves are presented to show the relation between strength and age for different temperature conditions, and also the relation between strength and temperature at different ages. The results are summarized in a set of curves which show the percentage strength of concrete at different ages and under different temperature conditions to that at an age of twenty-eight days and under a normal temperature of 70 degrees F.

The results of the tests made under freezing temperature conditions are of especial interest; showing the gradual and slow gain in strength under a storage temperature slightly below freezing, and the disintegrating effect of alternate thawing and freezing temperatures.

The bulletin will be of value to the contractor, engineer and others engaged or interested in construction work for information regarding the strength which may be expected of ordinary concrete under different age and temperature conditions and the time for the removal of the forms.

Copies of Bulletin No. 81 may be obtained gratis upon application to W. F. M. Goss, Director of the Engineering Experiment Station, University of Illinois, Urbana, Illinois.

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MAGNESITE*

By Fletcher Hamilton, State Mineralogist

Magnesite has for a number of years been known to exist in many localities in California. In quality it is very high grade, many deposits yielding material carrying about 95 per cent magnesium carbonate. The deposits are mostly in the metamorphic rocks of the Coast Range and Sierra Nevada Mountains, and are scattered over an area nearly four hundred miles long. One deposit of sedimentary origin is situated in the Mojave Desert region.

During the year 1914 there was considerable activity in the production of magnesite, giving a larger output than during any previous year except 1910. Doubtless the curtailing of some European supplies, due to the war, and added possibilities for transportation through the Panama Canal, to eastern markets, have led to the increased production. The permanent nature of improvements at some deposits gives promise that future production will be still greater.

The following concerns are among those producing in 1914:

Cedar Mountain Magnesite Mine, Alameda County, where the rock was mined by the glory-hole system, and calcined in a flat hearth furnace, using oil fuel and having a daily capacity of about ten tons of crude.

The Sherlock Mine, Santa Clara County, quarries the rock and ships it in the crude state. At the Red Mountain deposit, the material is stoped underground, calcined in a vertical shaft kiln, and transported 33 miles by auto truck to the railroad.

The Sonoma Magnesite Company, Sonoma County, is installing rotary kilns and a short railroad for delivery to the main line.

The Tulare Mining Company, Tulare County, stopes the magnesite exposed in underground workings, and calcines the product.

A number of owners have carried on development work, and it seems assured that a much greater demand can easily be met by the various California deposits.

The principal uses at the present time include: refractory linings for basic open-hearth steel furnaces, copper reverberatories and converters, hullion and other metallurgical furnaces; in the manufacture of paper from wood pulp; and in structural work, for flooring, wainscoting, tiling, sanitary kitchen and hospital finishing, etc. In connection with building work it has proven particularly efficient as a flooring for steel railroad coaches, on account of having greater elasticity and resilience than "Portland" cement. For refractory purposes, the magnesite is "dead-burned"—i. e., all or practically all of the CO_2 is expelled from it. For cement purposes it is left "caustic"—i. e., from 5

per cent to 10 per cent of CO_2 is retained. When dry caustic magnesite is mixed with a solution of magnesium chloride (MgCl_2) in proper proportions, a very strong cement is produced, known as oxychloride or Sorel cement.** "It is applied in a plastic form, * * * which sets in a few hours as a tough, seamless surface. It has also a very strong bonding power, and will hold firmly to wood, metal, or concrete as a base. It may be finished with a very smooth even surface, which will take a good wax or oil polish. As ordinarily mixed there is added a certain preparation of wood flour, cork, asbestos, or other filler, thereby adding to the elastic properties of the finished product." Its surface is described as "warm" and "quiet" as a result of the elastic and nonconducting character of the composite material. The cement is usually colored by the addition of some mineral pigment to the materials before mixing as cement.

The desirable qualities of any flooring material (cost not considered) are listed for purposes of analysis or comparison under eighteen heads, as follows: Cleanliness, (sanitary qualities), quietness, immunity from abrasion (surface wear), resilience, immunity from slipperiness, appearance, waterproof character, plasticity, warmth (thermal insulation), life (immunity from deterioration with age), acid-proof character, alkali-proof character, fire resistance, elasticity, crushing strength, structural strength (rupture), immunity from expansion and contraction, and lightness. The importance of these several qualities varies with the varying requirements to be met; for instance, in some places, as in hospitals, cleanliness is one of the prime considerations; in other places immunity from abrasion might be one of the principal requisites. As to most of these qualities the conclusion is reached that the magnesia cement affords one of the most satisfactory flooring materials for many purposes such as in kitchen, laundry, toilet, and bath rooms, corridors, large rooms or halls in public or other buildings, including hospitals, factories, shops and restaurants.

There is no doubt that the material is steadily coming into more general recognition and favor for these uses. For a few special uses it is more or less disqualified; as an instance, it is not suited for construction of swimming tanks or for conditions of permanent wetness, since under constant immersion it gradually softens, although it is said to withstand intermittent wetting and drying and is recommended for

shower baths. Naturally it is not acid-proof and not wholly alkali-proof which might be a disadvantage in its use for laboratory floors and tables; but these are rather special requirements. Its cost per square foot is given as 1 to 33 cents, depending on area, which is estimated to be lower than marble, cork, rubber, clay or mosaic tile, slate or terrazzo, although more expensive than wood, asphalt, linoleum, or Portland cement.

In the discussion of the subject the causes of failure are ascribed to uncertain climatic changes, lack of uniformity in the mixtures used, lack of care on the part of those handling the materials, possible deterioration of materials used through exposure (either before or after mixing), lack of proper preparation of foundations on which the material is to be laid, and as a very important factor, experience or nonexperience in the manipulation or actual laying and troweling of the material. Data concerning the percentages of magnesium chloride and ground calcined magnesia and data concerning the character and quantity of filler and color added to the commercial preparations are naturally guarded as trade secrets by the firm already in the business. The examination and standardization of the materials used, and of acceptable filler materials, and the establishment of standard proportions for the mixture would seem to be about the only satisfactory way of attacking the problem.

The condition of the calcination of magnesite for cement uses is important, as the same material may undoubtedly be very greatly varied in its reacting properties by different treatment in the kiln. It is generally agreed that the magnesite for cement use must be comparatively free from lime, as lime has a greater tendency to reabsorb water and carbon dioxide than the magnesia, thereby causing swelling, and is therefore not so permanent in the completed cement as pure magnesia material. The filler used may constitute 10 to 40 per cent of the whole cement, and common consist of ground marble, sand, sawdust, cork, asbestos, or other material. As an example of the formulas used in mixing cements the following is quoted:***

Mixtures for the Underlying or Coarse Layer

[Parts by weight.]

1. 15 parts magnesia.
10 parts magnesium chloride solution, 20 deg. Baume.
10 parts moist sawdust.
(Sets in 36 hours.)
2. 10 parts magnesia.
10 parts magnesium chloride solution, 28 deg. Baume.

**In this summary of the uses and properties of magnesia cement we have drawn freely from the following references:

Eng. Soc. Western Pennsylvania Proc., 1913, vol. 29, pp. 305-323, 418-444.
U. S. G. S. Mineral Resources, 1913, Part II, pp. 450-453.

*From "Mineral Production for 1914" by Fletcher Hamilton, State Mineralogist, Bulletin No. 70 of California State Mining Bureau.

***Scherer, Robert, Der Magnes sein Vorkommen, seine Gewinnung und technische Verwertung, pp. 216-217, Hartleben's Bibliothek, Wien und Leipzig, 1908.

Structural Materials in California.*

By Fletcher Hamilton, State Mineralogist

Magnesite Continued

- 5 parts sawdust.
(Sets in 16 hours.)
- 24 parts magnesite.
- 15 parts magnesium chloride solution, 20 deg. Baume.
- 3 parts ground cork.
(Sets in 24 hours.)
- 5 parts magnesite.
- 3 parts magnesium chloride solution, 20 deg. Baume.
- 5 parts ashes.
(Sets in 24 hours.)

Recipes for Overlaying or Surface Layers.

- [Parts by weight.]
- 40 parts magnesite.
- 23 parts magnesium chloride solution, 19 deg. Baume.
- 10 parts asbestos powder.
- 5 parts wood flour.
- 1 part red ochre.
(Sets in 24 hours.)
- 25 parts magnesite.
- 23 parts magnesium chloride solution, 20 deg. Baume.
- 4½ parts wood flour, impregnated with ½ parts Terpentinhazlosung.
- 15 parts yellow ochre.
(Sets in 30 hours.)

The magnesite used is, as explained, fine ground calcined (not deadened) of certain specific kinds or of derivation regularly sold for plastic purposes. This material mostly comes in paper-lined casks, keels or boxes, in which form it is permanent, but it deteriorates exposure, absorbing carbonic acid moisture from the air. If carefully dried it can probably be kept undamaged a year or more, but it should be used with a few weeks after being dried, even under most favorable conditions.

In considering mineral production the value of the crude material is used far as practicable. Magnesite presents a peculiar example of a material which is seldom handled on the market the crude state. It is calcined and used before being considered marketable. The value of the calcined magnesite varies, the San Francisco price for 1914 averaging \$25 to \$30 per ton, which figure includes about \$4 ton freight. From two to two and a half tons of the crude material are used to make one of the calcined. From this derivation we have arbitrarily figured the value of the crude production, for 1914, on a basis of \$10 ton at the mine.

Magnesite products have been found to be highly satisfactory and growing popularly, and the future for this industry appears to be bright. A large supply is already known to exist in California, and only a sufficient demand and cheaper transportation are lacking to make this an item of consequence in the mineral total of the State.

As indicated by this chapter heading, the mineral substances herein considered are those more or less directly used in building and structural work. California is independent, so far as these are concerned, and almost any reasonable construction can be made with materials produced in the State. This branch of the mineral industry for 1914 was valued at \$14,469,981, showing a decrease from 1913 like many other lines, owing to the financial depression. Only a few years ago its value was of no significance in considering the total mineral production of the State. With the growth, in population and otherwise, of California, this subdivision of the mineral industry in the State will increase indefinitely. Deposits of granite, marble and other building stones are distributed widely throughout the State, and slowly but surely transportation and other facilities are being extended so that the growing demand may be met. The largest single item, cement, has an unparalleled record of growth since the inception of the industry in California twenty-three years ago. Not

until 1904 did the annual value of cement produced reach the million-dollar mark. It increased 500 per cent in nine years. Crushed rock production is yearly becoming more worthy of consideration, due to the strides recently taken in concrete building, as well as to activity in the building of good roads. Brick, with an annual output worth over \$2,000,000, is slowly decreasing, due to the popularity of cement and concrete; nevertheless, this item will be an important one for many years to come, and of course, a market for fire and fancy brick of all kinds will never be lacking.

The following table gives the comparative figures for the value of structural materials produced in California during the years 1913 and 1914. Forty-four counties contributed to this total, and there is not a county in the State which is not capable of a considerable output of at least one of the following classes of material.

A comparison of the annual production of the various structural materials in 1913 and 1914 is shown in the following table:

Substance	Value 1913	Value 1914	Inc. value	Decrease value
Bituminous rock	\$ 78,479	\$ 106,618	\$58,139	.....
Brick	2,915,350	2,288,227	.....	\$ 627,123
Cement	7,743,024	6,558,148	.....	1,184,876
Chrome	12,700	9,434	.....	3,266
Lime	528,547	378,662	.....	149,884
Magnesite	77,056	114,350	37,294	.....
Marble	113,282	48,832	.....	64,450
Sandstone	27,870	45,322	17,452	.....
Stone, miscellaneous	6,168,020	4,860,357	.....	1,307,663
Totals	\$17,664,328	\$14,469,981	.....	.....
Net decrease .....	.....	.....	.....	\$3,194,347

CEMENT.*

By Fletcher Hamilton, State Mineralogist.

Cement is one of the most important structural materials in the output of the State. During 1914, there was produced a total of 5,109,218 barrels, valued at \$6,558,148. This production comes from six counties, as follows: Contra Costa, Napa, Riverside, San Bernardino, Santa Cruz and Solano. There were seven plants operating, employing 2,634 men. The enlargement of this industry, of course, depends upon the growth of the surrounding communities, and a summary of the lime and clay deposits of the State shows that considerable enlargement would not be impossible.

"Portland" cement was first commercially produced in the State in 1891; though in 1860 and for several years following, a natural hydraulic

cement from Benicia was utilized in building operations in San Francisco. While the total figures are not of the same magnitude as those for gold and petroleum, the growth of the industry has been more rapid, and a comparison of the annual figures representing the output since the inception of the industry is of interest.

OIL DISPLACES COAL.

Owing to the great output of petroleum in California and its use as a manufacturing, railroad, and steam fuel, the production of coal in Washington has been considerably reduced during recent years. It is estimated that the consumption of California oil for fuel on the Pacific Coast is equivalent to about 21,000,000 tons of coal, or between 6 and 7 times the output of coal in Washington, or for that matter in all the Pacific Coast States combined, in 1914.

*From "Mineral Production for 1914" by Fletcher Hamilton, State Mineralogist, Bulletin No. 70 of California State Mining Bureau.

News From the California State Commission.

STATE CORPORATION DEPARTMENT

While Commissioner of Corporations H. L. Carnahan will permit shares to be issued by a corporation in exchange for an unpatented invention where the inventor has made application for patent, and desires to secure financial aid to develop his idea, permits authorizing such issues are drawn in such a manner as to safeguard the public as far as possible.

In every case of this character, the permit requires that the certificates evidencing shares so issued shall be void and must be cancelled if the inventor fails to secure Letters Patent covering his process or invention. Meanwhile, the certificates must be deposited as an escrow pending the proceedings before the Patent Commissioner.

In the case of Hendricks Copper Process Company, an Oakland corporation, the Commissioner authorizes the issue of 46,500 shares to Geo. P. Hendricks and Dr. R. L. Jump in exchange for the Hendricks process for hardening copper, with the provision that the shares be held as above indicated, and further that they be withheld from sale until the company shall have accumulated surplus profits sufficient for the payment of an annual dividend of not less than 10 per cent upon all shares outstanding. The company is further permitted to sell 1,670 shares to certain individuals who signed an application setting forth the fact that they were thoroughly familiar with the affairs of the company and experimental nature of its enterprise and desired to invest.

Similar conditions were imposed in permitting the Resilient Auto-Wheel Company, a Nevada corporation, capitalized at 1,000,000, to sell a limited number of shares at the price of 25c per share for the purpose of raising funds with which to conduct further experiments in the perfection of an invention on which application has been made for Letters Patent. The company is allowed to issue one share of stock to the inventors for each share sold for cash, thus giving them control of the company at all times. All of the shares issued to the inventors, and 17,500 shares permitted to be issued to investors prior to incorporation at a price less than 25c, must be deposited as an escrow until patents are allowed and until the company is in a position to pay 10% dividends.

Cinco Mining Company, owning a number of unpatented copper mining locations in Sierra County and lease and option to purchase quartz claims at Poker Flat, Sierra County, has been permitted to sell 250 shares at par, 100 per share, to net the company the full amount of the selling price. The permit requires 745 shares previously issued in payment for its properties to be held in escrow pending the financing of the company.

Porterville Magnesite Co. of California is permitted to issue 350 shares of preferred stock and 645 shares of common stock to C. S. Woody and H. S. Doyle in exchange for certain property and contracts for the construction of a plant upon the condition that the shares shall be deposited and held as an escrow pending the further order of the Commissioner, and that they shall not be sold or offered for sale without the consent of the Commissioner.

Dodge Rice Co., San Francisco, which proposes to operate in rice lands in Northern California, is permitted to sell 5,000 shares at par, \$100 per share, to net 100 per cent.

The Kings Hospital, Los Angeles, which proposes to erect a large one story hospital at 43rd and Normandy streets, Los Angeles, to cost approximately \$40,000, and to operate it and a nurses' home in connection with it, has made application for permission to sell 75,000 shares at par, \$1 per share, to net the company not less than 80 per cent of the selling price.

Standard Diving Company, San Francisco, formed to exploit a newly invented deep sea diving dress and air pump, is permitted to issue 680 shares to Lewis Larson, Cyrus Deckelman and Robert Caporgno, who financed the inventors, to issue a like number of shares to Jean E. Dera, Arthur P. Freeman and Charles Liebrecht, owners of the inventions and to sell 1,000 shares at par, \$10 per share, issuing an additional share to the inventors for each share sold for cash. It is required that all the share permitted to be issued except the 1,000 to be sold for cash, shall be withdrawn from sale during the financing period.

Concordia, a San Francisco club, has made application for permission to sell \$175,000 bonds to its members for the purpose of renewing and extending \$150,000 bonded indebtedness outstanding and to meet new building obligations. The bonds are subject to a first mortgage of \$85,000 upon the club property on Van Ness avenue. They bear 5 per cent interest and mature November 1, 1935.

California Profit Sharing Oil Company of Los Angeles makes application for permission to issue 5,000 shares to T. W. Phillips, 500 to J. A. Bangs, 10,000 to Geo. W. Thomas, 17,250 to C. W. Fox and 17,250 to D. C. Graham, in exchange for 20 acres of land in Ventura County, together with certain oil drilling equipment. The company proposes to split this property into 2,000 lots to be sold to the public, the purchasers to share in the product of an oil well to be drilled on the property if oil is found.

Briceland Oil Co. makes application for permission to issue certain shares to California and Oregon Oil Co. of New York. The company proposes to drill for oil on leased land in Humboldt County.

Porterville Alfalfa Farm, Inc., makes application to sell 550 shares at par \$100 per share, to stock its property in Tulare County and erect additional buildings and install dairy equipment.

APPELLATE COURT.

A decision of state-wide importance has been handed down by the Third District Appellate Court, being to the effect that proceedings in street improvement work are not subject to the initiative and referendum.

In writing the decision which was made on rehearing of the case of Edwin M. Chase vs. F. J. Kalber, town clerk of Rio Vista, Justice Hart changed his views. His first decision in the case was that the proceedings are subject to the initiative and referendum. In his last opinion, Justice Hart emphasizes that, were street improvement proceedings subject to the initiative and referendum, a bond issue for street work could be held, a resolution establishing grade or providing for improvement of a certain street could be knocked out and other proposed street work be demoralized.

It is pointed out that the person directly concerned in street improvement are the owners of property along the street and if they desire to have the street improved, no power should be given by which the rest of the city could stop the work. If property owners do not desire a street to be improved there is a provision in the law by which they can hold up the proposed improvement for a period of six months.

OIL POSSIBILITIES IN ROSEBUD COUNTY, MONT.

Requests for information concerning possible occurrences of oil and gas in Montana are frequently received by the Geological Survey. Partly to meet this demand for information and partly because much attention has been attracted to the possibilities of striking oil in the Porcupine Dome, the United States Geological Survey has published a Bulletin 621-F, a report on the possibilities of obtaining oil in that locality.

An examination of the territory by C. F. Bowen has shown that the structural and stratigraphic conditions are favorable to the accumulation of oil and gas if these substances were originally contained in the strata, but it has no proved their existence in the area examined. In fact, there are no known surface indications of oil or gas in the area, and there is no well except a deviated well drilled for water at Vananda that would test whether or not they occur below the surface.

A copy of this report may be obtained free on application to the Director of the Geological Survey, Washington, D. C.

Technical Societies.

SAN FRANCISCO ASSOCIATION OF MEMBERS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.

Officers for 1915.

President—A. M. Hunt.
Vice-Presidents—H. L. Hachl, M. C. Couchot.

Secretary—E. T. Thurston, Jr.
Treasurer—P. E. Harroun.

Board of Directors—M. C. Couchot, L. Hachl, A. M. Hunt, P. E. Harroun, T. Thurston, Jr., C. H. Snyder, C. B. Ing.

Weekly luncheons in College Room, Mirrau Cafe, Wednesdays at 12:30. Engineers welcome; Informal; no program.

Regular meetings are held bi-monthly at such time and place as may be appointed by the board of directors. The established custom is to meet on the third Fridays of February, April, June, August, October and December. Address E. T. Thurston, Secretary, Mechanics' Institute Bldg., Post Street, San Francisco.

SAN FRANCISCO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

233 Post Street.

President—W. B. Faville.
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Monthly meeting the third Thursday.

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One vacancy.

SAN ANGELES AND SOUTHERN CALIFORNIA.

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AMERICAN INSTITUTE ELECTRIC ENGINEERS—Los Angeles Section.

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Secretary.....C. G. Pyle
1st. Secretary.....Edward Woodbury
EXECUTIVE COMMITTEE—J. A. Philp, J. E. Barker, Geo. A. Damon, W. Nye.

Regular meetings third Tuesday in each month. Address all communications to C. G. Pyle, Secretary, Standard Underground Cable Co., 914 Hibernian Bldg., Los Angeles.

ENGINEERS AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.

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DIRECTORS—Arthur S. Bent, J. J. Backus, A. C. Martin, Kenneth Shibley.
Regular monthly meetings as arranged by program committee. Address all communications to H. Z. Osborne, Jr., Secretary, care City Engineer's Office, Los Angeles.

AMERICAN INSTITUTE OF ARCHITECTS—SOUTHERN CALIFORNIA CHAPTER.

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Vice-President.....S. Tilden Norton
Secretary.....Fernand Parmentier
Treasurer.....August Wackerbarth
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Regular meetings second Tuesday evening each month. Address all communications to A. R. Walker, Acting Secretary, 1403 Hibernian Building.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS—Los Angeles Section.

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Secretary.....Ford W. Harris
EXECUTIVE COMMITTEE—W. H. Adams, Ford W. Harris, O. J. Root, W. W. Smith, Paul Weeks.

Address all communications to Ford W. Harris, 1029 Higgins Bldg., Los Angeles.

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President.....Geo. F. Pennebaker
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Secretary-Treasurer.....F. C. Ayars
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Address all communications to Frank C. Ayars, Secretary, 505-6 Douglas Bldg., Los Angeles.

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Address all communications to Fred K. L. Roehrig, Secretary, 721 American Bank Bldg., Los Angeles.

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BUILDERS ASSOCIATION OF SAN DIEGO—Second Floor K, or P. Bldg., Corner Third and E Streets, San Diego.

President.....Wm. R. Weckerly
Vice-President.....Chas. Kelly
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DIRECTORS—Wm. R. Weckerly, Chas. Kelly, Max Winter, D. J. Miller, Robt. Houghton, H. V. Wenger, R. M. Gilson.

Address all communication to D. J. Miller, Secretary, Builders' Association, Second Floor, K. of P. Bldg. San Diego.

SAN DIEGO ARCHITECTURAL ASSOCIATION.

President.....J. B. Lyman
Vice-President.....Charles Cressy
Secretary.....Robt. Halley, Jr.
Treasurer.....G. A. Hansen
Monthly luncheon at Rudder's first Monday each month. Address all communications to Robt. Halley, Jr., 314 Union Bldg., San Diego.

PERSONAL.

PERSONAL

S. J. Van Ornum, Civil Engineer, is supervising the street paving work being done for the city of Gridley by Clark & Henery Construction Co. of Stockton.

At the last meeting the Town Trustees of Morgan Hill, Santa Clara County, appointed Henry B. Fisher of San Francisco as engineer in charge of the improvement of Monterey street, between the improved parts of the state highway to the north and south.

WORK, SAYS EDISON IS SUCCESS SECRET.

Thomas A. Edison and Henry Ford joined in giving the young men of this country advice on how to succeed.

"There is only one formula in my success cabinet," said Edison slowly, a twinkle in his eye. "That is make yourselves so dog gonned valuable to your boss that he wouldn't fire you for the word."

Ford said:

"One word embraces my rule for success and that is 'work.' Any young man who works in this country and works in the right direction can make a success of his life."

Mr. City Official:

A proposal ad in the "Building and Engineering News" will bring you inquiries and real competition on your public work; that's what you want!

American Builders' Congress.

Staff Article

The Builders' Congress which convened in the Palace Hotel Tuesday the 19th is one of the most important of the many noteworthy gatherings that have assembled in this City during the Exposition year. Every builder and every contractor that could be present at the various sessions was in attendance. We congratulate the building industry of San Francisco on having brought together at this time so representative a body of men as constituted this first National Congress of American Builders.

In immediate evidence of the splendid results obtained and the bright prospects for the future, Mr. Sturgis, who was on his way back to Boston from a meeting of the architects at San Francisco, came back from San Diego for the sole purpose of delivering an important message to the Builders, and Mr. Lewman came here direct from Louisville on purpose to do his part toward making the Builders' Congress in San Francisco a signal event in the history of the industry.

Another speaker of hardly less eminence in the building circles of America is Charles W. Gindele, President of the Building Construction Employers' Association of Chicago, an institution that has done more than any other by its thoroughly business like organization and its firm stand for justice and equity in the relationship of employer and employee, to bring about and perpetuate proper working conditions in Chicago.

TUESDAY, OCTOBER 19.

The opening session of American Builders' Congress, held Tuesday morning at the Palace Hotel, was very well attended there being about 500 representative Architects and Building Firms in attendance.

W. B. Faville, President of San Francisco Chapter A. I. A., presided at the opening session.

Arthur Arlett presented Governor Johnson, compliments and greetings. Ed. Rainey spoke for Mayor Rolph and President of the Panama-Pacific International Exposition.

In introducing Mr. Sturgis to the audience, President W. B. Faville said:

"It is a pleasant privilege that has been assigned to me this morning of presenting to the great body of Master Builders and Artisans, the President of the Architectural Profession.

He comes from the Eastern horizon of our great Country to review the two pages of history which the Architects and Builders have created within the last few years.

These pages of history have been made by the combined efforts of the Architects, who have visualized the work, and the Builders and Artisans, who have brought these visions into reality.

The first page of history is that of the City itself, freshly arisen from its devastation, the story that it tells in its erection of building after building and stone upon stone is of the honesty and integrity of the Country which has

created it. It is not built as well as the best thoughts of the Country but it is built much better than the poorest expression of the Country and it is the result of our daily method of living.

The second page of history is that of the Exposition, a City of a thousand glitters of Architectural magnificence and the Poetry which is of the highest expression of ourselves.

It is because of these two pages of history written by the business of Architecture and the "Art" of Building, which go hand in hand and back to back that the message from the East will be of vital interest to you; it is a happy co-incidence which has brought the President of the American Institute of Architects—Mr. R. Clipston Sturgis to address you this morning."

The principal address of the morning session was delivered by R. Clipston Sturgis, President of the American Institute of Architects, Boston, Mass.

Mr. Sturgis took for his subject, "Co-operation" on the basis of success between the Architect, Contractor and Sub-Contractor. Mr. Sturgis pointed out the work done by the American Chapter of Architects in the matter of formulating a uniform contract and invited his hearers to study that document and to give the Chapter of Architects the benefit of any suggestions for the betterment of that instrument.

At the close of the morning session a luncheon was served to the invited guests. Among them being the following: R. Clipston Sturgis, President A. I. A.; W. B. Faville, President S. F. Chapter, A. I. A.; L. P. Rixford, Architect, Wm. Coxhead, Architect, George William Kelham, Architect, J. D. McGilvray, Chairman General Committee, H. L. Lewman, President National Association American Builders'; Chas. Wm. Bostrom, A. E. Coleman, Chas. G. Fanning, C. W. Gindele, E. C. Kimball, J. B. Noelle, Delegates from Chicago; A. H. Bergstrom, President General Contractors' Association, S. F.; E. M. Tate, Pittsburgh Builders' Exchange; H. Maundrell, President Builders' Exchange, S. F.; G. Alexander Wright, Architect and President of American Quantity Surveyors; Henry Jacks, C. M. Elliot of Local Committee, Willis Polk, W. H. Crim, Architect; E. T. Thurston, Secretary General Committee; Wm. Hague, Secretary General Contractors' Association; Ralph McLeran, General Contractors' Association.

The afternoon session, presided over by Chairman Ralph McLeran, was even better attended than the morning. United States Senator James D. Phelan addressed the meeting and paid a glowing tribute to the men who rebuild the city.

H. L. Lewman of Louisville, Ky., President of the National Association of Builders' Exchanges delivered an address on National Organization in the Building Industry. Including all who are interested in any manner in the construction of buildings as The Builder. Mr. Lewman brought out in a forceful manner the great need of organized co-operation. Co-operation between the various local, state

and national associations was pointed out as of the greatest benefit. Mr. Lewman as one of the founders of the



PRES. H. L. LEWMAN NATIONAL ASS'N OF BUILDERS' EXCHANGES

National Association told of its organization its purpose and of the many ways in which such an organization benefited all those engaged in construction.

He was given careful attention and at the close of the address was greeted with a wealth of applause.

Using his native city of Chicago as an illustration, Charles W. Gindele, President of the Building Construction Employers' Association of Chicago addressed the meeting on the subject of "The Building Business as a Factor in the Commercial Life of the Country." His remarks were witty and he soon secured and held the attention of his audience. Mr. Gindele has taken a leading part in building activities in Chicago and has witnessed that city in its growth, witnessed its struggle, and finally its complete recovery from the fire of 1871. Could a better or more competent man been assigned to the subject? Throughout his remarks, Mr. Gindele stuck to Chicago as his illustration and brought his audience through the days following the fire to his climax with Chicago as America's second greatest city.

Tuesday's program concluded with the Grand Ball at the Municipal Auditorium starting at 8:30 P. M. and continuing until long past midnight. Without a doubt it was an evening that will be long remembered by all who attended and will go down as the most successful social event of American Builders' Week.

WEDNESDAY, OCTOBER 20.

Wednesday morning's program for Builders' Week provided by a Bay excursion, which a number of the out

own guests and a large number of builders enjoyed despite the cold. The afternoon's program included one of the most interesting papers of the congress and was held in the Hall, Festival Hall at the Exposition Grounds. Only a limited number were present, however, causing the omission of Mr. Lewis R. Ferguson's paper on "The Fireproof Value of Concrete," until Thursday afternoon. Walter E. Dennison, Second Vice-President National Terra Cotta Society, read a paper on "Clay Products in Their Modern Application," which was well received. Chairman Maundrell asked that a copy be filed and a paper be printed in its entirety.

John B. Lepnard, who was to have read on "Metal Products as Applied in Building," is ill and forced to remain at home.

Willard Doane, National Board of Fire Underwriters, read an excellent paper on "The Economic Side of Fire Prevention." He presented the matter in clear and concise words and his method of showing the vast amounts of loss each year by fire greatly interested his audience. Throughout he advocated Prevention. Following his paper was a general discussion in which Mr. Lewis R. Ferguson and Mr. George Alexander Wright participated.

THURSDAY, OCTOBER 21.

Thursday was "Builders' Day" at the Exposition, the greater part of the day being consumed by the passing of the monster parade from the Exposition Building through the Exposition Grounds. After the parade had passed and the reviewing stand commemorating medals were presented to H. L. Hanson, President of the National Association of Builders' Exchanges; A. J. Westrom, President of the General Contractors' Association, San Francisco; and H. Maundrell, President of the Builders' Exchange, San Francisco. The afternoon session, held in Festival Hall, was much better attended than Wednesday's session, and was presided over by Chairman P. J. McNear. A reception for the ladies was given during the afternoon in the California Building.

The first speaker in Festival Hall was Lewis R. Ferguson, Assistant Secretary National Association of Portland Cement Manufacturers, whose paper on "The Fireproof Value of Concrete" had been postponed from Wednesday's meeting. Mr. Ferguson is thoroughly familiar with his subject and proved of much interest to the audience. His talk was fully illustrated with lantern slides showing the results of fire at the big Edison plant and the methods used in making ready to the concrete columns, beams and slabs.

Mr. Fee, President of Building Employers' Association of San Francisco, and introduced by Chairman Hanson, was "also the ideal of both the nation and the Exchange," was the next speaker. His subject was "Efficient Conduct of Building Operations." All who know Mr. Fee in his business ability admit that a suitable man could not have been selected to such a topic. He spoke of slides made each succeeding year

in mechanical equipment, design and methods of construction and illustrated this by reference to the Woolworth Building, New York, the Panama Canal, the rapid construction of our Exposition and of the Twin Peaks Tunnel.

"Such progress, however," said Mr. Fee, "has not been made in our system of estimating and indeed I doubt if a single step forward has been taken in this line of work in the last twenty years." He then proceeded to show the importance of efficiency in this department of the contractor's office and was loud in his praise of Architect G. Alex. Wright, one of the pioneers in advocating the establishment of a quantity surveyor system. Among other of Mr. Fee's suggestions bearing on this subject was that of securing state legislation looking to the creation of licensed quantity surveyors by the state. Mr. Fee was greeted with loud applause at the conclusion of his speech.

"Bonding the Builder" was the subject of a paper read by Henry J. Jacobs, Attorney for the California Building Laws Association. He treated the legal side of the subject and was carefully followed by the audience.

Architect George William Kelham, Chief of Architecture of the Panama-Pacific International Exposition, was the last speaker, his subject being "Opening Bids in Public." Mr. Kelham was warmly received. His remarks were extemporaneous and included both sides of the subject so important to every contractor. He is heartily in favor of such a practice as opening bids in public and offered several excellent suggestions.

"Let the contractors appoint a delegation to attend any meetings at which bids are to be opened either by an architect or owner or by both. Don't let sixty or eighty contractors go. Send a committee." This was one suggestion and the second had to do with the much troubled question of sub-contractors' bids. "If," said Mr. Kelham, "each general contractor will accompany his bid with a list of his sub-contractors, for one will be only too glad to adopt the idea of opening bids in public."

The evening session included a special display of lighting and fire works, receptions and entertainment in the California building.

THE PARADE.

The public had been promised a novel and unusual parade with many wonders and the Parade Committee, headed by Edward J. Brandon, and assisted by Parade Director Col. George L. Hutchin, made good, for not one of the promised features was missing.

Headed by a platoon of Mounted Police and consisting of eighteen divisions, the parade left the foot of Market street promptly at 10:30 o'clock. The line of march was out Market street to Golden Gate avenue, thence to Van Ness avenue, thence south on Van Ness to Market, counter marching on Van Ness to the Van Ness entrance to the Exposition and through the Zone to the Avenue of Palms, passing the reviewing stand by the Fountain of Energy and disbanding outside of the Scott street entrance.

Representatives from Sacramento,

San Jose and throughout Alameda County were present. Sacramento's delegation, consisting of over 150 was accompanied by a large float called "Sacramento's Skyline."

FIRST DIVISION.

Platoon of Mounted Police.
Coast Artillery Band.
Chief of Police and Staff.
Grand Marshal—Edward J. Brandon.
Governor Hiram Johnson.
Mayor of San Francisco—Jas. Rolph Jr.
Parade Director: Geo. L. Hutchin.
Assistant Parade Directors: Chas. F.



PARADE DIRECTOR, G. L. HUTCHIN

Seitz, C. F. Pratt.
Chief Aids to Grand Marshal: W. H. George, Frank J. Klimm.
Aids to Grand Marshal:
L. A. Taylor, 110 Jessie St.
Morris Dillon, 150 Jessie St.
C. J. Powers, 180 Jessie St.
W. S. Hanbridge, Rialto Bldg.
Emil Hogberg, 180 Jessie St.
Thomas Carroll, 180 Jessie St.
Jas. A. Wagner, 352 Church St.
Henry Gervais, 1727 Mission St.
Captain Fulford, 301 Mission St. (Cr.
W. P. Fuller & Co.)
Harry Walker, 1011 Franklin, Okd.
John P. Cleese, 15th and York Sts.
Col. O. W. Stoner, 110 Jessie St.
W. W. Dennis, Monadnock Bldg. (Cr.
McNear & Co.)

John Grant, 544 Market St.
Col. Ed Hunt, 1011 Franklin, Oakland
Chalmers Munday, Clunie Bldg.
Geo. S. McCallum, Call Bldg.
Nelson Hope, 1597 Treat Ave.
Chas. Haggen, 110 Jessie St.
J. J. Punston, 116 Natoma St.

SECOND DIVISION.

Marshal—Geo. S. McCallum.
1. Exposition Officials.
2. Board Harbor Commissioners.
3. Board of Supervisors.
4. Board of Public Works.
5. City Engineer.
6. Chief Building Inspector.
7. Invited Guests and Delegates.
8. Delegates to Convention.

9. Newspapers:
Daily Pacific Builder.
Architect & Engineer.
McGraw Publishing Co.

THIRD DIVISION.

Architects.
Band.
General Contractors' Association of
San Francisco, 75 Decorated Autos.
Band.
General Contractors' Association of
San Francisco, 75 Decorated Autos.

FOURTH DIVISION.

Marshal—P. N. Winlund.
Oakland Band.
Float.
Members of Oakland Builders' Ex-
change and General Contractors'
Association of Oakland in Automob-
iles.

FIFTH DIVISION.

Marshal—J. Harry Wygant
Sacramento Band.
Contractors and Material Men of Sac-
ramento in automobiles (25 ma-
chines).
Float—"Sky Line of Sacramento."

SIXTH DIVISION.

Grading and Teaming.
Marshal—Arthur Sibley.
"Jerry," the horse that hauled the
first load of sand at the Midwinter
Fair.
Teams.
5 Auto Trucks, Etc.

SEVENTH DIVISION.

Rock, Sand and Gravel et al.
Marshal—John Cox.
John Cassaretto, 1 Float.
Bay Development Co., 1 Float.
Grant Gravel Co., 1 Float.
Pratt Building Material Co., 1 Float.
Peerless Auto Truck Co

EIGHTH DIVISION.

Cement and Concrete Industry.
Marshal—Alfred Durbrow.
Cowell Band.
Float—Largest sack of Cement.
Cowell's 4 Autos.
Standard Portland Cement Co.
Float—Concrete Mixer in action
Norris K. Davis.
Float—Paint Products Co.
Float—L. A. Taylor White-Washing
Machine.
Float—Dampproofing machine in
action Reigle & Jamieson.

NINTH DIVISION.

Housesmiths.
Marshal—H. J. Ralston.
Float—Tower of Jewels, Dyer Bros.
Float—Heating Rivets, Geo. Cram.
Float—Iron Products and 2 machines,
Blenio Guido.
Float—Kortick-Falls Mfg. Co.
Float—Pacific Rolling Mills.
Float—Central Iron Works.

TENTH DIVISION.

Band.
Masons and Builders.
Marshal—Walter N. Reed.
Float—Bricklaying Contest—Senator
"Bill" Scott and Councilman "Billie"
Baccus of Oakland.
Practical Tile Kiln in Operation.
Atlas Mortar Co., 2 Floats.
California Brick Co., 1 Float.

Western Lime & Cement Co., 1 Float.
Stockton Fire & Enameled Brick Co.,
1 Float.
Gladding McBean, 1 Float.
Clark & Son, 1 Float.
Members Masons' & Builders' Asso-
ciation in Austo (20 machines.)

ELEVENTH DIVISION.

Lathers and Plasterers.
Marshal—J. J. Connolly.
Float—Lathers.
Float—Atlas Mortar Co.
Members of Plasterers' Association.
(In automobiles.)
Holloway Expanded Metal Co., 1
Float.
Members of Lathers' Association.
(In automobiles.)
Arden Plaster Co., 1 Float.

TWELFTH DIVISION.

Marble, Stone and Granite Industries.
Marshal—J. F. Williams.
Vermont Marble Co., 1 Float.
J. D. McGilvray Stone Co., 1 Float.
Joseph Musto Sons-Keenan Co., 1
Float.

THIRTEENTH DIVISION.

Lumber, Planing Mills, Etc.
Marshal—G. H. Cunningham.
Float—Pope & Talbot, \$5 ft. timber
drawn by traction and trailer.
Float—Krusse—5 Floats and Autos.
Float—Inlaid Floor Co.
Float—Sockoloff.
Anderson Bros., 1 Float.
Hauptman Lumber Co., 1 Float.
Hammond, 1 Float.
Planing Mill Owners, 20 Machines.
J. D. Hannah, Fine Arts Building.

FOURTEENTH DIVISION.

Plumbers.
Marshal—Alex Coleman.
Float.
Members Plumbers' Association, in
Automobiles.
Furnace and Heating Trades in
Automobiles.

FIFTEENTH DIVISION.

Sheet Metal and Roofers.
Marshal—H. J. Hughes.
Paraffine Paint Co.
Pioneer Paper Co.
Zellerbach Paper Co.
Malott & Peterson.
Johns-Manville, Motor Truck and 4
machines.
Jas. Cantley & Co., 1 Float, 1 Machine
U. S. Metal Products, 1 Float.
Fibrestone & Roofing Co., 1 Float.

SIXTEENTH DIVISION.

Electrical Division.
Marshal—Felix Butte.
Central Station Float.
The Jobbers Float.
The Contractors' Float.
The Manufacturers Float.
Cal. Electrical Contractors & Dealers
in Autos. (30 machines).

SEVENTEENTH DIVISION.

Master Painters and Decorators.
Marshal—C. B. Savig.
Fuller Float.
Master Painters' and Decorators' As-
sociation in Autos.
Cal. Plate Glass Window Co., 1 Float.

EIGHTEENTH DIVISION.

Building Material Exhibits.

Marshal—A. J. Mitchell.
Float—Cleopatra at the Bath.
Float—Clawson Co.
Float—W. D. Henderson.
Float—Joost Bros.
Float—John P. Cleese Co.
Float—Otis Elevator Co.
Float—Marshall-Stearns.
Float—Albert J. Mitchell.
Lighting Fixture Club in Autos.

FRIDAY, OCTOBER 27.

Friday's program for American
Builders' Week included a morn-
ing auto trip for visiting contractors, for
machines being used. Among other
the party included Ralph P. Taylor,
M. Tate, Charles G. Fanning, W.
Blaising and O. G. Hughson.

The afternoon session, held in the
Palace Hotel, was exceptionally well
attended and included the following
excellent papers: "The Building and
Maintenance of Good State Highways
and Bridges," by A. E. Loder, Di-
vision Engineer, California Highway
Commission.

"Men Who Build and Their Legal
Responsibilities," by John L. McNa-
mara, formerly United States District At-
torney.

"Electricity as a Factor in Building
Construction," by J. E. Van Hoeseele,
Electrical Engineer, Pacific Gas
Electric Company.

"Modern Plumbing in Its Relation
to Building Construction," by John L.
E. Firmin, State Secretary, Associa-
tion of Master Plumbers of California.

During the evening many of the
visitors and large numbers of the local
contractors visited the Zone. Special
attractions were prepared and
program of dancing at Old Faithful
Inn.

SATURDAY, OCTOBER 28.

Saturday night's banquet brought to
a close American Builders' Congress
Week, when all the principals who have
been working for the past six months
to make American Builders' Congress
success, could relax and enjoy them-
selves.

About 200 prominent Eastern and
local representatives of the Building
Business and their ladies were present.
Harry Maundrell, President of the
Builders' Exchange, was Chairman of
the evening while Fred Whitten acted
as Toastmaster.

Songs by the Knickerbocker Ma-
Quartett, Miss Constance and L.
Larsen were rendered during the
evening.

Addresses were made by Messrs
Bergstrom, Ralph McLeran, H. L. Lev-
man of Louisville, Kentucky, H. Mau-
drell, Grant Fee, Chas. W. Gindele at
A. C. Kimble of Chicago and E. M. Ta-
of Pittsburgh, Pa.

A very significant remark was made
by President Maundrell, who said that
he hoped all the Building Trades
San Francisco and vicinity would be
marshalled under one roof.

Dancing concluded the evening
festivities.

ADVANCE CONSTRUCTION NEWS.

Classified According to Character of Work.

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APARTMENT HOUSES.

SAN FRANCISCO—Apartment house, 7 story and base. Class C construction. Cost not stated. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner's name withheld. Location, Fifty Vara District, covering an area of 50 by 70 feet. Will contain 26 suites of two and three rooms with private baths and wall beds. Interior finish pine, mahogany and white enamel. Hardwood floors. Complete steel frame. Exterior faced with pressed brick and terra cotta. Bath rooms finished in tile. Plans being prepared.

SAN FRANCISCO—Apartment houses 2, 2 story and base, frame, \$10,000. Architect, Edward E. Young, 251 Kearny street, S. F. Owner, Thomas Scoble, 363 14th avenue, S. F. Location, west Palm avenue north of Euclid, covering areas of 37 by 75 feet. Each will contain four small apartments with wall beds and private baths. Interior finish pine with some elm panels and hardwood floors. Central heating system. Bath rooms finished in tile. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 4 story and base, reinforced concrete, \$30,000. Architect, D. C. Coleman, Merchants' National Bank Bldg., S. F. Owner, William A. McKee. Location, north Geary street west of Larkin. Will contain a number of two and three room suites with wall beds and private baths. Interior finish pine and elm with hardwood floors. Steam heat, elevator service and hot water system. Bath rooms finished in tile. Exterior faced with cement plaster. Plans complete and owner to let all contracts.

OAKLAND, CAL.—Apartment house, 2 story and base, frame, \$26,500. Architect, E. W. Cannon, Central Bank Bldg., Oakland. Owner, Mrs. Elizabeth Gilseman. Location, northeast corner Webster and Magnolia avenue. Will contain ten suites of three rooms and two two-room suites. Interior finish pine with elm panels and hardwood floors. Wall beds and private baths. Steam heat and a hot water system. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

OAKLAND, CAL.—Apartment house alterations, 2 story, frame, \$5,000. Architect, none. Owner, A. L. Haley, 1525 San Pablo avenue, Oakland. Location, Cottage avenue. Work will consist of altering two flats into apartments and will include interior trim, painting, plastering, electric work and plumbing. Plans complete and work to be done by Day Labor.

STOCKTON, SAN JOAQUIN CO., CAL.—Apartment house, 3 story and base, brick and frame, \$10,000. Architect, none. Owner, W. E. Schroeder, Fremont & Sutter streets, Stockton.

Location, southeast corner Fremont and Sutter streets. Will contain a number of two, three and four room suites. Interior finish pine and hardwood with some hardwood floors. Wall beds and private bath rooms. Steam heat, oil burning system, hot water supply. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Apartment house, 3 story and base, frame, \$17,000. Architect, H. P. Starbuck, Howell Bldg., Fresno. Owner, Jacob Richter. Location, lots 1 to 5, in block B. Will contain two, three and four room suites. Interior finish pine with some elm panels and hardwood floors. Bath rooms finished in tile. Central heating system and open air sleeping porches. Hot water supply. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OCEAN PARK, LOS ANGELES CO., CAL.—Apartment house addition, 5 story and base. Class C construction, \$45,000. Architect, E. A. Wilson, Van Nuys Bldg., L. A. Owner, William Ellison. Location, Paloma avenue near Speedway. Will contain 78 rooms arranged in suites of two and three rooms. Interior finish pine. Central heating system, hot water supply and automatic elevator. Bath rooms finished in tile. Wall beds. Exterior faced with pressed brick. Plans being prepared.

BATH HOUSES.

Contracts Awarded.

SANTA MONICA, LOS ANGELES CO., CAL.—Bath house, 3 story and base, frame, \$25,000. Architect, Charles Gordon, Los Angeles Investment Bldg., L. A. Owners, Santa Monica Bathing Co. Contractor, L. F. S. Syndicate, Los Angeles Investment Bldg., L. A. Contract price, \$25,000.

BANKS

BERKELEY, ALAMEDA CO., CAL.—Bank and store alterations, brick and steel, \$15,000 for building and \$4,000 for bank fixtures. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, P. E. Bowles. Location, east Shattuck north Addison, covering an area of 84 by 78. Will contain bank and four stores. Interior finish pine and hardwood, special bank fixtures, ornamental iron and bronze. Exterior faced with pressed brick. Plans complete and figures being taken.

WALNUT GROVE, SACRAMENTO CO., CAL.—Bank, 2 story and base, reinforced concrete, \$10,000. Architect, W. H. Weeks, 75 Post street, S. F. Owner, Bank of Alexander Brown. Will contain banking rooms on first floor and a number of modern offices above. Interior finish pine, hardwood and or-

naumental iron. Special bank fixtures. Exterior faced with cement plaster. Plans being prepared.

BONDS.

RED BLUFF, TEHAMA CO., CAL.—The election to vote \$90,000 for the erection of a high school in this city carried by a large majority. Plans for the building have already been chosen and which provide for the accommodation of 500 pupils and will be modern in every respect.

MADERA, MADERA CO., CAL.—At a recent meeting of the City Trustees the 11 street bridge bonds were awarded to the Lumberman's Trust Company of Portland, who bid \$12,426 for the issue. The contract for the bridge has already been awarded and work will be started immediately.

MODESTO, STANISLAUS CO., CAL.—By a majority of 179 to 76 the patrons of the Modesto schools living west of the S. P. tracks, at a recent straw election, favored the construction of one central school building instead of two small buildings.

BAKERSFIELD, KERN CO., CAL.—Petitions for the proposed Mt. Whitney highway from Bakersfield to the county line above Weldon on the South Fork of the Kern River have been filed with the County Supervisors. The Board will appoint a committee to investigate the proposition and to find out what amount of money will be required to build the proposed road before calling the election for bonds.

HOLYVILLE, IMPERIAL CO., CAL.—Secretary Berry, of the Imperial Irrigation District, has notified the Southern Pacific Company that their bid for the district bonds has been accepted. The railroad company offered to purchase about \$3,000,000 worth of bonds at par.

MARTINEZZ, CONTRA COSTA CO., CAL.—According to information given out by the Martinez Development Board, several large industries will locate in this city if the litigation over the title of the waterfront property can be settled within the next few weeks. The nature of the industries has not been definitely announced. C. H. Hayden is president of the Development Board.

CALEXICO IMPERIAL CO., CAL.—The City of Calexico is planning a bond issue in the sum of \$100,000, of which \$61,000 will be expended in the improvement of the water system, \$6,000 for a fire truck and \$5,000 for a fire department building. Further information may be had from the City Clerk at Calexico.

LAMANDA PARK, LOS ANGELES CO., CAL.—Bonds in the sum of \$25,000 have been voted for the purpose of installing an ornamental lighting system on the city streets.

SANTA MONICA, LOS ANGELES CO., CAL.—An election will be called shortly to vote bonds in the sum of \$250,000 for a system of storm drains. Preliminary plans have been prepared by City Engineer Morton of Santa Monica.

HILLSBOROUGH, SAN MATEO CO., CAL.—The City of Hillsborough is inviting sealed proposals for the sale of \$40,000 of municipal improvement bonds to be opened on November 16, at 5 o'clock p. m.

BRIDGES AND DAMS

SAN FRANCISCO—Dry dock, \$5,000,000. Engineer's name not given. Owners, Union Iron Works. Secretary Daniels of the Navy has officially approved plans presented by the Union Iron Works for the construction of a \$5,000,000 dry dock, the largest on the Pacific Coast, which is to be erected at Hunters Point. Nothing now stands in the way of construction. It is stated that the Union Iron Works will at once call for bids.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Bridge construction, steel and concrete. Cost not stated. Engineer, County Surveyor, Santa Cruz. Owners, Counties of Santa Cruz and San Benito. All bids for the construction of the Santa Cruz-San Benito bridge have been rejected by the Board of Supervisors and new figures are being taken. Bids will be opened on November 9th.

MERCED, MERCED CO., CAL.—Bridges, concrete and timber. Cost not stated. Engineer, County Surveyor A. E. Cowell. Merced. Owners, Merced County. County Surveyor A. E. Cowell has been instructed by the Board of Supervisors to prepare plans and specifications for bridges to be constructed over streams crossing roads No. 4 and No. 5.

MERCED, MERCED CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, City Engineer, Merced. Owners, City of Merced. At the last meeting of the City Trustees plans and specifications were presented by Superintendent of Streets John Czerny for the construction of a concrete bridge over south slough on 16th St. The Trustees will co-operate with the County Supervisors in building the structure. While no action was taken it is thought bids will be called at the next meeting.

NAPA, NAPA CO., CAL.—Bridges, 3, steel and concrete. Cost not stated. Engineer, County Surveyor, Napa. Owners, Napa County. All bids received by the County Supervisors for the construction of three steel and concrete bridges in Road District No. 12 have been rejected, as all were considered too high. New bids will probably be called for.

RIO VISTA, SOLANO CO., CAL.—Wharf. Cost not stated. Engineer's name not given. Owners, California Transportation Co. Word has been received by M. Christenson, agent at Rio Vista for the California Transportation Company, Jackson street wharf, that the company will erect a modern wharf there for the dockage of their ships. The wharf will be 300 feet along the river front, according to A. E. Anderson, an official of the company.

MARTINEZ, CONTRA COSTA CO., CAL.—Wharf construction, \$10,000. Engineer's name not given. Owners, Grangers Business Association, Martinez. The Grangers Business Association has asked the Railroad Commission for authority to build a wharf in Contra Costa County into the Straits of Carquinez, near Port Costa. The association has obtained a franchise from Contra Costa County to build the wharf.

SACRAMENTO, CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Sacramento. Owners, Sacramento County. Bids will

be opened on November 2nd for the construction of a reinforced concrete bridge over the Pacific Gas and Electric Co.'s canal at Folsom. Plans can be secured from the County Surveyor.

SACRAMENTO, CAL.—By-pass. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. City Engineer Frank Miller has conferred with Major Rand of San Francisco over the plans for the Byrne by-pass north of Washington. The plans are nearly complete. Nearly twenty sets of plans have been made by the City Engineer of Sacramento in an effort to arrive at a satisfactory decision for weir or gates at the river end of the canal. Further information will be given when the plans have been completed.

VENTURA, VENTURA CO., CAL.—River protection work. Cost not stated. Engineer, County Surveyor, Ventura. Owners, Ventura County. The Board of Supervisors is advertising for bids for the construction of protection work along Santa Paula Creek. J. B. McCloskey is the County Clerk.

RIVERSIDE, RIVERSIDE CO., CAL.—Bridge, reinforced concrete, \$10,000. Engineer, Charles B. Wright, Rialto. Owners, Crescent City Railroad Co., Riverside. The Crescent City Railway has plans under way for the construction of a reinforced concrete bridge under the Crescent City Railway at Fairmount Boulevard. The bridge is to have an arch of 66 feet. It is to be 22 feet high and 22 feet across the top. Further information may be had from the engineer.

SALEM, MARION CO., ORE.—Bridge, steel and concrete, \$235,000. Engineer, H. E. Holmes, Portland. Owners, Marion and Polk Counties. Assistant Engineer H. E. Holmes, of the State Highway Department, has submitted to the Marion County Court plans for the new bridge across the Willamette River at this point. The plans call for a steel bridge to cost approximately \$235,000. Polk and Marion Counties will share the cost of the proposed structure. Further information will be given when bids have been called.

Contracts Awarded.

SANTA ROSA, SONOMA CO., CAL.—Bridge, reinforced concrete, \$1,448.50. Engineer, County Surveyor, Santa Rosa. Owners, Sonoma County. Contractors, Call Construction Co., Santa Rosa. Contract price, \$1,448.50.

MADERA, MADERA CO., CAL.—Bridge, reinforced concrete, \$9,470. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, Madera County. Contractors, Manning Bros., Fresno. Contract price, \$9,470.

HANTFORD, KINGS CO., CAL.—Bridges and culvert, reinforced concrete. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractor, Frank Gallagher, S. F. Contract price not stated.

MODESTO, STANISLAUS CO., CAL.—Bridges, 4, concrete, \$4,538. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Contractors, F. F. Reames and R. M. Simpson, Modesto. Contract price, \$4,538.

CHURCHES

LOS ANGELES, CAL.—Church, Class A construction, \$300,000 Architect,

John C. Austin, Baker-Detweiler Bldg., L. A. Owners, First Methodist Church. Location, southwest corner of 8th and Hope streets, covering an area of 195 by 157 feet. Fireproof construction, complete steel frame, brick exterior walls faced with pressed brick and terra cotta. Interior finish hardwood and ornamental plaster. Art glass windows. Concrete floors and hollow tile interior partitions. Steam heat and vacuum cleaning. Plans being completed and figures to be called for shortly.

FACTORIES AND WAREHOUSES.

FRESNO, FRESNO CO., CAL.—Warehouse, 1 story, brick. Cost not stated. Engineer, City Engineer Cronkite, Fresno. Owners, City of Fresno. Will cover an area of 160 by 150 feet and will be constructed from old paving blocks removed from the streets. The work will be done by Day Labor.

GRASS VALLEY, NEVADA CO., CAL.—Oil supply station, 1 story, concrete. Cost not stated. Engineer, Engineering Dept. Standard Oil Co., S. F. Owners, Standard Oil Co. The Standard Oil Co. has purchased a large tract of land here and will erect a big supply station on the site. The site is midway between the two towns and on a line of both steam and electric railways

Contracts Awarded.

CAMAS, WASH.—Warehouse, 3 story and base, reinforced concrete, \$30,000. Architect, none. Owners, Crown-Willamette Paper Co. Contractors, Van Sant-Houghton Co., 563 Market street, S. F. Contract price, \$30,000.

POMONA, LOS ANGELES CO., CAL.—Parking house, 1 story and base, reinforced concrete, \$25,000. Architect, none. Owners, Indian Citrus Union Plant. Contractors, Sommers-Lund Co., Baker-Detweiler Bldg., L. A. Contract price, \$25,000.

LOS ANGELES, CAL.—Warehouse reinforcing steel, \$36,000. Architect's name not given. Owners, City of Los Angeles. Contractors, Southern California Iron and Steel Co., 4th and Mateo streets, L. A. Contract covers reinforcing steel for municipal warehouse. Contract price, \$36,000.

FIRE REPORT

SISSON, SISKIYOU CO., CAL.—Flames that started in the rear of the Del Coronado Hotel in this city last week swept an entire block on Walnut street, the center of the business district, causing a loss of \$20,000. Besides the hotel, two lodging houses and five residences were destroyed. Little insurance was carried on the hotel building.

CALEXICO, IMPERIAL CO., CAL.—Plans for rebuilding the Imperial Valley hardware store, recently destroyed by fire, are now complete and the work will be started shortly. The building will be two story brick or concrete and will cost about \$50,000.

HICO, BUTTE CO., CAL.—The two-story residence of John Cussick, on Spruce street, was destroyed by fire last week causing a loss of \$1,500. The loss is partially covered by insurance.

FRESNO, FRESNO CO., CAL.—Fire in the Republic Building caused damage of \$2,000.

SACRAMENTO, CAL.—The recent fire in the southern Pacific snowsheds at Summit has proved to be one of the worst in years, according to Superintendent Dyer of that division. The damage, which was at first estimated at \$125,000, is now thought to total at least \$165,000.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$3,500. Architect, none. Owner, Thomas F. Mitchell, 1370 Utah street, S. F. Location, east Potrero north of 25th street. Will contain two flats of five rooms each. Interior finish pine with some hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architects, Koenig & Christiansen, Humboldt Bank Bldg., S. F. Owner, L. C. Christiansen. Location, north Cabrillo west of 7th avenue. Will contain two flats of five and six rooms. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, W. S. Rhodes, 3276 16th street. Owner, Henry Sipple. Location, 19th near Lexington. Will contain a number of three and four room flats. Interiors finished in pine and elm panels. Some hardwood floors. Open fire places and tile mantels. Wall beds. Exterior covered with rustic and cement plaster on metal lath. Plans being prepared.

SAN FRANCISCO—Flats and store, 2 story and base, frame, \$3,000. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. Location, west Hyde street near North Point. Will contain one store and two small flats. Interior finish pine. Open fire places and tile mantels. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

GARAGES

SAN FRANCISCO—Garage, 2 story and base, reinforced concrete. Cost not stated. Architect's name not given. Owner, Mrs. Ella Murray, Fairmont Hotel. Location, south California between Jones and Leavenworth. Designed for a commercial garage. Concrete floors and walls. Interior finish pine. Special machinery and tanks. Exterior faced with cement plaster. Plans being prepared.

IRRIGATION PROJECTS

MODESTO, STANISLAUS CO., CAL.—Irrigation work. Cost not stated. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Plans were presented at the last meeting of the directors and approved for the following work: (1) The construction of the nine reinforced structures in lateral No. 7. (2) the construction of plain and reinforced concrete transition outlet structures to the permanent flume over Dry creek. The plans were approved

and bids were ordered advertised to close on November 6th. Further information may be had from the engineer at Modesto.

STOCKTON, SAN JOAQUIN CO., CAL.—Pumping station alteration and remodel, reinforced concrete, \$25,000. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, Pacific Gas and Electric Co. Location, East and Sonora streets. Work will consist of concrete work, steel, plumbing and electric work. Exterior faced with cement plaster. Plans complete.

AMITY, ORE.—Water system, \$21,623. Engineer's name not given. Owners, City of Amity. J. P. O'Neil of Portland submitted the lowest bid for the construction of the proposed water system to be constructed in this city. O'Neil bid \$11,854 for steel pipe and \$9,777.79 for wood pipe. He will probably be awarded the contract.

Contracts Awarded.

SACRAMENTO, CAL.—Water pumps and header chambers, \$19,000. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, Tiebert & Ambrose, Oschner Bldg., Sacramento. Contract price, \$19,000.

MODESTO, STANISLAUS CO., CAL.—Irrigation work. Cost as follows. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Contractor, C. W. Richards, Oakland, enlarge canal between Rairden and Upper Dominick. Contract price, \$33,539. and Barrett & Hip, Sharon Bldg., S. F., five concrete drops, \$6,209.50.

GOVERNMENT WORK & SUPPLIES

Lighthouse Service, Lathes.

The following bids were received by the lighthouse inspector, 17th district, Portland, Ore., for one 25-in and 50-in sliding bed gap lathe and equipment for Tongue Point lighthouse depot, Ore.:

Zimmerman-Wells-Brown Co., Portland, Ore., f. o. b. Cincinnati, Ohio, \$1,991, accepted; f. o. b. Portland, Ore., \$2,175.

Pay & Scott, Dexter, Me., \$1,750; not as specified.

Portland Machinery Co., Portland, Ore., f. o. b. Dexter, Me., small, \$1,516; large, \$1,840; not as specified.

Pearl Harbor, H. T., Elevators.

The following supplemental bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for 3 hydro-pneumatic freight elevators installed, complete, at the naval station, Pearl Harbor, H. T., bids for which were originally opened August 28:

The A. Klockhefer Elevator Co., Milwaukee, Wis., \$4,896.

Otis Elevator Co., Washington, D. C., \$1,876.

Pocatello, Idaho, Furniture.

The contract for installing furniture in the U. S. post office at Pocatello, Idaho, has been awarded to McGuire Cabinet Co., Los Angeles, Cal., at \$1,550.

Important Contract Change.

The War Department, on the suggestion of the quartermaster general, has authorized the adoption of a plan for allowing bidders to submit annual guaranty bond in lieu of the separate

guaranty and the separate bond now required in each case, limited to cover the purchase of supplies and materials and the performance of service. The question was referred to other bureau chiefs regarding the extension of the plan to public works. The chief of ordinance, the surgeon general, and the chief signal officer reported that they see no reasons for any change in existing methods, so far as their departments are concerned. The chief of engineers gives the plan a qualified approval. This is regarded as a matter of administration, subject only to the qualification that the usual penal bond should be required to include the clause for the protection of labor and material mentioned. If the War Department retains the right to call for additional security within a year it is believed that the interests of labor and material mentioned would be safe guarded by the annual bond fully as well as by the separate bond now required.

Pearl Harbor, Marine Railway.

The bureau of yards and docks, Navy Department, has advertised for bids to be opened on November 27 for the construction of a marine railway at the naval station, Pearl Harbor, Hawaii. In this case, the bureau may award the contract for the work as a unit, but will also entertain bids for the various portions of the work separately and so award contract. This will enable the concerns in the various lines covered by the specifications to bid for that portion of the work they are able to perform only.

Canal Requisitions.

Bids will be called for at an early date by the general purchasing officer, Panama Canal, Washington, D. C., for furnishing hardware required in the construction of the Ancon Hospital. The advertisement will appear in these columns as soon as issued.

Berkeley, Cal., Vault Shelving.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for installing metal vault shelving in the U. S. public building at Berkeley, Cal.: Keyless Lock Co., Indianapolis, Ind., \$350.

Berger Mfg. Co., Canton, Ohio, \$356.
Art Metal Construction Co., Jamestown, N. Y., \$403.

Steel Fixture Mfg. Co., Topeka, Kans., \$444.

Van Dorn Iron Works Co., Cleveland, Ohio, \$464.50.

General Fireproofing Co., Washington, D. C., \$371.

American Bank Protection Co., Minneapolis, Minn., \$482.

Crown Metal Construction Co., Jamestown, N. Y., \$560.

Durand Steel Locker Co., New York City, \$459.

Watson Mfg. Co., Jamestown, N. Y., \$625.

Canton Art Metal Co., Canton, Ohio, \$461.

Reclamation Allotments.

The funds appropriated by Congress for reclamation projects during the fiscal year 1916 have been apportioned to the various projects by the Reclamation Service to the amount of \$10,-

948,834.69. To each project has been allotted the amount of money necessary to carry on this work economically during the period from July 1, 1915, to June 30, 1916, as follows:

Arizona, Salt River project, \$537,-
\$34.58.

Arizona-California, Yuma, \$659,560.-
34.

California, Orland project, \$70,195.92.

Colorado, Grand Valley project, \$561,284.06.

Colorado, Uncompahgre project, \$575,433.19.

Idaho, Boise project, \$1,039,943.36.

Idaho, Minidoka project, \$1,039,943.36.

Idaho-Wyoming, Jackson Lake enlargement, \$475,713.89.

Kansas, Garden City project, \$1,-
592.77.

Montana, Huntley project, \$120,008.-
45.

Montana, Milk River project, \$422,-
322.36.

Montana, St. Mary's storage, \$473.-
532.29.

Montana, Sun River project, \$719,-
940.44.

Montana-North Dakota, L. Yellow-
stone project, \$46,923.71.

Nebraska-Wyoming, North Platte
project, \$272,053.09.

Nebraska-Wyoming, Fort Laramie
unit, \$644,231.

Nevada, Truckee-Carson project,
\$190,069.11.

New Mexico, Carlsbad project, \$102,-
279.66.

New Mexico, Hono project, \$1,038.77.

New Mexico, Rio Grande project,
\$404,570.14.

New Mexico, Elephant Butte stor-
age, \$607,387.84.

North Dakota, North Dakota pump
project, \$20,034.99.

Oklahoma, Lawton project, \$40,022.28.

Oregon, Umatilla project, \$294,751.-
94.

Oregon-California, Klamath project,
\$164,863.11.

South Dakota, Belle Fourche project,
\$143,949.27.

Utah, Strawberry Valley project,
\$392,944.95.

Washington, Okanogan project, \$51,-
008.45.

Washington, Yakima storage, \$559,-
731.38.

Washington, Yakima-Sunnyside unit,
\$278,076.63.

Washington, Tieton unit, \$51,959.08.

Wyoming, Shoshone project, \$419,-
299.69.

Total for primary projects, \$10,473,-
350.26.

In addition the following allotments
were made for preliminary investiga-
tions, secondary projects:

Arizona-California, Colorado River
basin, \$25,000.

California, Iron Canyon co-operation,
\$25.

California, Pitts River co-operative
work, \$25.

California, Shasta Co. co-operative
work, \$100.

California, Lassen Co. co-operative
work, \$50.

California, general investigations,
\$3,000.

Nevada, Walker River investiga-
tions, \$50.

Oregon, Columbia River co-opera-
tion, \$25.

Oregon, general co-operation, \$7,500.

Texas, Pecos River investigation,
\$900.

Unallotted to specific investigations,
\$11,325.

Total for secondary projects, \$50,000.

On July 1, 1915, there were avail-
able for immediate expenditure from
the bond loan and Reclamation fund,
\$10,198,769.44. The expected accre-
tions to the fund from July 1, 1915, to
June 30, 1916, will bring this amount
up to \$17,198,769.44.

Storage Plants for Fuel Oil.

The following bids were received Oc-
tober 16 by the chief of the bureau of
yards and docks, Navy Department,
Washington, D. C., for constructing
storage plants for fuel oil at the navy
yards, Puget Sound, Wash.; Mare
Island, Cal.; Norfolk, Va., and the naval
station, San Diego, Cal.:

Bid 1. Charles C. Moore & Co., Shel-
don Building, San Francisco, Cal.

2. F. P. Walsh, 244 Kearny street,
San Francisco, Cal.

3. The Planner Water Tube Boiler
Co., Akron, Ohio.

4. Wayne Construction Co., 131 Pop-
lar avenue, Wayne, Pa.

5. Day & Zimmerman, 611 Chestnut
street, Philadelphia, Pa.

6. John W. Danforth Co., 72 Ellicott
street, Buffalo, N. Y.

7. The Turner Co., 272 Natoma street,
San Francisco, Cal.

8. Foster-Vogt Cot., 411 Sharon
Building, San Francisco, Cal.

Item 1. Oil storage and handling
plants with all appurtenances, complete
— Bid 1, \$962,806; 4, \$1,155,073; 6, \$957,-
300.

Item 2. Oil storage and handling
plant at Puget Sound, Wash.—Bid 1,
\$319,005; 4, \$413,524; 6, \$312,300.

Item 3. Oil storage and handling
plant at Mare Island—Bid 1, \$295,200;
2, \$258,225; 4, \$407,732; 6, \$308,500; 7,
\$313,000; 8, \$362,615.

Item 4. Do, at San Diego — Bid 1,
\$165,780; 4, \$193,740; 6, \$156,600.

Item 5. Do, at Norfolk, Va.—Bid 1,
\$199,800; 4, \$208,246; 5, \$199,696; 6,
\$194,700.

Item 6. Oil storage and handling
plant at Puget Sound, with appurte-
nances designed in accordance with the
alternate method of multiple pumping
plant, complete — Bid 1, \$287,655; 4,
\$389,667; 6, \$286,500.

Item 7. Change under item 1 if
conditions governed by item 6 are adopt-
ed for Puget Sound—Bid 1, \$27,900; 4,
\$23,957; 6, \$21,950.

Item 8. Reduction in price under item
1 if the insulation is restricted to the
steam and drip piping—Bid 1, \$101,000
from item 1, \$27,500 from item 2, \$43,-
500 from item 3, \$31,500 from item 4,
\$18,500 from item 6, \$91,500 from items
1 and 7; bid 2, \$16,860; 4, \$30,100; 6,
\$84,300; 7, \$47,000; 8, \$67,650.

Item 9. Reduction under item 1 if
the combined heaters and coolers, the
salt water pumps, traps, and all con-
nections in the heater houses on the
wharves, as well as the heater houses,
are omitted—Bid 1, deduct \$39,500 from
item 1, \$10,800 from item 2, \$10,700
from item 3, \$10,600 from item 4, \$5,000
from item 5, \$8,600 from item 6, and
\$37,300 from items 1 and 7; 2, \$4,750; 4,
\$31,926; 6, \$61,900; 7, \$5,600; 8, \$20,050.

Item 10. Reduction in price under
item 1 if boilers of one-half the speci-

and heating surface, but with furnace capacity to give the specified, are substituted—Bid 4, \$13,200; 5, \$1,000.

Item 11. Reduction in price under item 1 if the omission of 1 boiler, 1 fuel pump, and 1 foam system pump at each station, providing outlets for their future installation—Bid 1, deduct \$74.00 from item 1, \$23,400 from item 2, \$3,900 from item 3, \$20,200 from item 4, \$12,500 from item 5, \$17,200 from item 6, \$68,700 from item 7 and 8; 2, \$1,700; 3, \$73,800; 6, deduct \$18,400 from item 2, \$16,200 from item 3, \$16,000 from item 4, and \$10,000 from item 7, \$21,000; 8, \$22,200.

Item 12. Reduction in price from item 1 if reinforced concrete chimneys are used at all stations—Bid 1, deduct \$1,000 from item 1, \$1,200 from item 2, \$1,200 from item 3, deduct \$1,200 from item 6, deduct \$1,000 from items 1 and 2.

Item 13. Reduction in price if the buildings for the pumping plant, the valve chambers, etc., above ground are constructed of steel shapes and ribbed metal, with cement concrete plastered exterior, all according to the contractor's designs, subject to approval—Bid 1, \$3,160; 6, deduct from item 2 \$3,000, from item 3 \$2,400, from item 4 \$2,000, from item 5 \$1,000; 8, \$330.

Item 14. Reduction in price from item 1 for the omission of each new 1 tank, its embankments, heater, pump system, connections, etc., to the nearest adjacent valve chamber at each station—Bid 1, deduct \$25,400 from item 1, \$28,400 from item 2, \$28,400 from item 3, \$29,000 from item 4, 5, and 6, and \$23,000 from item 7; 2, \$24,950; 4, \$25,336; deduct \$30,000 from item 2, \$31,700 from item 3, \$24,300 from item 4, 7, 30,000; 8, \$26,820.

Item 15. Deduct from item 1 the complete project, but with such modifications or means or methods as are fully described and illustrated in detail in the proposal—Bid 1, deduct \$31,000 from item 1, \$22,500 from item 2, \$30,300 from item 3, \$27,300 from item 4, \$9,000 from item 5, \$28,500 from item 6, and \$88,600 from item 7.

Item 16. Reduction in price from item 1 for the omission of one of the three boilers proposed at Puget Sound—Bid 1, deduct \$7,900 from item 1, \$7,042 from item 2, \$2,927 from item 3, \$2,901 from item 4, and \$2,551 from item 5, 4 \$7,208; 6, \$7,000.

The following informal bid was received from bid 3: this bid was for boilers only: Item 2, \$12,950; 3, \$7,450; 4, \$7,419; 5, \$6,246.

Contracts Awarded.

MARE ISLAND, CAL.—Marine barracks, 3 story and base, reinforced concrete, \$141,700. Engineer, Bureau of Yards and Docks, Washington, D. C. Owners, United States Government. Contractors, Pringle-Dunn & Co., 338 Pine street, S. F. Contract price, \$141,700.

PEARL HARBOR, HAWAII—Wharf building, \$155,900. Engineer's name not given. Owners, United States Government. Contractors, Hawaiian Dredging Co., Honolulu. Contract price, \$155,900.

HONOLULU, HAWAII—Torpedo boat pier, \$55,600. Engineer's name not given. Owners, United States Government. Contractors, Lord-Young Engi-

neering Co., Honolulu. Contract price, \$55,600.

HALLS AND SOCIETY BUILDINGS

HAYWARD, ALAMEDA CO., CAL.—Civic center hall, 1 story, frame, \$7,000. Architect, F. Holberg Reimers, 2125 Shattuck avenue, Berkeley. Owners, Modern Homestead Association. Will contain a large meeting room, office and social rooms. Interior finish pine with maple floors. Open fire place. Exterior covered with shingles. Plans complete and figures being taken.

HOSPITALS

VENTURA, VENTURA CO., CAL.—Hospital detention home and two cottages, \$52,333. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. The Kling Co. of Los Angeles presented the low figures for this work at \$43,333 and will probably be awarded the contract. A complete list of the bids appears under the heading of Los Angeles and Southern California in this issue.

HOTELS.

LOS ANGELES, CAL.—Hotel, 4 story and base. Class C construction. \$30,000. Architect, Charles H. Kysor, Wright and Callender Bldg., L. A. Owner, Al. Phillips. Location, 6th street near Ruth avenue, covering an area of 55 by 100 feet. Will contain two stores and a number of single rooms. Interior finish pine. Steam heat, elevator service and a hot water supply. Bath rooms finished in tile. Patent store fronts. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

LIBRARIES.

Contracts Awarded

LOS ANGELES, CAL.—Library, 1 story and base, brick, \$24,592.50. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, City of Los Angeles. Contractor, Robert Jordan, Security Bldg., L. A. Contract price, \$24,592.50.

OAKLAND, CAL.—Library, 2 story and base. Class C construction. Cost as follows. Architect, W. H. Weeks, 75 Post street, S. F. Owners, City of Oakland. Contractor, C. Christenson, Oakland, general construction. Contract price, \$29,145; Siebert & So., S. F., heating and ventilating, \$1,949, and Thomas Day Co., S. F., lighting fixtures, \$826.

PANAMA-PACIFIC EXPOSITION WORK.

SAN FRANCISCO—Wrecking exhibit building. Cost not stated. Architect, none. Owners, Swedish Building Committee, Swedish Bldg. Exposition Grounds. Bids will be received up to November 10th by A. Gibson, Secretary of the Swedish Building Committee, for the removal of their building. Mr. Gibson can be seen at the building from 10 a. m. to 5 p. m. An official proposal appears in another column of this issue.

RAILROAD CONSTRUCTION AND EQUIPMENT.

SAN FRANCISCO—Hetch-Hetchy Railroad construction, \$1,700,000. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. At yesterday's meeting of the Board of Public Works plans and specifications for the construction of the Hetch-Hetchy road were approved. The road will be approximately 16 miles in length and will cost in the neighborhood of \$1,700,000. Further information relative to this work may be had from the City Engineer.

PORTLAND, ORE.—Railroad construction. Cost not stated. Engineer's name not given. Owners, Oregon, California & Eastern Railroad Co., Portland. Permanent organization of the Oregon, California & Eastern Railroad Co., the plans for which contemplate the construction of a system of rail lines through Central Oregon to connect with existing railroads touching the borders of the vast undeveloped region and to open new through routes to San Francisco and Nevada, has been effected. This was the following preliminary organization of the company under the laws of Nevada. The directors elected Robert E. Strathorn president.

RESIDENCES.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,000. Architect, O. E. Evans, 2861 Mission street, S. F. Owners, Lindberg Bros. Location, west York between Army and 26th street. Will contain eight rooms, bath and sleeping porch. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and shiplap. Plans complete and work to be done by Day labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, L. Mastropasqua, 580 Washington street, S. F. Owner, W. Heffrin. Location, south Vallejo east of Taylor. Will contain six rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. The bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day labor.

SAN FRANCISCO—Residence, 1 story and base, frame, \$3,000. Architect, none. Owners, San Francisco Building Co., 45 Kearny street. Location, west 17th avenue south of California. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire place, tile or brick mantel and automatic water heater. Bath finished in tile. Exterior covered with shingles. Plans complete and work to be done by Day labor.

SAN FRANCISCO—Residence, 1 story and base, frame, \$2,500. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, Frank Sallwein. Location, west 16th avenue south of Jennings. Will contain five rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile mantel. Automatic

water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and figures being taken.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owners, Jespersen & Dippe, 878 54th street, Oakland. Location, south Appar west Market. Will contain five rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, E. B. Spittler, 815 Oxford street, Berkeley. Location, west Mendocino south of Indian Rock. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places, tile and brick mantels and automatic water heater. Bath rooms tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$8,000. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, G. Ross. Location, Nova Piedmont. Will contain eight rooms, three baths and sleeping porch. Interior finish hardwood and white enamel. Hardwood floors. Furnace heat, open fire places, tile or brick mantels and automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and figures being taken.

CLAREMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$12,000. Architect, Benj. G. McDougall, Sheldon Bldg., S. F. Owner, Sam B. Melenagen. Location, Claremont. Will contain ten rooms, baths and sleeping porch. Interior finish pine, hardwoods and white enamel. Hardwood floors. Central heating system, open fire place and tile or brick mantels. Bath rooms finished in tile. Automatic water heater. Exterior cement plaster. Plans being prepared.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, Hiram King Lovell, Dalziel Bldg., Oakland. Owner, F. L. Wayne. Location, Dana street. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Furnace heat and open fire place. Brick mantel. Tile bath room. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$8,000. Architect, Sidney B. Newsum, Nevada Bank Bldg., S. F. Owner, R. B. Bain. Location, Piedmont. Will contain nine rooms, three baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect,

none. Owner, O. F. Brerling, 1748 Broadway Oakland. Location east Rawson north Santa Rita. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residences, 2, 1 story and base, frame, \$2,500 each. Architect, none. Owner, G. Taylor, 438 Walsworth avenue, Oakland. Location, east Charlotte south Posen. Will contain five rooms and bath each. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Henry Barkmeyer, 173 35th avenue, Oakland. Location, west Peralta south Lynde. Will contain five rooms and bath. Interior finish pine with some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$3,200. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner, E. L. Higgins. Location, Thomas street. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire place and tile mantel. Automatic water heater. Tile bath. Exterior covered with cement plaster. Plans being prepared. Work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,200. Architect, none. Owners, Hanehaber & Picard, 477 Hardy, Oakland. Location, west Hemphill north Coronado. Will contain six rooms and bath. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile mantel. Tile bath room. Automatic water heater. Exterior cement plaster. Work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, H. Goranson, 431 48th street, Oakland. Location, southeast corner 50th and Ygnacio. Will contain six rooms, bath and sleeping porch. Interior finish pine. Some hardwood floors. Open fire place and tile or brick mantel. Tile bath. Automatic water heater. Work to be done by Day Labor. Exterior cement plaster.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, George L. Mohr, 2055 University avenue, Berkeley. Location, east Colby south Webster. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Automatic water heater. Exterior cement plaster. Work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, J. Clinkenbeard, 2700 Grove street, Oakland. Location, south 40th street west Telegraph. Will contain

five rooms, bath and sleeping porch. Interior finish pine. Some hardwood floors. Open fire places and tile mantel. Automatic water heater. Exterior rustic and cement plaster. Work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$15,000. Architects, Coates & Traver, Fresno. Owner, A. G. Wishon. Location, Huntington Boulevard. Will contain twelve rooms, three baths and sleeping porches. Interior finish pine and hardwood with hardwood floors. Central heating system and open fire places. Mantels tile and brick. Bath rooms tile. All kinds of electric appliances. Exterior covered with cement plaster. Plans being prepared.

FRESNO, FRESNO CO., CAL.—Residence, 1 story, frame, \$1,200. Architect, none. Owner, Lydia Abbott. Location, 233 Mary street. Will contain four rooms and bath. Interior trim pine. Open fire place and tile mantel. Exterior rustic. Plans complete and work to be done by Day Labor.

VISALIA, TULARE CO., CAL.—Residence, 2 story and base, frame, \$6,000. Architects, Swartz & Swartz, Rowell Bldg., Fresno. Owner, Mrs. T. A. El-Chatten. Will contain eight rooms, bath and sleeping porch. Interior finish pine and white enamel, hardwood and hardwood floors. Open fire places, furnace heat and automatic water heater. Brick mantel. Exterior covered with cement plaster. Plans being prepared.

VISALIA, TULARE CO., CAL.—Residence, 2 story and base, frame, \$6,000. Architects, Swartz & Swartz, Rowell Bldg., Fresno. Owner, Mrs. T. A. Elliott. Will contain eight rooms, bath and sleeping porch. Interior finish pine, white enamel and hardwood. Hardwood floors, open fire places and tile mantels. Automatic water heater. Tile bath room. Exterior covered with cement plaster. Plans being prepared.

MARTINEZ, CONTRA COSTA CO., CAL.—Residence, 1 story and base, frame, \$3,140. Architect, Carl Geiffuss, 46 Kearny street, S. F. Owner, M. W. Joost. Ludden & Lambley, Martinez, submitted the low figure for this work and will probably be awarded the contract.

YOVENTVILLE, NAPA CO., CAL.—Residence, 1 story and base, frame, \$16,000. Architect, Sidney B. Newsum, Nevada Bank Bldg., S. F. Owner, Bertram E. Nixon. Will contain 16 rooms, several baths and sleeping porches and outbuildings. Interior finish pine with hardwood floors. Bath rooms finished in tile. Central heating system and hot water supply. Open fire places and tile or brick mantels. Exterior covered with cement plaster. Work being done by Day Labor.

SACRAMENTO, CAL.—Residence, 1 story and base, \$2,200. Architect, none. Owner, John L. Johnson, 2725 W. Sacramento. Will contain five rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

Contracts Awarded

WILLOWS, GLENN CO., CAL.—Residence, 2 story and base, frame, \$12,000. Architect, none. Owner, Frank B. Glenn. Contractor, W. R. Zumwalt, Willows. Contract price, \$12,000.

SCHOOLS.

BAKERSFIELD, KERN CO., CAL.—School electric work. Cost not stated. Architect, Orville L. Clark, Brower & Bakersfield. Owners, City of Bakersfield. Bids will be opened on Nov. 30th for all electric work in new schools. Plans can be secured from the architect.

Contracts Awarded.

ALPHA SCHOOL DISTRICT, MADEIRA CO., CAL.—School, 1 story, frame, 10,000. Architect, E. A. Mathewson, 1000, 10th St., Fresno. Owners, Alpha School District. Contractors, Manning & Co., Fresno. Contract price, \$7,820.

CHICO, BUTTE CO., CAL.—School building, 1 story, brick and concrete, 10,000. Architect, A. J. Bryan, Chico. Owners, Chico Union High School District. Contractor, W. B. Johnson, Chico. Contract price, \$7,000.

ALTO, SANTA CLARA CO., CAL.—School warehouse, 1 story, concrete, \$25,000. Architect, none. Owners, Trustees Leland Stanford, Jr., University. Contractor, A. E. Hettinger, Alto. Contract price, \$25,000.

SEWERS, STREET WORK & WATER SYSTEMS.

TURLOCK, STANISLAUS CO., CAL.—Sewer paving. Cost not stated. Engineer, City Engineer, Turlock. Owners, City of Turlock. At the Trustees' meeting the Engineer was instructed to prepare estimates and necessary plans and specifications for grading, oiling and curbing of shallow avenue to East avenue. Further information will be given on this work when the plans are complete.

SALINAS, TULARE CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Visalia. Owners, City of Visalia. Plans and specifications prepared by the City Engineer for the improvement of South Bridge street in the alley line south of the South Pacific's new freight depot on South Bridge street to Tulare avenue were adopted by the City Trustees. Bids on the work will be called shortly. The improvement will consist of a concrete pavement.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street improvement. Cost not stated. Engineer, Town Engineer, South San Francisco. Owners, City of South San Francisco. Bids will be opened on November 1st at 8 p. m. for improving Cypress avenue between the 11th line of Miller avenue and the 12th line of Lux avenue, and Lux avenue between the east line of Maple avenue and the west line of San Bruno, grade, pave with asphaltic concrete, concrete gutters and four-inch lateral sewers. Bids will also be opened at the same time for the improvement of Magnolia avenue and Orange avenue, grade with asphaltic concrete and concrete gutters.

SALINAS, MONTEREY CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Salinas. Owners, Monterey County. Bids are now being taken by the County Superintendents for the macadamizing and grading of a portion of the Arroyo road to the Pajaro Road District of Monterey County. The bids close November 1st, 2 p. m. Further information may

be had from the County Surveyor at Salinas.

SALINAS, MONTEREY CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Salinas. Owners, City of Salinas. The City Council has rejected all bids received for the improvement of North Main street and new bids have been called for. Further information may be had from the City Engineer at Salinas.

NAPA, NAPA CO., CAL.—Sewer construction. Cost not stated. Engineer, Town Engineer, Napa. Owners, Town of Napa. Bids will be opened on November 1st for the construction of a sewer in Nursery street. Complete information can be had from the Town Clerk.

PETALUMA, SONOMA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. At the last meeting of the City Council the following action was taken relative to street improvements. Superintendent of Streets Shaver was ordered to reconstruct the curb and gutter on the south side of Western avenue from Post to Baker. On recommendation of the Superintendent of Streets corrugated iron culverts were ordered for West street at Main, Stanley street at Upham and Basset street at Upham. Ordinances Nos 140 and 141, establishing the grade of Hayes and Webster streets, were passed. A communication from Stone Bros. for a sewer on 3rd street between D and C was referred to the street committee. Specifications prepared by the City Engineer for the improvement of Laurel avenue from B to D streets were accepted and bids will be called for on the work.

NAPA, NAPA CO., CAL.—Street improvements. Cost not stated. Engineer, Town Engineer, Napa. Owners, Town of Napa. At the last meeting of the City Council the following action was taken on street improvements: Specifications for work on Ash street, to cost about \$1,243.07, were read and adopted and the work ordered done. Specifications under Resolution of Intention No. 458 for work on Clay street from Jefferson to Madison, to cost \$785.21, were also adopted and the work ordered done. Specifications for work on Jackson street from Yajome to Main were also read and adopted and the work ordered done. The cost will be \$1,749.79. Specifications for sewer work on Nursery and Vallejo streets, under Resolution of Intention No. 160 were read and adopted and the work ordered done. The cost will be \$326.20. Councilman Gardner said it had been suggested to him by the people living on Pine and Symons streets that catchbasins be placed on the corners of those streets. The matter was referred to the City Engineer.

RICHMOND, CONTRA COSTA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. Plans and specifications having been approved the City Council has ordered bids received until 8 p. m. November 1st for the construction of a sewer in Cutting Boulevard. Further information may be had from the City Engineer at Richmond.

CALIFORNIA—State Highway construction. Cost as follows. Engineer,

State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. The following low bids were submitted at the last meeting of the State Highway Commission: Sonoma County, Sec. 8-A, Reclamation to Fairville, 4.2 miles, graded. Engineer's estimate, \$51,870.53. Low, Bates, Bolland & Ayre, Oakland, \$22,182.90. Mariposa County, Sec. 18-A, westerly boundary to Cathay White Rock road, 10 miles graded. Engineer's estimate, \$47,178.64. Low, George R. Bailey, San Diego, \$42,748.60. Placer County, Lincoln to northern boundary, 9 miles, paved with Portland cement concrete. Engineer's estimate, \$56,123.45. Low, C. H. & A. W. Gorrill, Cal Bldg., S. F., \$47,339.80.

SACRAMENTO, CAL.—Transformer building. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The City Commission has accepted plans and specifications for a transformer building to be erected at the new sewer pumping station on Riverside road. Bids for the work will soon be asked for.

SACRAMENTO, CAL.—Sewers. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Plans and specifications are now being prepared by Joseph E. Temple of the City Engineer's office for alley sewers and the City Commissioners will take the matter up with the Executive Board of the Oak Park Business Men's Association. It is estimated that six miles of sewers will be required to cover the territory bounded by Y street, Lower Stockton avenue, Park avenue and 37th street. Further information will be given on this work when the plans have been adopted.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Road extension. Cost not stated. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Plans and specifications for the excavation and construction along the line of certain portions of the right-of-way on the extension of the Morro creek road, which work covers excavation and filling, etc., between Station O and Station 262-00, were approved by the County Superintendents at their last meeting and bids have been ordered received until November 2nd, 10 a. m. Further information may be had from the County Surveyor at San Luis Obispo.

PASO ROBLES, SAN LUIS OBISPO CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Paso Robles. Owners, City of Paso Robles. A resolution of intention for the construction of sewers in Fifteenth and manholes at the intersection of a manhole at Olive and Twelfth streets and the construction of sewers and manholes at the intersection of 14th and Vine streets. Further information will be given on this work when the bids have been called.

Contracts Awarded.

SACRAMENTO, CAL.—Road construction, \$26,000. Engineer, County Surveyor, Sacramento. Owners, Sacramento County. Contractors, Clark & Henery, Ochsner Bldg., Sacramento. Contract price, \$26,000.

DAILY CITY, SAN MATEO CO., CAL.—Sewer construction, \$4,935.25. Engineer, City Engineer, Daily City. Owners, Daily City. Contractor, W. J. To-

bin, Daly City. Contract price, \$4,935.25.
BAKERSFIELD, KERN CO., CAL.—Road construction, \$12,158.95. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractors, Castro & Blaisdell, Bakersfield. Contract price, \$12,158.95.

STORES AND OFFICES.

PORTLAND, ORE.—Stores and lofts, 2 story and base, brick. Cost not stated. Architects, Whitehouse & Foulhoux, Wilcox Bldg., Portland. Owner, O. B. Stubbs. Will cover an area of 70 by 100 feet, and has been designed to carry four stories. Upper floor lofts. Interior finish pine. Patent store fronts, steam heat and hot and cold running water. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

SEATTLE, WASH.—Publishing offices, 6 story and base, steel and concrete, \$135,000. Architects, Charles H. Behh & Carl F. Gould, Denny Bldg., Seattle. Owner, Times Publishing Co. Contractor, A. W. Quist & Co., Hoge Bldg., Seattle. Contract price, \$135,000.

THEATRES.

SAN FRANCISCO—Theatre, 4 story and base. Class A construction, \$300,000. Architect, Benj. G. McDougall, Sheldon Bldg., S. F. Owners, Ellis Street Improvement Co. Location, northeast Ellis and Mason streets, covering an area of 87½ by 137½ feet. Fireproof construction with complete steel frame, reinforced concrete floors and walls. Steam heat, elevator service, vacuum cleaning. Hollow tile interior partitions, metal window sash and frames. Interior finish pine, hardwood and large amount of ornamental plaster. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

MAY REVIVE LOST ART.

If any good can come at all from the destruction of Rheims cathedral, it might be said to be from the opportunity to study the fragments of stained glass from its famous windows, the secret of the coloring of this glass made in the thirteenth century having been lost in antiquity. M. Chesnau, assistant director of the French school of mines, has reported through the Academie des Sciences that he has been able to determine many of the chemical processes used to attain the results in the Rheims windows. Among other discoveries he says that the wonderful red glass which has been the despair of later artisans was acquired by covering a bottle green glass with a thin enamel of oxidulated copper.—Hartford Times.

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OFFICIAL PROPOSALS.

PROPOSALS FOR BUILDING REPAIRS.

BUILDING REPAIRS—Treasury Department, Supervising Architect's Office, Washington, D. C.—Sealed proposals will be opened in the office at **11 o'clock A. M., November 18, 1915**, for the execution, remodeling, etc., of the U. S. office at Boise, Idaho. Drawings and specifications may be obtained from the custodian at Boise, Idaho, or this office, in the discretion of the advising architect, JAMES A. WETZEL, acting supervising architect.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 981—Office of General Purchasing Officer, Panama Canal, Washington, D. C.—Sealed proposals will be received here until **October 14, 1915**, under proposal 981 furnishing two steel oil storage tanks. Bids are desired both for delivery and erection. Each tank to be 10 feet in diameter and 35 feet high. Further information address P. C. G. S., major, corps of engineers, U. S. Army, general purchasing officer.

PROPOSALS FOR SPUD TIMBERS.

SPUD TIMBERS—Office of the General Purchasing Officer, Panama Canal, Washington, D. C.—Sealed proposals will be received here until **November 15, 1915**, under requisition 1877-D for 1000 spud timbers, round, 32-inch diameter, 65 feet long, of Douglas fir. For further information address P. C. G. S., major, corps of engineers, U. S. Army, general purchasing officer.

PROPOSALS FOR MARINE RAILROAD.

MARINE RAILWAY—Sealed proposals indorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock A. M., November 27, 1915**, and there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Drawings and specifications may be obtained on application to the bureau or the commandant of the naval station named, H. R. STANFORD, chief bureau.

PROPOSALS FOR SALE OF OLD MATERIAL.

SALE—Navy Yard, Mare Island, Cal.—Material will be sold at the navy yard, Mare Island, Cal., material belonging to the Navy, condemned as unfit for use, consisting of launchers, compasses, whaleboats, diving apparatus, culture, refrigerators, safes, plumb-lines, fenders, glassware, ordnance stores, hawsers, rope, flags, fans, pumps, carbon brushes, boilers, pumps, generators, motors, scrap brass, etc. Sale will be for cash to the highest bidder by sealed proposals to be received at 1 o'clock, November 2, 1915. Bids containing forms of proposals and terms of sale can be obtained upon application to the general keeper, navy yard, Mare Island, J. JOSEPH DANIELS, Secretary of the Navy.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 979—Proposals for Copper Cable and Wire, Steel Re-

inforcing Bars, Steel Wire, Poultry Netting, Bolts, Nuts, Rivets, Nails, Lag Screws, Boat Spikes, Washers, Pipe Fittings, Ship Augers, Twist Drills, Winch, Hinges, Key Blanks, Hammers, Coal Baskets, Street Lamps, Water Gauge Lamps, Hose, Packing, Rubber Bands, Pencils, Cardboard, Japan Oil, Locomotive Black, Yellow Ochre, Yellow Chrome and Lumber.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 A. M., November 15, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 979) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

CEMENT BIDS WANTED.

Bids are desired until **October 23rd, 1915**, for furnishing cement for the Hetch Hetchy Water Supply project. Address CITY ENGINEER, San Francisco. (11)

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 977—Proposals for Fuel Oil.—Annual Estimate for the Period Beginning January 1, 1916, and ending December 31, 1916.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 A. M., November 4, 1915**, at which time they will be opened in public, for furnishing the above mentioned oil. Blanks and general information relating to this circular (No. 977) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

NOTICE TO CONTRACTORS.

FOR SALE.

The Swedish Government Building on the Exposition Grounds will be sold to highest bidder. Purchaser to remove said building from the premises, clear and grade the lot to level of curb, between January 15th and March 15th, 1916, and this work must be commenced on or before February 1st, 1916. Sealed bids, addressed to "Commissioner General for Sweden, Swedish Building, Exposition Grounds, San Francisco, Cal.," will be received up to **November 10th, 1915**.

For further particulars apply to A. Gibson, Secretary, Swedish Building, Exposition Grounds, between the hours of 10 A. M. and 5 P. M. (11)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock, noon, Monday, November 8, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of a building to be known as "Hay, Storage and Feed Barn," Stockton State Hospital Farm, near Stock-

ton, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope "Proposals for Hay, Storage and Feed Barn, Stockton State Hospital Farm, near Stockton, California."

(Signed) W. F. McCLURE,
State Engineer.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until **2 o'clock, P. M., on November 2, 1915**, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State Highway as follows:

Imperial County across Myers Creek, (VII-imp-12-A) a reinforced concrete bridge about 500 feet long, with one three hinged arch span of 170 feet.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be obtained at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers' Offices are located at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the state.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
ALFRED B. ETCHER,
Highway Engineer.
CHARLES C. CARLETON,
Acting Secretary.

NOTICE TO CONTRACTORS.

OFFICE CONSTRUCTING QUARTERMASTER, Fort Mason, Cal.—SEALED PROPOSALS will be received here until **11:00 A. M., October 26, 1915**, and then be opened for improvements to roads, walks, gutters, etc., at Lettman General Hospital. Further information on application. (*)

ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

WRECKING EXHIBIT BUILDING—Cost not stated. San Francisco. Architect, none. Owners, Swedish Building Committee, Swedish Bldg., Exposition Grounds. Bids will be received up to November 10th by A. Gibson, Secretary of the Swedish Building Committee, for the removal of their building. Mr. Gibson can be seen at the building from 10 a. m. to 5 p. m. An official proposal appears in another column of this issue.

APARTMENT HOUSE—7 story and base. Class C construction. Cost not stated. San Francisco. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner's name withheld. Location, Fifty Vara District, covering an area of 50 by 70 feet. Will contain 26 suites of two and three rooms with private baths and wall beds. Interior finish pine, mahogany and white enamel. Hardwood floors. Complete steel frame. Exterior faced with pressed brick and terra cotta. Bath rooms finished in tile. Plans being prepared.

APARTMENT HOUSES—2, 2 story and base, frame, \$10,000. San Francisco. Architect, Edward E. Young, 251 Kearny street, S. F. Owner, Thomas Seoble, 363 14th avenue, S. F. Location, west Palm avenue north of Euclid, covering areas of 27 by 75 feet. Each will contain four small apartments with wall beds and private baths. Interior finished in pine with some elm panels and hardwood floors. Central heating system. Bath rooms finished in tile. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—4 story and base, reinforced concrete, \$30,000. San Francisco. Architect, D. C. Coleman, Merchants' National Bank Bldg., S. F. Owner, William A. McKee. Location, north Geary street west of Larkin. Will contain a number of two and three room suites with wall beds and private baths. Interior finish pine and elm with hardwood floors. Steam heat, elevator service and hot water system. Bath rooms finished in tile. Exterior faced with cement plaster. Plans complete and owner to let all contracts.

DRY DOCK—\$5,000,000. San Francisco. Engineer's name not given. Owners, Union Iron Works. Secretary Daniels, of the Navy, has officially approved the plans presented by the Union Iron Works for the construction of a \$5,000,000 dry dock, the largest on the Pacific Coast, which is to be erected at Hunters Point. Nothing now stands in the way of construction. It is stated that the Union Iron Works will at once call for bids.

FLATS—2 story and base, frame, \$3,500. San Francisco. Architect, none. Owner, Thomas F. Mitchell, 1370 Utah street, S. F. Location, east Potrero north of 25th street. Will contain two

flats of five rooms each. Interior finish pine with some hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$1,000. San Francisco. Architects, Koenig & Christiansen, Humboldt Bank Bldg., S. F. Owner, L. C. Christiansen. Location, north Cabrillo west of 7th avenue. Will contain two flats of five and six rooms. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$5,500. San Francisco. Architect, W. S. Rhodes, 3376 16th street. Owner, Henry Sipple. Location, 19th near Lexington. Will contain a number of three and four room flats. Interior finished in pine and elm panels. Some hardwood floors. Open fire places and tile mantels. Wall beds. Exterior covered with rustic and cement plaster on metal lath. Plans being prepared.

FLATS AND STORE—2 story and base, frame, \$3,000. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner's name withheld. Location, west Hyde street near North Point. Will contain one store and two small flats. Interior finish pine. Open fire place and tile mantel. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

GARAGE—2 story and base, reinforced concrete. Cost not stated. San Francisco. Architect's name not given. Owner, Mrs. Ella Murray, Fairmont Hotel. Location, south California between Jones and Leavenworth. Designed for a commercial garage. Concrete floors and walls. Interior finish pine. Special machinery and tanks. Exterior faced with cement plaster. Plans being prepared.

RAILROAD CONSTRUCTION—\$1,700,000. San Francisco to Hetch-Hetchy. Engineer, City Engineer. Temporary City Hall, S. F. Owners, City and County of San Francisco. At yesterday's meeting of the Board of Public Works plans for and specifications for the construction of Hetch-Hetchy road were approved. The road will be approximately 16 miles in length and will cost in the neighborhood of \$1,700,000. Further information relative to this work may be had from the City Engineer.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, O. E. Evans, 2861 Mission street, S. F. Owners, Lindberg Bros. Location, west York between Army and 26th streets. Will contain eight rooms, bath and sleeping porch. Interior finish pine

and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and shiplap. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, L. Mastropasqua, 580 Washington street, S. F. Owner, W. Heffrin. Location, south Vallejo east of Taylor. Will contain six rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. San Francisco. Architect, Paul F. De Martini, 2123 Powell street, S. F. Owner, Frank Saluzzo. Location, West 16th avenue south of Jennings. Will contain five rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and figures being taken.

RESIDENCE—1 story and base, frame, \$3,000. San Francisco. Architect, none. Owners, San Francisco Building Co., 45 Kearny street. Location, west 17th avenue south of California. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire place, tile or brick mantel and automatic water heater. Bath finished in tile. Exterior covered with shingles. Plans complete and work to be done by Day Labor.

THEATRE—4 story and base. Class A construction, \$300,000. San Francisco. Architect, Benj. G. McDougall, Sheldon Bldg., S. F. Owners, Ellis Street Improvement Co. Location, northeast Ellis and Mason streets, covering an area of 87½ by 137½ feet. Fireproof construction with complete steel frame reinforced concrete floors and walls. Steam heat, elevator service, vacuum cleaning. Hollow tile interior partitions, metal window sash and frame. Interior finish pine, hardwood and large amount of ornamental plaster. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

Contracts Awarded.

WHARF CONSTRUCTION—\$155,900. Pearl Harbor, Hawaii. Engineer's name not given. Owners, United States Government. Contractors, Hawaii Dredging Co., Honolulu. Contract price, \$155,900.

TORPEDO BOAT PIERS—\$85,600. Honolulu, Hawaii. Engineer's name not given. Owners, United States Government. Contractors, Lord-Young Engineering Co., Honolulu. Contract price, \$85,600.

City Bids Opened

Figures Opened for Ocean Beach Esplanade, Clocks, Chutes and Shades For City Hall.

Bids were opened at the regular Wednesday afternoon session of the Board of Public Works for construction of the Ocean Beach Esplanade. C. E. Lamburth presented the low bid at approximately \$49,900. A complete list of the unit prices appear below.

Bids were also received at the same meeting for clock system and mail chutes in the new City Hall and for shades in the same building.

Ocean Beach Esplanade.

Bidder	Concrete	Esplanade	Table	Wall
	Per Lineal Ft.			
Western Tide & Lbr. Co.	\$ 75.34			
Triblitt Pacific Co.	165.50			8.00
Healy-Triblitt Const. Co.	159.00			5.00
P. Bohndt	106.00			4.50
Lange & Berckstrom	124.00			1.60
L. E. Joppeitz	105.00			7.50
C. E. Lamburth	74.00			6.00
E. S. Mulford	98.00			6.00
Posner-Vogt Co.	99.33			4.95
Clinton Pipefitting Co.	97.00			1.00
John Grace	97.70			8.00

Clocks and Mail Chutes, New City Hall

Cutler Mail Chute Co., Prop. 2 (A) \$4,830; (B) \$1,630; Prop. 3 (A) \$3,114; Prop. B, \$2,914.
Standard Electric Time Co., Prop. 1, \$3,954.

Albert S. Samuels, Prop. 1, \$5,787.50.
American Mailing Device Co., Prop. 2, \$3,442; Prop. 3, \$3,173.

Shades, City Hall.

D. N. & E. Walter & Co., \$1,158.75
W. & J. Sloane, 1,145.00

Low Bidders On Highway Work.

State Highway Commission Receives Figures for Work in Sonoma-Mariposa and Placer Counties.

(By Special Wire)

SACRAMENTO, CAL., Oct. 18, 1915.—Bids were opened by the State Highway Commission today for construction in Sonoma, Mariposa and Placer Counties.

The following low bids were received. Contracts will be awarded at the next meeting.

Sonoma County, Sec. 8-A. Reclamation to Fairville, 4.2 miles, graded. Engineer's estimate, \$31,970.53. Low, Bates-Borland & Ayre, Oakland, \$22,182.90.

Mariposa County, Sec. 18-A westerly boundary to Cathay White Rock Road, 10 miles, graded. Engineer's estimate, \$17,178.64. Low, George R. Bailey, San Diego, \$42,748.50.

Placer County, Lincoln to northern boundary, 9 miles, paved with Portland cement concrete. Engineer's estimate, \$56,123.45. Low, C. H. and A. W. Gorrill, Cal Bldg., San Francisco, \$17,339.50.

OAKLAND AND ALAMEDA COUNTY

APARTMENT HOUSE—2 story and base, frame, \$20,000. Oakland, Cal. Architect, E. W. Cannon, Central Bank Bldg., Oakland. Owner, Mrs. Elizabeth Gilseman. Location, northeast corner Webster and Magnolia avenue. Will contain ten suites of three rooms and two two-room suites. Interior finish pine with elm panels and hardwood floors. Wall beds and private baths. Steam heat and a hot water system. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

APARTMENT HOUSE ALTERATION—2 story, frame, \$5,000. Oakland, Cal. Architect, none. Owner, A. L. Haley, 1525 San Pablo avenue, Oakland. Location Cottage Park. Work will consist of altering two flats into apartments and will include interior trim, painting, plastering, electric work and plumbing. Plans complete and work to be done by Day Labor.

BANK AND STORE ALTERATIONS—Brick and steel, \$15,000 for building and \$4,000 for bank fixtures. Berkeley, Alameda Co., Cal. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, P. E. Bowles. Location, east Shattuck north of Addison, covering an area of 84 by 78. Will contain bank and stores. Interior finish pine and hardwood, special bank fixtures, ornamental iron and bronze. Exterior gaced with pressed brick. Plans complete and figures being taken.

CIVIC CENTER HALL—1 story, frame, \$7,000. Hayward, Alameda Co., Cal. Architect, F. Holberg Reimers, 2125 Shattuck avenue, Berkeley. Owners, Modern Homestead Association. Will contain a large meeting room, office and social rooms. Interior finish pine with maple floors. Open fire place. Exterior covered with shingles. Plans complete and figures being taken.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owners, Jespersen & Dippo, 878 54th street, Oakland. Location, south Apgar west Market. Will contain five rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$3,000. Berkeley, Alameda Co., Cal. Architect, none. Owner, E. B. Spittler, 815 Oxford. Location, west

Mendocino south of Indian Rock. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places, tile and brick mantels and automatic water heater. Bath rooms tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$8,000. Piedmont, Alameda Co., Cal. Architect, John Hudson Thomas, First National Bank Bldg., Berkeley. Owner, G. Ross. Location, Nova Piedmont. Will contain eight rooms, three baths and sleeping porch. Interior finish hardwood and white enamel. Hardwood floors. Furnace heat, open fire places, tile or brick mantels and automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and figures being taken.

RESIDENCE—2 story and base, frame, \$12,000. Claremont, Alameda Co., Cal. Architect, Benj. G. McDougall, Sheldon Bldg., S. F. Owner, Sam B. McLenagen. Location, Claremont. Will contain ten rooms, baths and sleeping porch. Interior finish pine, hardwoods and white enamel. Hardwood floors. Central heating system, open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heater. Exterior cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$3,500. Oakland, Cal. Architect, Hiram K. Lovell, Dalziel Bldg., Oakland. Owner, F. L. Wayne. Location, Dana street. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Furnace heat and open fire place. Brick mantel. Tile bath room. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$8,000. Piedmont, Alameda Co., Cal. Architect, Sidney B. Newsom, Nevada Bank Bldg., S. F. Owner, R. B. Bain. Location, Piedmont. Will contain nine rooms, three baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, O. F. Breiling, 1748 Broadway, Oakland. Location, east Rawson north Santa Rita. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 1 story and base, frame, \$2,500 each. Berkeley, Alameda Co., Cal. Architect, none. Owner, G. Taylor, 138 Walsworth avenue, Oakland. Location, east Charlotte south Posen. Will contain five rooms and bath each. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exterior covered with rustic and cement

plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, Henry Barkmeyer, 173 35th avenue, Oakland. Location, west peralta south Lynde. Will contain five rooms and bath. Interior finish pine with some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1½ story and base, frame, \$2,200. Oakland, Cal. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner, E. L. Higgins. Location, Thomas street. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire place and tile mantel. Automatic water heater. Tile bath. Exterior covered with cement plaster. Plans being prepared. Work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,200. Oakland, Cal. Architect, none. Owners, Hanehaber & Picard, 477 Hardy, Oakland. Location, west Hemphill north Coronado. Will contain six rooms and bath. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior cement plaster. Work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, Owner, H. Goranson, 431 48th street, Oakland. Location, southeast corner 50th and Vgnacio. Will contain six rooms, bath and sleeping porch. Interior finish pine. Some hardwood floors. Open fire place and tile or brick mantel. Tile bath. Automatic water heater. Work to be done by Day Labor. Exterior cement plaster.

RESIDENCE—1 story and base, frame, \$2,500. Berkeley, Alameda Co., Cal. Architect, none. Owner, George L. Mohr, 2055 University avenue, Berkeley. Location, east Colby south Webster. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Automatic water heater. Exterior cement plaster. Work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, J. Clinkenbeard, 2700 Grove street, Oakland. Location, south 40th street west Telegraph. Will contain five rooms, bath and sleeping porch. Interior finish pine, some hardwood floors. Open fire places and tile mantels. Automatic water heater. Exterior rustic and cement plaster. Work to be done by Day Labor.

LIBRARY—2 story and base. Class C construction. Cost as follows. Oakland, Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, City of Oakland. Contractor, C. Christenson, Oakland, general construction. Contract price, \$29,145. Siebert & Co., S. F., heating and ventilating, \$1,949, and Thomas Day Co., S. F., lighting fixtures, \$826.

SAN JOSE AND THE SANTA CLARA VALLEY.

BRIDGE CONSTRUCTION—Steel and concrete. Cost not stated. Santa Cruz, Santa Cruz Co., Cal. Engineer, County Surveyor, Santa Cruz. Owners, Counties of Santa Cruz and San Benito. All bids for the construction of the Santa Cruz-San Benito county bridge have been rejected by the Board of Supervisors and new figures are being taken. Bids will be opened on November 9th.

STREET IMPROVEMENT—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer, Town Engineer, South San Francisco. Owners, South San Francisco. Bids will be opened on November 1 at 8 p. m. for improving Cypress avenue between the north line of Miller avenue and the south line of Lux avenue, and Lux avenue between the east line of Maple avenue and the west line of San Bruno, regrade, pave with asphaltic concrete, concrete gutters and four-inch lateral sewers. Bids will also be opened at the same time for the improvement of Magnolia avenue and Orange avenue, grade with asphaltic concrete and concrete gutters.

ROAD IMPROVEMENT—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Bids are now being taken by the County Supervisors for the macadamizing and grading of a portion of the Aromas road, in the Pajaro Road District of Monterey County. The bids close November 15th, 2 p. m. Further information may be had from the County Surveyor at Salinas.

STREET IMPROVEMENT—Cost not stated. Salinas, Monterey Co., Cal. Engineer, City Engineer, Salinas. Owners, City of Salinas. The City Council has rejected all bids received for the improvement of North Main street, and new bids have been called for. Further information may be had from the City Engineer at Salinas.

Contracts Awarded

SCHOOL—1 story, frame, \$7,620. Alpha School District, Madera Co., Cal. Architect, E. A. Mathewson, Forsythe Bldg., Fresno. Owners, Alpha School District. Contractors, Manning Bros., Fresno. Contract price, \$7,620.

SCHOOL WAREHOUSE—1 story, concrete, \$25,000. Palo Alto, Santa Clara Co., Cal. Architect, none. Owners, Trustees Leland Stanford, Jr., University. Contractor, A. E. Hettinger, Palo Alto. Contract price, \$25,000.

SEWER CONSTRUCTION—\$4,935.25. Daly City, San Mateo Co., Cal. Engineer, City Engineer, Daly City. Owners, Daly City. Contractor, W. J. Tobin, Daly City. Contract price, \$4,935.25.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

BRIDGES—3, steel and concrete. Cost not stated. Napa, Napa Co., Cal. Engineer, County Surveyor, Napa. Owners, Napa County. All bids received by the County Supervisors for the construction of three steel and concrete bridges in Road District No. 12 have been rejected, as all were considered too high. New bids will probably be called for.

WHARF—Cost not stated. Rio Vista, Solano Co., Cal. Engineer's name not given. Owners, California Transportation Co. Word has been received by M. Christensen, agent at Rio Vista for the California Transportation Company, Jackson street wharf, that the company will erect a modern wharf there for the dockage of their ships. The wharf will be 300 feet along the river front, according to A. E. Anderson, an official of the company.

WHARF CONSTRUCTION—\$10,000. Martinez, Contra Costa Co., Cal. Engineer's name not given. Owners, Grangers Business Association, Martinez. The Grangers Business Association has asked the Railroad Commission for authority to build a wharf in Contra Costa County into the Straits of Carquinez, near Port Costa. The association has obtained a franchise from Contra Costa County to build the wharf.

RESIDENCE—1 story and base, frame, \$16,000. Yountville, Napa Co., Cal. Architect, Sidney B. Newsom, Nevada Bank Bldg., S. F. Owner, Bertram E. Nixon. Will contain 16 rooms, several baths and sleeping porches and

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out buildings. Interior finish pine with hardwood floors. Bath rooms finished in tile. Central heating system and hot water supply. Open fire places and tile or brick mantels. Exterior covered with cement plaster. Work being done by Day Labor.

SEWER CONSTRUCTION—Cost not stated. Napa, Napa Co., Cal. Engineer, Town Engineer, Napa. Owners, Town of Napa. Bids will be opened on November 1st for the construction of a sewer in Nursery street. Complete information can be had from the Town Clerk.

STREET IMPROVEMENT—Cost not stated. Petaluma, Sonoma Co., Cal. Engineer, City Engineer, Petaluma. Owners, City of Petaluma. At the last meeting of the City Council the following action was taken relative to street improvements: Superintendent of Streets Shaver was ordered to reconstruct to curb and gutter on the south side of Western avenue from Post to Baker. On recommendation of the superintendent of streets, corrugated iron culverts were ordered for West street at Main, Stanley street at Upham and Bassett street at Upham. Ordinances Nos 140 and 141, establishing the grades of Hayes and Webster streets, were passed. A communication from Stone Bros. for a sewer on 3rd street between D and C was referred to the street committee. Specifications prepared by the City Engineer for the improvement of Laurel avenue from B to D street were accepted, and bids will be called for on the work.

STREET IMPROVEMENTS—Cost not stated. Napa, Napa Co., Cal. Engineer, Town Engineer, Napa. Owners, Town of Napa. At the last meeting of the City Council the following action was taken on street improvements: Specifications for work on Ash street, to cost \$1,243.97, were read and adopted and the work ordered done. Specifications under Resolution of Intention No. 458, for work on Clay street from Jefferson to Madison, to cost \$785.21, were also adopted and the work ordered done. Specifications for work on Jackson street from Vajome to Main were also read and adopted and the work was ordered done. The cost will be \$1,719.79. Specifications for sewer work on Nursery and Vallejo street, under Resolution of Intention No. 460, were read and adopted and the work ordered done. The cost will be \$520.20. Councilman Gardner said it has been suggested to him by the people living on Pine and Symons streets that catch-basins be placed on the corners of those streets. The matter was referred to the City Engineer.

SEWER CONSTRUCTION—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Plans and specifications having been approved, the City Council has ordered bids received until 8 p. m., November 1st for the construction of a sewer in Cutting Boulevard. Further information may be had from the City Engineer at Richmond.

Contracts Awarded.

BRIDGE—Reinforced concrete, \$1,418.50. Santa Rosa, Sonoma Co., Cal. Engineer, County Surveyor, Santa Rosa. Owners, Sonoma County. Contractors, Call Construction Co., Santa

Rosa. Contract price, \$1,448.50.

MARINE BARRACKS—3 story and base, reinforced concrete, \$141,700. Mare Island, Cal. Engineer, Bureau of Yards and Docks, Washington, D. C. Owners, United States Government. Contractors, Pringle-Dunn & Co., 338 Pine street, S. F. Contract price, \$141,700.

RESIDENCE—1 story and base, frame, \$3,140. Martinez, Contra Costa Co., Cal. Architect, Carl Geiffuss, 16 Kearny street, S. F. Owner, M. W. Joost. Ludden & Lambley, Martinez, submitted the low figure for this work and will probably be awarded the contract.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

APARTMENT HOUSE—3 story and base, frame, \$17,000. Fresno, Fresno Co., Cal. Architect, H. F. Starbuck, Rowell Bldg., Fresno. Owner, Jacob Richter. Location, lots 1 to 5 in block B. Will contain two, three and four room suites. Interior finish pine with some elm panels and hardwood floors. Bath rooms finished in tile. Central heating system and open air sleeping porches. Hot water supply. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BRIDGES—Concrete and timber. Cost not stated. Merced, Merced Co., Cal. Engineer, County Surveyor A. E. Cowell, Merced. Owners, Merced County. County Surveyor A. E. Cowell has been instructed by the Board of Supervisors to prepare plans and specifications for bridges to be constructed over streams crossing roads No. 4 and No. 5.

BRIDGES—Reinforced concrete. Cost not stated. Merced, Merced Co., Cal. Engineer, City Engineer, Merced. Owners, City of Merced. At the last meeting of the City Trustees plans and specifications were presented by Superintendent of Streets John Czerny for the construction of a concrete bridge over south slough on 16th street. The Trustees will co-operate with the County Supervisors in building the structure. While no action was taken, it is thought that bids will be called at the next meeting.

WAREHOUSE—1 story, brick. Cost not stated. Fresno, Fresno Co., Cal. Engineer, City Engineer Cronkite, Fresno. Owners, City of Fresno. Will cover an area of 100 by 150 feet, and will be constructed from old paving blocks removed from the streets. The work will be done by Day Labor.

IRRIGATION WORK—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Plans were presented at the last meeting of the directors and approved for the following work: (1) the construction of the nine reinforced structures in lateral No. 3, (2) the construction of plain and reinforced concrete transition outlet structure to the permanent flume over Dry creek. The plans were approved and bids were ordered advertised to close on November 6th. Further information may be had from the engineer at Modesto.

RESIDENCE—2 story and base, frame, \$15,000. Fresno, Fresno Co., Cal. Architects, Cones & Taylor, Fresno.

Owner, A. G. Wishon. Location Huntington Boulevard. Will contain twelve rooms, three baths and sleeping porches. Interior finish pine and hardwood with hardwood floors. Central heating system and open fire places. Mantels tile and brick. Bath rooms tile. All kinds of electric appliances. Exterior covered with cement plaster. Plans being prepared.

RESIDENCE—1 story and base, frame, \$1,200. Fresno, Fresno Co., Cal. Architect, None. Owner, Lydia Abbott. Location, 233 Mary street. Will contain four rooms and bath. Interior trim pine. Open fire place and tile mantel. Exterior rustic. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$6,000. Visalia, Tulare Co., Cal. Architects, Swartz & Swartz, Rowell Bldg., Fresno. Owner, Mary Francis Chatten. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hite enamel and hardwood. Hardwood floors. Open fire places, furnace heat and automatic water heater. Brick mantel, tile bath. Exterior covered with cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$6,000. Visalia, Tulare Co., Cal. Architects, Swartz & Swartz, Rowell Bldg., Fresno. Owner, Mrs. T. A. Elliott. Will contain eight rooms, bath and sleeping porch. Interior finish pine, white enamel and hardwood. Hardwood floors, open fire places and tile mantels. Automatic water heater. Tile bath room. Exterior covered with cement plaster. Plans being prepared.

SCHOOL ELECTRIC WORK—Cost not stated. Bakersfield, Kern Co., Cal. Architect, Orville L. Clark, Brower Bldg., Bakersfield. Owners, City of Bakersfield. Bids will be opened on October 30th for all electric work in the new schools. Plans can be secured from the architect.

SEWER CONSTRUCTION—Cost not stated. Paso Robles, San Luis Obispo Co., Cal. Engineer, City Engineer, Paso Robles. Owners, City of Paso Robles. A resolution of intention for the construction of sewers in Fifteenth and Sixteenth streets, the construction of a manhole at olive and Twelfth streets and the construction of sewers and manholes at the intersection of 11th and Vine streets. Further information will be given on this work when the bids have been called.

STREET PAVING—Cost not stated. Turlock, Stanislaus Co., Cal. Engineer, City Engineer, Turlock. Owners, City of Turlock. At the Trustees' last meeting the Engineer was instructed to prepare an estimate and the necessary plans and specifications for the grading, oiling and curbing of Marshall avenue to East street. Further information will be given on this work when the plans are completed.

STREET PAVEMENT—Cost not stated. Visalia, Tulare Co., Cal. Engineer, City Engineer, Visalia. Owners, City of Visalia. Plans and specifications prepared by the City Engineer for the improvement of South Bridge street from the alley line south of the Southern Pacific's new freight depot on North Bridge street to Tulare avenue were adopted by the City Trustees and bids on the work will be called for shortly. The improvement will consist of a concrete pavement.

ROAD EXTENSION—Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Plans and specifications for the excavation and construction along the line of certain portions of the rights-of-way on the extension of the Morio creek road, which work covers excavation and filling, etc., between station 0 and Station 262-00 were approved by the County Supervisors at their last meeting and bids have been ordered received until November 2nd, 10 a. m. Further information may be had from the County Surveyor at San Luis Obispo.

Contracts Awarded.

BRIDGE—Reinforced concrete, \$9,170. Madera, Madera Co., Cal. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, Madera County. Contractors, Manning Bros., Fresno. Contract price, \$9,170.

BRIDGES AND CULVERT—Reinforced concrete. Cost not stated. Hanford, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractor, Frank Gallagher, S. F. Contract price not stated.

BRIDGES—4, concrete, \$4,538. Modesto, Stanislaus Co., Cal. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Contractors, F. F. Reames and R. M. Simpson, Modesto. Contract price, \$4,538.

IRRIGATION WORK—Cost as follows. Modesto, Stanislaus Co., Cal. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Contractors, C. W. Richards, Oakland, enlarge canal between Bairden and Upper Dominick. Contract price, \$33,539; and Barrett & Hilp, Sharon Bldg., S. F., five concrete drops, \$6,209.50.

ROAD CONSTRUCTION—\$12,158.95. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractors, Castro & Blaisdell, Bakersfield. Contract price, \$12,158.95.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

APARTMENT HOUSE—3 story and base, brick and frame, \$10,000. Stockton, San Joaquin Co., Cal. Architect, none. Owner, W. E. Schroeder, Fremont and Sutter streets, Stockton. Location, southeast corner Fremont and Sutter streets. Will contain a number of two, three and four room suites: Interior finish pine and hardwood with some hardwood floors. Wall beds and private bath rooms. Steam heat, oil burning system, hot water supply. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BANK—2 story and base, reinforced concrete, \$10,000. Walnut Grove, Sacramento Co., Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owner, Bank of Alexander Brown. Will contain banking rooms on first floor and a number of modern offices above. Interior finish pine, hardwood and ornamental iron. Special bank fixtures. Exterior faced with pressed brick. Plans being prepared.

BRIDGE—Reinforced concrete, Cost not stated. Sacramento, Cal. Engineer, County Surveyor, Sacramento.

Owners, Sacramento County. Bids will be opened on November 2nd for the construction of a reinforced concrete bridge over the Pacific Gas and Electric Co.'s canal at Folsom. Plans can be secured from the County Surveyor.

BY-PASS—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. City Engineer Frank Miller has conferred with Major Rand of San Francisco over the plans for the Bryte by-pass north of Washington. The plans are nearly complete. Nearly twenty sets of plans have been made by the City Engineer of Sacramento in an effort to arrive at a satisfactory decision for weir or gates at the river end of the canal. Further information will be given when the plans have been completed.

OIL SUPPLY STATION—1 story, concrete, Cost not stated. Grass Valley, Nevada Co., Cal. Engineer, Engineering Dept. Standard Oil Co., S. F. Owners, Standard Oil Co. The Standard Oil Company has purchased a large tract of land here and will erect a big supply station on the site. The site is midway between the two towns and on a line of both steam and electric railways.

PUMPING STATION—Alter and remodel, reinforced concrete, \$25,000. Stockton, San Joaquin Co., Cal. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, Pacific Gas and Electric Co. Location, East and Sonora streets. Work will consist of concrete work, steel, plumbing and electric work. Exterior faced with cement plaster. Plans complete.

RESIDENCE—1 story and base, \$2,200. Sacramento. Architect, none. Owner, John L. Johnson, 2725 W, Sacramento. Will contain five rooms and bath. Interior finish pine. Hardwood floors, open fire place and tile mantel. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

STATE HIGHWAY CONSTRUCTION—Cost as follows. California. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. The following low bids were submitted at the last meeting of the State Highway Commission: Sonoma County, Sec. 8-A, Reclamation to Fairville, 4.2 miles, graded. Engineer's estimate, \$31,870.53. Low, Bates, Borland & Ayre, Oakland, \$22,182.90. Mariposa County, Sec. 18-A, westerly boundary to Cathay White Rock road, 10 miles, graded. Engineer's estimate, \$17,178.64. Low, George R. Bailey, San Diego, \$22,748.60. Placer County, Lincoln to northern boundary, 9 miles, paved with Portland cement concrete. Engineer's estimate, \$56,123.45. Low, C. H. & A. W. Gorrill, Call Bldg., S. F., \$17,339.80.

TRANSFORMER BUILDING—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The City Commission has accepted plans and specifications for a transformer building to be erected at the new sewer pumping station on Riverside road. Bids for the work will soon be asked for.

SEWERS—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Plans and specifications are

now being prepared by Joseph E. Temple of the City Engineer's office for alley sewers, and the City Commissioners will take the matter up with the Executive Board of the Oak Park Business Men's Association. It is estimated that six miles of sewers will be required to cover the territory bounded by Y street, Lower Stockton avenue, Park avenue and 37th street. Further information will be given on this work when the plans have been adopted.

Contracts Awarded.

ROAD CONSTRUCTION—\$26,000. Sacramento, Cal. Engineer, County Surveyor, Sacramento. Owners, Sacramento County. Contractors, Clark & Henry, Ochsen Bldg., Sacramento. Contract price, \$16,000.

WATER PUMPS AND HEADER CHAMBERS—\$19,000. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, Tiechert & Ambrose, Oschner Bldg., Sacramento. Contract price, \$19,000.

RESIDENCE—2 story and base, frame, \$12,000. Willows, Glenn Co., Cal. Architect, none. Owner, Frank E. Glenn. Contractor, W. R. Zumwalt, Willows. Contract price, \$12,000.

SCHOOL ADDITION—1 story, brick and concrete, \$7,000. Chico, Butte Co., Cal. Architect, A. J. Bryan, Chico. Owners, Chico Union High School District. Contractor, W. B. Johnson, Chico. Contract price, \$7,000.

LOS ANGELES & SOUTHERN CALIFORNIA.

APARTMENT HOUSE ADDITION—5 story and base. Class C construction, \$45,000. Ocean Park, Los Angeles Co., Cal. Architect, E. A. Wilson, Van Nuys Bldg., L. A. Owner, William Ellison. Location, Paloma avenue near Speedway. Will contain 78 rooms arranged in suites of two and three rooms. Interior finish pine. Central heating system, hot water supply and automatic elevator. Bath rooms finished in tile. Wall beds. Exterior faced with pressed brick. Plans being prepared.

RIVER PROTECTION WORK—Cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. The Board of Supervisors is advertising for bids for the construction of protection works along Santa Paula creek. J. B. McCloskey is the County Clerk.

BRIDGE—Reinforced concrete, \$10,000. Riverside, Riverside Co., Cal. Engineer, Charles B. Wright, Rialto. Owners, Crescent City Railroad Co., Riverside. The Crescent City Railway have plans under way for the construction of a reinforced concrete bridge under the present City Railway at Fairmount Boulevard. The bridge is to have an arch of 66 feet. It is to be 22 feet high and 22 feet across the top. Further information may be had from the engineer.

CHURCH—Class A construction, \$300,000. Los Angeles, Cal. Architect, John C. Austin, Baker-Detwiler Bldg., L. A. Owners, First Methodist Church. Location, southwest corner of 8th and Hope streets, covering an area of 195 by 157. Fireproof construction, complete steel frame, brick exterior walls faced with pressed brick and terra cotta. Interior finish hardwood and

ornamental plaster. Art glass windows. Concrete floors and hollow tile interior partitions. Steam heat and vacuum cleaning. Plans being completed and figures to be called for shortly.

HOTEL—4 story and base. Class C construction, \$30,000. Los Angeles, Cal. Architect, Charles H. Kysor, Wright and Callender Bldg., L. A. Owner, A. Phillips. Location, 6th street near 4th avenue, covering an area of 55 by 100 feet. Will contain two stories and a number of single rooms. Interior finish pine. Steam heat, elevator service and a hot water supply. Bath rooms finished in tile. Patent store fronts. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

HOSPITAL DETENTION HOME AND TWO COTTAGES—\$43,333. Ventura, Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. The Kling Co. of Los Angeles presented the low figures for this work at \$43,333 and will probably be awarded the contract. A complete list of the bids appears under the heading of Los Angeles and Southern California in this issue.

Contracts Awarded.

BATH HOUSE—3 story and base, same, \$25,000. Santa Monica, Los Angeles Co., Cal. Architect, Charles Gordon. Los Angeles Investment Bldg., L. A. Owners, Santa Monica Bathing Co. Contractor, L. F. S. Syndicate, Los Angeles Investment Bldg., L. A. Contract price, \$25,000.

PACKING HOUSE—1 story and base, reinforced concrete, \$25,000. Pomona, Los Angeles Co., Cal. Architect, none. Owners, Indian Citrus Union Plant. Contractors, Sommers-Lund Co., Baker-twiller Bldg., L. A. Contract price, \$25,000.

WAREHOUSE REINFORCING STEEL—\$26,000. Los Angeles, Cal. Architect's name not given. Owners, City of Los Angeles. Contractors, Southern California Iron and Steel Co., 4th and 14th streets, L. A. Contract covers reinforcing steel for municipal warehouse. Contract price, \$26,000.

LIBRARY—1 story and base, brick, \$24,592.50. Los Angeles, Cal. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, City of Los Angeles. Contractor, Robert Jordan, Security Bldg., L. A. Contract price, \$24,592.50.

Open Bids For State Work At Ventura.

Kling Co. of Los Angeles to be Awarded Contract for Detention Ward and Two Cottages.

(By Special Wire)

SACRAMENTO, CAL., Oct. 18, 1915—Bids were opened at the Monday meeting of the State Board of Control for the construction of a Detention Ward and two cottages at the California State Home for Girls near Ventura, Ventura County. The Kling Co., 15th and Long Beach, Los Angeles, presented the lowest bid and will probably be awarded the contract. Following is a complete list of the bids received:

Detention Ward and Cottages.

Kling Co., Los Angeles.....	\$43,333
F. O. Engstrom.....	45,987
L. Bergren & Son.....	48,472
W. E. Gier Constr. Co.....	48,599
Louis Cereghino & Son.....	49,789
George M. Easton.....	49,800
John Harnish Co.....	50,900
James T. Dawson.....	51,892
Merchants Rlty & Invst. Co.....	51,975
Dauhenspeck & Tryten.....	52,500
Robert Jordan.....	52,903
Jacob Constr. Co.....	53,360
C. McNeill.....	55,320
John Simpson & Co.....	56,950
Pioneer Constr. Co.....	59,361

PORTLAND AND OREGON

BRIDGE—Steel and concrete, \$235,000. Salem, Marion Co., Ore. Engineer, H. E. Holmes, Portland. Owners, Marion and Polk Counties. Assistant Engineer H. E. Holmes, of the State Highway Department, has submitted to the Marion County Court plans for the new bridge across the Willamette River at this point. The plans call for a steel bridge to cost approximately \$235,000. Polk and Marion Counties will share the cost of the proposed structure. Further information will be given when bids have been called.

WATER SYSTEM—\$21,623. Amity, Ore. Engineer's name not given. Owners, City of Amity. J. P. O'Neil of Portland submitted the lowest bid for the construction of the proposed water system to be constructed in this city. O'Neil bid \$11,854 for steel pipe and \$9,777.70 for wood pipe. He will probably be awarded the contract.

RAILROAD CONSTRUCTION—Cost not stated. Portland, Ore. Engineer's name not given. Owners, Oregon-California & Eastern Railroad Co., Portland. Permanent organization of the Oregon-California & Eastern Railroad Co., the plans of which contemplate the construction of a system of rail lines through Central Oregon to connect with existing railroads touching the borders of the vast undeveloped region and to open new through routes to San Francisco and Nevada have been effected. This was the following preliminary organization of the company under the laws of Nevada. The directors elected Robert E. Strathorn president.

STORES AND LOFTS—2 story and base, brick. Cost not stated. Portland, Ore. Architects, Whitehouse & Foulloux, Wilcox Bldg., Portland. Owner O. B. Stubbs. Will cover an area of 70

by 100 feet, and has been designed to carry four stories. Upper floor lofts. Interior finish pine. Patent store fronts, steam heat and hot and cold running water. Exterior faced with pressed brick. Plans being prepared.

SEATTLE AND WASHINGTON

Contracts Awarded.

WAREHOUSE—3 story and base, reinforced concrete, \$30,000. Camas, Wash. Architect, none. Owners, Crown-Willamette Paper Co. Contractors Van Sant-Houghton Co., 503 Market street, S. F. Contract price, \$30,000.

PUBLISHING OFFICES—6 story and base, steel and concrete, \$135,000. Seattle, Wash. Architects, Charles H. Bebb and Carl F. Gould, Denny Bldg., Seattle. Owner, Times Publishing Co. Contractor, A. W. Quist & Co., Hoge Bldg., Seattle. Contract price, \$135,000.

Mr. City Official:

A proposal ad in the "Building and Engineering News" will bring you inquiries and real competition on your public work; that's what you want!

PHILIPPINE CEMENT PLANT IN OPERATION.

[From the Philippine Free Press.] Information has been received from Manila that the first shipment of cement from the plant of the Rizal Cement Company, at Binangonan, Province of Rizal, has been received by a local firm. The works have been under construction for some time, but were completed only a few weeks ago. They have a capacity of 500 barrels a day. Tests of the product, both here and abroad, have been very satisfactory, proving it equal to the best imported cement. Some account of the plant, before its actual erection, was published in the Daily Consular and Trade Reports for September 27, 1912.

Seattle is the only city in the United States boasting a tin smelter. This industry depends on the Alaskan mines for its raw material, but hopes to develop connections enabling it to draw upon Bolivian and Chinese sources. The Straits Settlements are the present world leaders in tin production with 70,000 tons annually. Bolivia yields 20,000 tons and all other sources 30,000 tons.

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200 varieties—price list free.

White Brothers

5th and Brannan Streets

San Francisco

Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded SAN FRANCISCO.

No.	Owner	Contractor	Amt.
2976	Wynn	Haglund	1665
2977	Kazebeer	Gutleben	3850
2978	Martinho	De Luca	2100
2979	Towle	Dunn	1665
2980	Hennebury	Morriso	2900
2981	Crichton	Nolan	5870
2982	Brown	Brown	2900
2983	Sheehan	Roettger	2900
2984	Denigan	Wallen	7180
2985	Postal Realty	Kurtz	2782
2986	Same	De Lew	566
2987	Same	Van Emon	1650
2988	Same	Petersen	610
2989	Same	Soule	840
2990	Same	Herman	520
2991	Same	Clark	1975
2992	Same	Mission Marble	775
2993	Same	Feltz	1160
2994	Same	G. Iron	1160
2995	Lehfeldt	Lehfeldt	5000
2996	Same	Same	5000
2997	Same	Same	5000
2998	Stephens	Larsen	4100
2999	Garbarini	Gravano	5000
3000	Grannis	Grannis	1500
3001	Rudolph	Hansen	400
3002	Beyer	Beyer	3500
3003	Long	Long	3500
3004	Bothin	Bothin	3500
3005	Thompson	Thompson	2750
3006	Haner	Haner	2328
3007	Galatoire	Madden	2250
3008	Colombo	Baratti	5500
3009	Firpo	Hannah	10830
3010	Lynch	Grimes	9250
3011	Grover	McKenzie	42000
3012	City of S. F.	Lindgren	1350
3013	Leahfeldt	McKeon	8000
3014	Sullivan	Schroder	500
3015	Fretz	McKenzie	700
3016	Crocker Est.	Owner	500
3017	Tallant	Tallant	500
3018	Well	Swenson	500
3019	Dini	Dini	700
3020	Heyman	Heyman	400
3021	Van Garack	Old	500
3022	Cameron	Arthur	2450
3023	Leigh	Leigh	1500
3024	Petrucy	Novello	1500
3025	Allred	Allred	400
3026	Thitz	Thitz	500
3027	Patterson	Patterson	400
3028	Soureau	Soureau	400
3029	Pfahls	Pfahls	400
3030	Blum	Urier	1000
3031	S F Packing	Owner	4000
3032	Raggio	Devenenzi	3000
3033	Matulich	Maronich	2000
3034	Moeiler	Leigh	2000
3035	Heffrin	Heffrin	1000
3036	Henry	Grant	1150
3037	Pool	Backlund	1200
3038	Bleuss	Montroull	2500
3039	McBarnes	McBarnes	7500
3040	Birrer	Birrer	4000
3041	Christiansen	Alfred	2850
3042	Braun	Steur	2082
3043	Postal Rity	Kurtz	4970
3044	Whelan	Keenan	450
3045	Blockrock	Mager	450
3046	Delmas	Shoaf	3500
3047	Mitchell	Mitchell	3000
3048	S F Bldg Co.	Owner	4000
3049	Hanchett	Hanchett	2500
3050	Lacey	Rea	1200
3051	Prey	Rea	500
3052	Tuitchel	Pegel	7550
3053	MacDonald	Koschnetzki	3325
3054	Perren	Houle	1400
3055	Heineberg	Harper	1900
3056	Croce	Harper	400
3057	Henzel	Henzel	500
3058	Empress	Novelty	750
3059	Hemphill	Ferguson	850
3060	Standard Oil	Johnson	1000
3061	Scheider	Scheider	400
3062	Hobson	MacRea	7129
3063	Pringle	Pringle	3700
3064	Sudden	Pacific Mig	729
3065	MacKay	Johnson	250
3066	Cogswell	Bender	11455
3067	Same	Cal Granite	
3068	Same	Knowles	

3069	Meyer	Andresen	5035
3070	Garibaldi	Garibaldi	700
3071	Hanly	Hanly	400
3072	Robinson	Brumfield	500
3073	Winn	Holl	400
3074	Scoble	Scoble	10000
3075	Scoble	Scoble	10000
3076	Alexander	Alexander	4000
3077	Pacific G & E Co.	Vulcan	12988
3078	Lynch	Pinkerton	1105

FRAME DWELLING

(2976) W MOULTRIE 125 S Tompkins.
One and one-half-story and basement frame dwelling.
Owner.....Mary E. Wynn, 604 Moultrie, San Francisco.
Architect...None.
Contractor...K. Haglund, 602 Moultrie, San Francisco.

COST, \$1665

FRAME DWELLING

(2977) E UPPER TERRACE 32-6 S Clifford. Two-story and basement frame dwelling.
Owner.....Estelle Kazebeer, 375 Mills Bldg., San Francisco.
Designers...C. M. Norgrove and W. W. Eckley, 2220 Roosevelt Ave Berkeley.
Contractor...Gutleben Bros., New Call Bldg., San Francisco.

COST, \$3850

ALTERATIONS

(2978) NO. 2266 UNION. Alterations and additions to brick residence.
Owner.....A. S. Martinho, Premises.
Architect...A. A. Cantin, 68 Post, S. F.
Contractor...R. De Luca, 2256 Jones, San Francisco.

COST, \$2100

FRAME DWELLING

(2979) E FORTY-SEVENTH AVE 250 N Fulton. One-story and basement frame dwelling.
Owner.....Mrs. Jennie Towle, 206 Hobart Bldg., S. F.
Architect...None.
Contractor...J. M. Dunn, 2630 Anza, San Francisco.

COST, \$1665

FRAME DWELLING

(2980) S JACKSON 214-4 W Larkin. Two-story and basement frame dwlg.
Owner.....E. and L. Hennebury, 1029 Sacramento, S. F.
Architect...None.
Contractor...A. T. Morris, 501 11th Ave., San Francisco.

COST, \$2900

FRAME STORE

(2981) W MISSION 100 S Twenty-third. One-story frame store.
Owner.....James Crichton, 207 Cole, San Francisco.
Architect...None.
Contractor...M. F. Nolan, 228 Noe, S. F.

COST, \$5870

FRAME DWELLING

(2982) W SEVENTEENTH AVE 278-11 N Clement. Two-story and basement

frame dwelling.

Owner.....Lillie E. Brown, 1434 6th Ave., San Francisco.
Architect...Theo. W. Lenzen, 709 Humboldt Bank Bldg., S. F.
Contractor...S. E. Brown, 1434 6th Ave. San Francisco.

COST, \$2900

FRAME DWELLING

(2983) N CABILLO 57 W 15th Ave. Two-story and basement frame dwlg.
Owner.....Ellen F. Sheehan, 1027 Phelan Bldg., S. F.
Architect...None.
Contractor...Fred Roettger, 272 12th Ave., San Francisco.

COST, \$2000

CLASS "C" BRICK STORES

(2984) NW VAN NESS AVE AND McAllister W 100-9XN 60. All work for one-story Class "C" brick stores.
Owner.....E. C. Denigan, Pacific Bldg San Francisco.
Architect...O'Brien Bros., 240 Montgomery, San Francisco.
Contractor...A. M. Wallen, 251 Kearny, San Francisco.
Filed Oct. 16, '15. Dated Oct. 15, '15.
All steel in position.....\$1346.25
Roofed.....1346.25
Brown coated.....1346.25
Completed and accepted.....1346.25
Usual 35 days.....1795.00
TOTAL COST, \$7180.00

Bond, \$3590. Sureties, Gustave Peterson and P. J. Carney. Limit, 40 days. Forfeit, \$10. Plans and specifications filed.

ALTERATIONS

(2985) S PINE 68-9 E Sansome. Plumbing and heating for alterations and additions to brick stores and offices.
Owner.....Postal Realty Co., 247 Powell, San Francisco.
Architect...Chas. Paff & Co., 905 Merchants' Exchange Bldg., San Francisco.
Contractor...O. Kurtz, 445 Stevenson, San Francisco.

COST, \$2782

(2986) ELECTRIC WIRING ON ABOVE

Contractor...De Lew Elec. Co., 139 Stevenson, San Francisco.

COST, \$566

(2987) ELEVATOR WORK ON ABOVE

Contractor...R. C. Van Emon, 235 1st, San Francisco.

COST, \$1650

(2988) CONCRETE WORK ON ABOVE

Contractor...H. L. Peterson, 62 Post, San Francisco.

COST, \$610

(2989) REINFORCING BARS ON

above.

Contractor...Edw. L. Soule, Rialto Bldg San Francisco.

COST, \$340

VAULT DOORS ON ABOVE.
 Contractor...Hermann Safe Co., 120
 Folsom, San Francisco.
 COST, \$230

TERRA COTTA ON ABOVE.
 Contractor...N. Clark & Son, 116 Na-
 toma, San Francisco.
 COST, \$1975

MARBLE AND TILE WORK
 above.
 Contractor...Mission Marble Works, 363
 Guerrero, San Francisco.
 COST, \$775

TERRAZZO WORK ON ABOVE
 Contractor...Francis Feltz, 1716 Mission
 S. F.
 COST, \$325

STRUCTURAL IRON WORK
 above.
 Contractor...Golden Gate Iron Works,
 1514 Howard, S. F.
 COST, \$1160

E FLATS
 S FILBERT 97-6 W Steiner.
 2-story frame flats.
 Contractor...Henry A. Lehfeldt, Fran-
 cisco and Sacramento, Ber-
 keley.
 Contractor...Thomas & Oliver, Pan-
 tagas Theatre Bldg., Okd.
 work.
 COST, \$5000

E FLATS
 S FILBERT 122-6 W Steiner.
 2-story frame flats.
 Contractor...Henry A. Lehfeldt, Fran-
 cisco and Sacramento, Ber-
 keley.
 Contractor...Thomas & Oliver, Pan-
 tagas Theatre Bldg., Okd.
 work.
 COST, \$5000

E FLATS
 S FILBERT 67½ W Steiner.
 2-story frame flats.
 Contractor...Henry A. Lehfeldt, Fran-
 cisco and Sacramento, Ber-
 keley.
 Contractor...Thomas & Oliver, Pan-
 tagas Theatre Bldg., Okd.
 work.
 COST, \$5000

K APARTMENTS
 E HDYE 112-6 S Ellis. Four-
 y and basement brick (12) apart-
 mts.
 Contractor...Mrs. F. Stephens.
 Contractor...Arthur G. Scholz, 839 Phe-
 lian Bldg., San Francisco.
 Contractor...Larsen-Sampson Co., 601
 Crocker Bldg., S. F.
 COST, \$18,000

IE FLATS
 S NORTON 200 W Mission.
 2-story and basement frame (2)
 flats.
 Contractor...G. Garbarini, 35 Norton,
 San Francisco.
 Contractor...Paul De Martini.
 Contractor...A. Gravano, 9 Eugenia
 Ave., San Francisco.
 COST, \$4100

ME RESIDENCE
 S JACKSON 61-5 E Steiner.
 2-story and basement frame resi-
 dence.
 Contractor...Mrs. Sophie Grannis, 1955
 Franklin, San Francisco.
 Contractor...E. E. Young, 251 Kearny,

San Francisco.
 Contractor...F. R. Granis, 1955 Frank-
 lin, San Francisco.
 COST, \$3000

FRAME DWELLING
 (3001) SW ATHENS AND CORDOVA.
 One-story and basement frame dwlg.
 Owner...J. Rudolph, 1636 18th Ave.,
 San Francisco.
 Architect...None.
 Contractor...Peter Hansen, 4097 23rd,
 S. F.
 COST, \$1800

PLASTERING, ETC.
 (3002) NO. 603 MORSE. Plastering,
 new roof and windows.
 Owner...M. Beyer, Premises.
 Architect...None.
 Day's work.
 COST, \$400

BOILER HOUSE
 (3003) S HAIGHT 130 W Broderick.
 One-story brick boiler house.
 Owner...S. F. Long, 21 Buena Vista
 Ave., San Francisco.
 Architect...None.
 Day's work.
 COST, \$500

BRICK WAREHOUSE
 (3004) N CLEMENTINA 200 E 4th.
 One-story brick and reinforced con-
 crete warehouse.
 Owner...H. E. Bothin, 604 Mission,
 San Francisco.
 Architect...John A. Ettler, 604 Mission
 San Francisco.
 Day's work.
 COST, \$3500

FRAME DWELLING
 (3005) E EIGHTH AVE 150 S Geary.
 Two-story and basement frame dwlg.
 Owner...Mrs. Anna E. Thompson,
 1140 Clay, San Francisco.
 Architect...C. O. Clausen, Hearst Bldg
 San Francisco.
 Contractor...W. S. Thompson, 1140 Clay,
 San Francisco.
 COST, \$3500

FRAME FLATS
 (3006) W SAN CARLOS 210 N 19th.
 Two-story and basement frame (2)
 flats.
 Owner...John F. Haner, 3580 20th,
 San Francisco.
 Architect...None.
 Day's work.
 COST, \$2750

FRAME RESIDENCE
 (3007) SW INNES AVE 175 SE New-
 hall SE 25xSW 100. All work for one
 and one-half-story frame residence.
 Owner...Mrs. Engenie Galatoire,
 1534 Innes, S. F.
 Architect...None.
 Contractor...P. H. Madden, 1527 Jerrold
 San Francisco.
 Filed Oct. 18, '15. Dated Oct. 16, '15.

Frame up\$584.50
 1st coat plaster on 584.50
 Completed and accepted 584.50
 Usual 35 days 584.50
 TOTAL COST, \$2338.00
 Bond, \$1200. Sureties, Thos. R. O'Day
 and Leo. W. Hardy. Limit, 30 days.
 Forfeit, none. Plans and specifications
 filed.

FRAME DWELLING
 (3008) W LEAVENWORTH 78 S Val-
 lejo S 19-5xW 137-6. All work for
 one-story and basement frame dwlg.
 Owner...Antonio Colombo, 844 North
 Point, San Francisco.

Architect...Paul J. Capurro, 1844
 Powell, San Francisco.
 Contractor...Ernesto Baratti, 1842
 Powell, San Francisco.
 Filed Oct. 18, '15. Dated Oct. 5, '15.
 Frame up\$612.50
 Brown coated 612.50
 Completed and accepted 612.50
 Usual 35 days 612.50
 TOTAL COST, \$2450.00
 Bond, none. Limit, 70 days. Forfeit,
 none. Plans and specifications filed.

ALTERATIONS
 (3009) E GRANT AVE 68 S Union.
 All work except window shades and
 gas fixtures for alterations and addi-
 tions to frame building (New
 Tivoli Hotel).
 Owner...S. Firpo and Finocchio
 Bros., 1434 Grant Ave.,
 San Francisco.
 Architect...None.
 Contractor...B. Pagano, 1628 Stockton,
 San Francisco.
 Filed Oct. 18, '15. Dated Oct. 16, '15.

Roof on\$1375
 Brown coated 1375
 Completed and accepted 1375
 Usual 35 days 1375
 TOTAL COST, \$5500
 Bond, \$2750. Surety, Emilio and A. S.
 Cleerone. Limit, 90 days from Oct. 18.
 Forfeit, none. Plans and specifications
 filed.

BRICK STORES AND APARTMENTS
 (3010) N GEARY 62-6 E Jones E 75xN
 77-6. All work for two-story brick
 stores and apartments.
 Owner...Jeremiah Lynch.
 Architect...W. H. Crim Jr., 425 Kear-
 ny, San Francisco.
 Contractor...J. S. Hannah, Williams
 Bldg., San Francisco.
 Filed Oct. 18, '15. Dated Oct. 16, '15.

Brick work completed and roof
 on\$2707.50
 Standing finish on ready for
 painting 2707.50
 Completed and accepted 2707.50
 Usual 35 days 2707.50
 TOTAL COST, \$10,830.00
 Bond, \$5425. Sureties, G. W. Cushing
 and J. D. Hannah. Limit, 55 days from
 recording. Forfeit, \$15. Plans and
 specifications filed.

COTTAGES AND GARAGES
 (3011) W ELLINGWOOD 35 N San
 Miguel Rancho and rear being Lots
 30 and 41 in W side Edgewood Ave
 E 25 frontage by 121-6. All work
 except painting for three one-story
 and basement frame cottages and 3
 garages.
 Owner...C. B. Grover, 215 Califor-
 nia, San Francisco.
 Architect...Dolliver & Swan, 761
 Royal Insurance Bldg., 201
 Sansome, S. F.
 Contractor...Grimes & Drew, 116 Bat-
 tery, San Francisco.
 Filed Oct. 19, '15. Dated Oct. 18, '15.

Concrete work completed\$1870
 Frame up and roof rafters on 1870
 Plastered 1870
 Standing finish on 1870
 Completed and accepted 1870
 TOTAL COST, \$9350
 Bond, none. Limit, 90 days from sign-
 ing. Forfeit, none. Plans and speci-
 fications filed.

(Correction in Location)

LIBRARY

(3012) FLK BDED BY LARKIN, McAllister, Hyde and Fulton. All work except exterior granite, interior imitation Travertine stone, book stacks and furniture for public library building.

Owner.....Board of Trustees of Public Library & Reading Rooms.

Architect...George W. Kelham, Sharon Bldg., San Francisco.

Contractor...Lindgren Co., Monadnock Bldg., San Francisco.

Filed Oct. 19, '15. Dated Oct. 15, '15.
On 15th of each month..... 75%
5 days after completion.....Balance

TOTAL COST, \$420,606

Bonds, \$105,500 in favor of owner and \$219,303 in favor of material men. Surety, Guardian Casualty & Guaranty Co. Limit, 320 working days. Forfeit, \$100. Plans and specifications filed.

FLATS

(3013) S FILBERT, bet. Steiner and Pierce. Plumbing, sewer, gas and water piping for three two-story flat buildings.

Owner.....Henry A. Leahfeldt, Francisco and Sacramento, Bkly
Architect...None.

Contractor...F. P. McKeon, 3206 Fillmore, San Francisco.

Filed Oct. 19, '15. Dated Oct. 15, '15.

Rough plumbing in.....\$483
On completion..... 483

Usual 35 days..... 384
TOTAL COST, \$1350

Bond, limit, forfeit, none. Plans and specifications, none.

FRAME FLATS

(3014) W DOLORES 70 S 17th S 28-8x W 75. All work for three-story frame (6) flats.

Owner.....Michael & Birdie Sullivan, 67 Dorland, S. F.

Architect...John J. Foley, 46 Kearny, San Francisco.

Contractor...Schroder Bros., 765 Folsom, San Francisco.

Filed Oct. 19, '15. Dated Oct. 5, '15.

Frame up.....\$2150
Brown coated..... 2150

Completed and accepted..... 2150
Usual 35 days..... 2150

TOTAL COST, \$8600

Bond, \$1300. Surety, Hartford Accident & Indemnity Co. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(3015) NO. 2440 TWENTY-SECOND. Alter and repair dwelling.

Owner.....Mrs. E. B. Fretz, 3446 22nd San Francisco.

Architect...None.

Contractor...W. McGenzie, 2885 Pine, San Francisco.

COST, \$500

ALTERATIONS

(3016) GORE COR. MARKET & POST. Install skylights and sub-divide rooms.

Owner.....Crocker Estate Co., 525 Crocker Bldg., S. F.

Architect...None.

Day's work..... COST, \$700

ALTERATIONS

(3017) NO. 610 GEARY. Alter store for dining room and kitchen.

Owner.....Geo. P. Tallant, 604 California-Pacific Bldg., S. F.

Architect...None.

Day's work..... COST, \$500

ALTERATIONS

(3018) NO. 628 HAIGHT. Alter store.

Owner.....Chas. B. Weil, 25 Stockton, San Francisco.

Architect...None.

Contractor...Swenson & Franzen, 145 Natoma, San Francisco.

COST, \$500

CONCRETE FLOOR, ETC.

(3019) SE LOMBARD AND OCTAVIA. Concrete floor and wall.

Owner.....R. Dini, 2051 Lombard, San Francisco.

Architect...None.

Day's work..... COST, \$700

FRAME DWELLING

(3020) W THIRTY-NINTH AVE 210 N Fulton. One-story and basement frame dwelling.

Owner.....Oscar Heyman & Bro., 742 •Market, San Francisco.

Architect...None.

Contractor...Oscar Heyman & Bro., 742 Market, San Francisco.

COST, \$1750

ALTERATIONS

(3021) NO. 1578 ELEVENTH AVE. Raise and alter dwelling.

Owner.....J. Van Garack, Premises.

Architect...None.

Contractor...G. H. Old, 1329 9th Ave., San Francisco.

COST, \$400

ALTERATIONS

(3022) W TWENTY-FIFTH AVE 75 S West Clay. Alter for garage and dwelling.

Owner.....Dr. Ida B. Cameron, Prem.

Architect...None.

Contractor...J. Arthur & Son, 1330 8th Ave., San Francisco.

COST, \$500

FRAME DWELLING

(3023) W EIGHTEENTH AVE 125 S Balboa. Two-story and basement frame dwelling.

Owner.....E. Leigh, 421 21st Ave., San Francisco.

Architect...None.

Contractor...Leigh & Schultz, 421 21st Ave., San Francisco.

COST, \$2450

FRAME DWELLING

(3024) SE JENNINGS' AND KEY. One-story and basement frame dwlg.

Owner.....James Petrucy and G. Novello, 1009 Key Ave., San Francisco.

Architect...None.

Day's work..... COST, \$1500

FRAME DWELLING

(3025) S OCEAN 122 E Otsego. One and one-half-story and basement frame dwelling.

Owner.....C. S. Allred, 150 Onondago Ave., San Francisco.

Architect...None.

Day's work..... COST, \$1950

ALTERATIONS

(3026) NO. 37 ARBOR. Alter fire damage.

Owner.....Mrs. M. Thitz, Premises.

Architect...None.

Day's work..... COST, \$400

FRAME DWELLING

(3027) W THIRTY-FOURTH AVE S Geary. One-story and base frame dwelling.

Owner.....H. E. Patterson, Geary, San Francisco.

Architect...None.

Day's work..... COST

ALTERATIONS

(3028) NO. 465 TENTH AVE. and alter dwelling.

Owner.....Louis D. Soureau, Clay, San Francisco.

Architect...None.

Day's work..... COST,

ADDITION

(3029) NO. 440 BRAZIL. Rals add to cottage.

Owner.....Annie H. Pfahls, 319 San Francisco.

Architect...None.

Day's work..... COST,

ALTERATIONS

(3030) NOS. 48-50 CALIFORNIA. for stores.

Owner.....Leon Blum, 214 I San Francisco.

Architect...None.

Contractor...Chas. E. Urfer, 555 S. F.

COST,

FRAME WAREHOUSE

(3031) NW FAIRFAX & MENI One-story frame warehouse.

Owner.....S. F. Packing & Prov Co., Premises.

Architect...None.

Day's work..... COST,

FRAME FLATS

(3032) S ANZA 82-6 E Twenty-s Ave. Two-story and basement f

(2) flats.

Owner.....Joseph Raggio, 392 bard, San Francisco.

Architect...J. Devencenzi, 1069 U San Francisco.

Contractor...Devencenzi Bros., Union, San Francisco.

COST,

FRAME FLATS

(3033) W EIGHTH AVE 250 N F Two-story and basement frame

flats.

Owner.....Mat Matulich, 671 9th San Francisco.

Architect...None.

Contractor...G. Maronich, 4137 S. F.

COST,

FRAME DWELLING

(3034) E EIGHTEENTH AVE 3 Geary. Two-story and base

frame dwelling.

Owner.....G. Moeller, 24th and ment, San Francisco.

Architect...None.

Contractor...Leigh & Schultz, 419 Ave., San Francisco.

COST,

FRAME DWELLING

(3035) S VALLEJO 137-6 E T Two-story and basement frame

Owner.....W. Heffrin, Premises

Architect...Louis Mastropasqua, Washington, S. F.

Day's work..... COST,

NOTE:—Foundation started.

DWELLING
N GRAFTON 50 W Granada.
tory and basement frame dwlg.
Sussane Henry, 4829 Mis-
sion, San Francisco.
None.
tor. J. C. Grant, 646 Edinburgh
S. F. COST, \$1000

DWELLING
N CHENERY — E Surrey. One
and basement frame dwelling.
John Pool, 14 Surrey, S. F.
None.
tor. John Backlund, 1172 De
Haro, San Francisco
COST, \$1150

ATIONS
NO. 235 CORTLAND. Alter
er shop.
Frank Bleuss, Premises.
None.
tor. P. W. Montrouil, 270 An-
dover, San Francisco.
COST, \$1200

DWELLING
E FORTY-SEVENTH AVE 190
arillo. Two-story and basement
dwelling.
A. C. McBurnes, 1536 Haight,
San Francisco.
tor. G. E. Gottschalk, 958 Phen-
lian Bldg., San Francisco.
ork. COST, \$2500
Foundation in.

TENEMENTS
N CALIFORNIA 127 W Larkin.
-story and basement frame (6)
ents.
A. Birrer, 1480 Sutter, S. F.
tor. Heiman & Schwartz, Nava-
da Bank Bldg., S. F.
ork. COST, \$7500

FLATS
N CABRILLO 95 W 7th Ave.
-story and basement frame (2)
ents.
L. C. Christiansen, 1345 4th
Ave., San Francisco.
tor. Keonig & Christiansen, 914
Humboldt Bk. Bldg., S. F.
ork. COST, \$4000

STORES
W VALENCIA 60 N 17th 60x88.
lumber, plaster, roofing, rough
ware, etc., for one-story and
ment frame stores.
J. and Fred Braun, 730
Guerrero, San Francisco.
tor. Ernest U. Essman, 24th
and Church, S. F.
tor. Steur & Bury, 1465 O'Far-
rell, San Francisco.
Oct. 20, '15. Dated Oct. 18, '15.
Frame up and roof on.....\$710
Sided and front completed... 710
Sided..... 715
Usual 35 days..... 715
TOTAL COST, \$2850
Bond, none. Limit, 30 days. Forfeit,
Plans and specifications filed.

ATIONS
S PINE 55-59 E Sansome E 34-
36. Plumbing, sewerling, pip-
and steam heating for alterations
additions to offices and stores.
Postal Realty Co., 247 Powell
San Francisco.

Architect...Charles Paff & Co., Mer-
chants' Exchange Bldg.,
San Francisco.
Contractor...O. Kurtz, 445 Stevenson,
San Francisco.
Filed Oct. 20, '15. Dated Oct. 4, '15.
Roughing in completed.....\$1041
Completed and accepted..... 520
Usual 35 days..... 521
TOTAL COST, \$2082
Bond, \$1041. Sureties, Adolph and Wm.
Kurtz. Limit, 40 days. Forfeit, \$5.
Plans and specifications filed.

FRAME FLATS
(3044) E THIRTEENTH AVE 100 S
Balboa (B) S 25x E 120. All work for
two-story and basement frame flats.
Owner.....Thos. F. Whelan, 46 Val-
paraiso, San Francisco.
Architect...None.
Contractor...C. J. & W. J. Keenan, 1743
Cole, San Francisco.
Filed Oct. 20, '15. Dated Oct. 20, '15.
Frame up.....\$1242
Brown coated..... 1242
Completed and accepted..... 1242
Usual 35 days..... 1244
TOTAL COST, \$4970
Bond, none. Limit, 100 days. Forfeit,
none. Plans and specifications filed.

NEW FRONTS
(3045) SE ALABAMA AND TWENTY-
fourth. New fronts.
Owner.....Chas. Bockroff, Premises.
Architect...None.
Contractor...Mager Bros., 110 Jessie,
San Francisco.
COST, \$450

ALTERATIONS
(3046) NO. 948 OLNEY. Alter and
add to dwelling.
Owner.....W. W. Delmas, Premises.
Architect...None.
Contractor...Shoaf Bros., 3534 San
Bruno, San Francisco.
COST, \$450

FRAME FLATS
(3047) E POTRERO 75 N 25th. Two-
story and basement frame (2) flats.
Owner.....Thos. F. Mitchell, 1370
Utah, San Francisco.
Architect...None.
Day's work. COST, \$3500

FRAME DWELLING
(3048) W SEVENTEENTH AVE 121 S
California. One-story and basement
frame dwelling.
Owner.....S. F. Bldg. Co., 45 Kearny,
San Francisco.
Architect...None.
Day's work. COST, \$3000

FRAME FLATS
(3049) W COLLEGE AVE 225 N St.
Mary's Ave. Two-story and basement
frame (2) flats.
Owner.....Carrie Hanchett, 108 Col-
lege Ave., San Francisco.
Architect...None.
Contractor...F. Hanchett, 108 College
Ave., San Francisco.
COST, \$2500

BRICK MACHINE SHOP
(3050) S RUSH 192-3 W Polk. One-
story and basement brick machine
shop.

Owner...V. E. Lacey & E. Reite, 110
Jessie, San Francisco.
Architect...O. R. Thayer, 41 Mont-
gomery, San Francisco.
Contractor...J. B. Reite.
COST, \$4900

ALTERATIONS
(3051) E HOOPER 100 N Eighth. Alter
machinery building.
Owner.....John Frey, Premises.
Architect...None.
Contractor...San Francisco Mill Fur-
nishing Co., 521-23 7th, S. F.
COST, \$1200

ADDITION
(3052) NO. 323 THIRD AVE. Add
porch.
Owner.....W. Tuitchel, Premises.
Architect...None.
Contractor...F. Pegel, 366 10th Ave.,
San Francisco.
COST, \$500

FRAME FLATS
(3053) W DOLORES 134 N 15th N 25
x W 125 M B 82. All work for three-
story and basement frame flats.
Owner.....John A. MacDonald.
Architect...C. O. Clausen, Hearst Bldg
San Francisco.
Contractor...John Koschnetzki, 1321
12th Ave., San Francisco.
Filed Oct. 21, '15. Dated Oct. 19, '15.
Frame up.....\$1415.60
Brown coated..... 1415.60
Standing finish and exterior
wood work completed..... 1415.65
Completed and accepted..... 1415.65
Usual 35 days..... 1887.50
TOTAL COST, \$7550.00
Bond, \$4000. Sureties, J. L. Ward and
Jno. Spargo. Limit, 90 days. Forfeit,
\$5. Plans and specifications filed.

FRAME STORE AND FLAT
(3054) SW MISSION 275 SW from S
corner Mission and Russia Ave SW
25xSE 83-6 Ptn Bk 5, Excelsior
Homestead. All work except grad-
ing, foundation or concrete work for
two-story frame store and flat.
Owner.....Margaret J. Ferren, 79
Broad, San Francisco.
Architect...None.
Contractor...David Houle, 660 Market,
San Francisco.
Filed Oct. 21, '15. Dated Oct. 19, '15.
Frame up, \$381.25 and Deed to
Lot valued at \$450.....
Brown coated, \$381.25 and Deed
to Lot valued at \$450.....
Completed, \$381.25 and Deed to
Lot valued at \$450.....
Usual 35 days.....\$331.25
TOTAL COST, \$3325.00
Bond, \$1750. Sureties, Marion Houle
and Virena M. Salmon. Limit, 110
days. Forfeit, none. Plans and spec-
ifications filed.

FRAME DWELLING
(3055) S JACKSON 214-4 W Larkin
W 25xS 117-10½ th Irregular 25 to
E line, th N to beg. All work for
two-story and basement frame dwlg.
Owner.....Laura and Elfrieda Hein-
berg, 1029 Sacramento
San Francisco.
Architect...None.
Contractor...Alfred T. Morris, 501 11th
Ave., San Francisco.
Filed Oct. 21, '15. Dated Sept. 20, '15.

Frame up & rafters in place. \$86.25
1st coat plaster on..... \$86.25
Standing finish on and doors
hung \$86.25
Completed \$86.25
Usual 35 days..... \$1675.00
TOTAL COST, \$4500.00
Bond, none. Limit, 100 days from
Sept. 20. Forfeit, none. Plans and
specifications filed.

NOTE:—1st report Oct. 18th, No. 2980

FRAME DWELLING

(3056) W HOLLY PARK CIRCLE 50
S Murray. One-story and basement
frame dwelling.
Owner.....Antonio Croce, 453 Holly
Park Circle, S. F.
Architect...None.
Contractor...Wm. Harper, 431 Holly
Park Circle, San Francisco.
COST, \$1400

CONCRETE GARAGE

(3057) S BUSH 127-6 E Steiner. One-
story concrete garage.
Owner.....Geo. L. Henzel, NE Bush &
Steiner, San Francisco.
Architect...Oliver Everett, 1940 Web-
ster, San Francisco.

Day's work. COST, 1900

SIGN

(3058) NO. 965 MARKET. Electric
sign.
Owner.....Empress Theatre, Prem.
Architect...None.
Contractor...Novelty Elec. Sign, 165
Eddy, San Francisco.
COST, 400

ALTERATIONS

(3059) NO. 2020 BROADWAY. Addition
and alteration to dwelling.
Owner.....Hemphill Estate, Los Gatos
Architect...None.
Contractor...Ferguson & Son, 1739
Union, San Francisco.
COST, \$500

SUPPLY STATION

(3060) SE DUBOCE AND SANCHEZ.
One-story steel supply station.
Owner.....Standard Oil Co., Standard
Oil Bldg., S. F.
Architect...None.
Contractor...Mortenson Constr. Co.
COST, \$750

(3061) NO. 538 NATOMA. Add eight
rooms to rooming house.

Owner.....L. Scheafer, Premises.
Architect...None.
Day's work. COST, \$850

FRAME DWELLING

(3062) NO. 22 DOUGLASS (rear).
One-story and basement frame dwlg.
Owner.....John Hobson, Premises.
Architect...None.
Contractor...A. S. MacRea, 655 Moraga,
San Francisco.
COST, \$1000

INSTALL SIDEWALK DOORS

(3063) NO. 468 PINE. Install side
walk doors.
Owner.....Pringle Co., Russ Bldg.,
San Francisco.
Architect...None.
Day's work. COST, \$400

RESIDENCE

(3064) N WASHINGTON 103 W
Spruce N 127-8 1/4 x W 62-6. Mill and

carpentry finish for residence.
Owner.....Margaret E. Sudden, 62
Jordan Ave., S. F.
Architect...G. A. Applegarth, Claus
Spreckels Bldg., S. F.
Contractor...Pacific Mfg. Co., 117 Ste-
venson, San Francisco.
Filed Oct. 22, '15. Dated Oct. 16, '15.

On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$7129

Bond, none. Limit, as rapidly as pos-
sible. Forfeit, none. Plans and spec-
ifications filed.

FRAME DWELLING

(3065) N CARRILLO 90 E 46th Ave E
25xN 100. All work for two-story
and basement frame dwelling.
Owner.....R. S. Mackay.
Architect...Plans by Contractor.
Contractor...Johnson & Johnson.
Filed Oct. 22, '15. Dated Oct. 20, '15.

Building plastered \$1000
Completed and accepted..... 1200
Usual 35 days..... 1500
TOTAL COST, \$3700

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

COMPOSITION ROOFING

(3066) SW FOLSOM AND TWENTY-
sixth W 170 S 150-9 1/4 m or 1 S 86
deg 35 min E 175 m or 1 N 173 M B 200
Composition roofing for three-story
and basement Class "A" building.
Owner.....Board of Trustees of Cogsw-
well Polytechnical Col-
lege by Lange & Bergstrom
Sharon Bldg., S. F.

Architect...Fredk. H. Meyer, Bankers'
Invst. Bldg., S. F.
Contractor...J. W. Bender Roofing &
Paving Co., Russ Bldg.,
San Francisco.

Filed Oct. 22, '15. Dated Oct. 13, '15.
On 10th of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$729

Bond, limit, forfeit, none. Plans and
specifications, none.

(3067) GRANITE WORK ON ABOVE.
Contractor...California Granite Co.,
Sharon Bldg., S. F.

Filed Oct. 22, '15. Dated Oct. 13, '15.
Payments same as above.....
TOTAL COST, \$280

Bond, limit, forfeit, none. Plans and
specifications, none.

(3068) METAL FURRING, PARTI-
tions and lathing on above.

Contractor...A. Knowles, 985 Folsom,
San Francisco.
Filed Oct. 22, '15. Dated Oct. 13, '15.
Payments same as above.....
TOTAL COST, \$1,455

Bond, limit, forfeit, none. Plans and
specifications, none.

FRAME FLATS

(3069) S PARNASSUS AVE 108-4 E
Stanyan S 120x E 25. All work ex-
cept plumbing, painting, shades and
light fixtures for two-story and base-
ment frame flats.

Owner...Henry A. Meyer, 185 Parn-
assus Ave., S. F.
Architect...E. A. Neumarkel, 55 New
Montgomery, S. F.
Contractor...H. C. Andresen, 1229 Pearl
Alameda.
Filed Oct. 22, '15. Dated Oct. 22, '15.

Enclosed and roof on.....
Brown coated
Completed and accepted.....
Usual 35 days.....
TOTAL COST, \$

Bond, none. Limit, 90 days. For-
none. Plans and specifications file

ALTERATIONS

(3070) NO. 62 VALLEY. Alter d-
Owner.....Francesco Garibaldi,
Connecticut, S. F.
Architect...None.
Day's work. COST, 4

ALTERATIONS

(3071) NO. 230 CHATTANOOGA. R-
and underpin dwelling.
Owner.....Miss Mary Hanly, Prem.
Architect...None.
Day's work. COST, 4

BILL BOARD

(3072) NW GEARY AND KEAR-
Galvanized iron bill board.
Owner.....Chas. S. Robinson, Pre-
Architect...None.
Contractor...Brumfield Elec. Sign
18 7th, San Francisco.
COST, 1

ALTERATIONS

(3073) NO. 306 MUNICH. Raise
underpin garage.
Owner.....Mary Winn, Premises.
Architect...None.
Contractor...O. K. Holt, 3877 26th, S-
COST, 4

FRAME APARTMENTS

(3074) W PALM AVE 180 N Eu-
Ave. Two-story and basement fra-
(4) apartments.
Owner.....Thos. Scoble, 363 14th A-
San Francisco.
Architect...E. E. Young, 251 Kear-
San Francisco.
Day's work. COST, \$10

FRAME APARTMENTS

(3075) W PALM AVE 220 N Eu-
Ave. Two-story and basement fra-
(4) apartments.
Owner.....Thos. Scoble, 363 14th A-
San Francisco.
Architect...E. E. Young, 251 Kear-
San Francisco.
Day's work. COST, \$10

FRAME FLATS

(3076) W TWENTIETH AVE 12-
Anza. Two-story and basement fra-
(2) flats.
Owner.....Jos. P. Alexander,
Seville, San Francisco.
Architect...Theo. S. Boehm, 4119 15-
San Francisco.
Day's work. COST, \$4

CLASS "A" OFFICE BUILDING

(3077) S SUTTER 115-9 E Powel
137-6x E 45-6. Ornamental bron-
cast iron, wrought iron, for st-
ways, elevator fronts, doors, grill
of first story front and entrance
eight-story Class "A" office build-
Owner.....Pacific Gas & Electric C-
445 Sutter, San Francisco
Architect...Edgar A. Mathews,
Post, San Francisco.
Contractor...Vulcan Iron Works, Ke-
ny and Francisco, S. F.
Filed Oct. 23, '15. Dated Oct. 21, '15

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED

Oct. 18, 1915—E STEINER 87-6 N Union 100x112-6. Edw Charmok to whom it may concern...Oct. 16, 1915
Oct. 19, 1915—S UNION 137-6 W Steiner 27-6x137-6. C S Allred to whom it may concern...Oct. 19, 1915
Oct. 19, 1915—LOT 18 BLK 17-A, C S Allred's Sub Bkls 17 and 18 West End Map No. 1. Anders M Boe to whom it may concern...Oct. 19, 1915
Oct. 19, 1915—E SIXTEENTH AVE 250 S Anza S 25xE 127-6. Karl F Holzmueller to whom it may concern...Oct. 13, 1915
Oct. 19, 1915—W TWENTY-FIRST Ave 125 N Clement N 25x120. Alton R Lapham to whom it may concern...Oct. 18, 1915
Oct. 20, 1915—BOULEVARD extending from intersection of West Clay and 27th Ave to a termination at or near the North end or termination or 32nd Ave as per Map attached to agreement made by 1st Party with Percy V Long, City Attorney, Dated April 30, 1915. John Brickell Co to The City Street Improvement Co...Oct. 19, 1915
Oct. 20, 1915—E SEVENTEENTH AV 72 N Lake N 25xE 57-6. Myrtle E Hills to Marcus Marcussen...Oct. 18, 1915
Oct. 21, 1915—SW HARRIET 75 SE Harrison SE 25xSW 75. Gustaf B Holmberg to L F Sanden and Carl Yngve...Oct. 20, 1915
Oct. 21, 1915—S SUTTER 115-9 E Powell S 137-6xE 45-6. Pacific Gas & Elec Co to Arthur Arlett...Oct. 14, 1915
Oct. 22, 1915—E TWENTY-FIFTH Ave 150 S California S 25xE 120. Louis Loo to J A Bowers...Oct. 15, 1915
Oct. 22, 1915—E TWENTY-NINTH Ave 300 S Geary S 25xE 120. Mrs E Wurdack (as filed) to Leigh & Schultz...Oct. 18, 1915
Oct. 22, 1915—N OAK 157-6 W Van Ness Ave W 89-9 N 120 E 68-9 S 40 E 21 S 80. The Young Men's Institute Hall Ass'n to J Gensler...Oct. 14, 1915
Oct. 22, 1915—S JACKSON 181 E E Webster. William Matson to W D Henderson...Oct. 9, 1915

LIENS FILED

SAN FRANCISCO COUNTY.

Oct. 26, 1915—N GOLDEN GATE AVE 192-6 W Polk W 32-6xN 120. P E O'Hair (as P E O'Hair & Co) vs Daniel Breslauer Estate Co, or D Breslauer Est Co and L A Hinson...\$165
Oct. 20, 1915—NE CHURCH & ARMY N 51-6xE 96. Frank Zichosch vs John G and Elizabeth Trapp and John Cerda...\$72
Oct. 20, 1915—E VERMONT 100 S Mariposa S 25xE 100. Macdonald Lumber Co, \$277.53; Reinhart Lumber & Planing Mill Co, \$192.20 vs Frank Kamblich and R S Selman...\$475
Oct. 20, 1915—E VERMONT 700 S Mariposa 25x100. Geo Spencer vs Frank Kamblich...\$475
Oct. 22, 1915—NE COLUMBIA AVE & S Chestnut being SE Cor. Chest-

nut and Columbus Ave E 100 S 80 W 63.37 NW 65.65. Columbia Lumber Co vs Lewls Packing Co and Rouda & Spivock...\$829.87

RELEASE OF LIENS

Oct. 8, 1915—E THIRTY-FIRST AVE Oct. 22, 1915—S FELL 100 E Steiner E 37-6xS 137-6. O F Larson to Herbert C Cameron and Thas F and Isabel Murray...\$12
Oct. 22, 1915—E FRONT 25-8 S Washington S 111-2xE 120. E B and A L Stone Co, J S Guerin (as J S Guerin & Co) to Thomas H Price Co and Thomas & Sands...
Oct. 21, 1915—LOT 2 BLK 2810 Forest Hill Court. Eudey Bros, E S Bonnett to E M Reach and J Holmes Wade...
Oct. 18, 1915—S JACKSON 11-0% W Columbus Ave W 21-8 S 68 E 11-0% N 68. J H Deming to Carl Ferro Guido or Gus Ferro...

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Amt.
2173	Moffitt	Butler & Lowry	1230
2174	Same	Butler & Lowry	3250
2175	Same	Floodberg	15300
2176	Same	Stockholm	4277
2177	Same	Clark	3150
2178	Same	Dalziel	5737
2179	Same	Tanner	1630
2180	Same	U S Metal	4190
2181	Mitchell	MacGregor	4218
2182	Nichols	Boedeker	3000
2183	Bloom	Cords	3000
2184	Neary	Neary	3000
2185	Short	Short	3000
2186	Phillips	Fake	1100
2187	Accatanna	Campomenosi	2400
2188	Derby	Lydskens	3500
2191	Gordona	Hamblen	3000
2193	Nunes	Nunes	500
2194	Goranson	Goranson	2500
2195	Hancheber	Picard	2300
2201	Keller	Knowles	5000
2202	Young	Young	2500
2205	Gunter	Gunter	500
2209	Cal. Cotton	Owner	500
2210	Barkmeyer	Owner	2000
2211	Merdoza	Thomas	1600
2212	Larson	Farker	500
2213	Breirling	Breirling	2500
2214	Henze	Benson	2000
2216	Oden	Martin	1500
2217	Roberts	Rodgers	500
2218	Ravazza	Clark	2100
2219	Phillips	Woolley	2000
2220	Seaver	Woods	1000
2221	Petersen	Petersen	1800
2222	Patton	Baumann	2500
2223	Coggins	Woodburn	2675
2226	Baker	Okl Bldg	2000
2227	Gotting	Gotting	400
2228	Maurer	Rounds	1000
2229	Clinkenbeard	Owner	2500
2240	Pacific G & E	W'n Pipe	1175
2241	Erickson	Kringler	1500
2242	Havens	Stubbe	3900
2243	Pactus	Pactus	500
2246	Jespersen	Dippo	2000
2247	Twin Rotary	Owner	500
2248	Sluich	Corbett	400
2249	W'n Fuel	Chalmers	1000

CLASS "A" THEATRE

(2173) S ELEVENTH 125 E Broadway E 175xS 100, Oakland. Electric work for Class "A" theatre.

Owner...James Moffitt Estate Co., 1st National Bank Bldg., San Francisco.

Architect...Cunningham & Politeo, 1st National Bank Bldg., S. F.
Contractor...Butte Eng. & Elec. Co., 653 Howard, San Francisco.

Filed Oct. 15, '15. Dated Sept. 24, '15.
On 1st and 15th of each month 75%
Usual 35 days...

TOTAL COST, \$6260

Bond, \$3180. Surety, Massachusetts Bonding & Insurance Co. Limit, 90

Roughing in of stairs and installing all elevator work...\$2500
Stair work and 1st story front done...4500
Completion of all work...2738
Usual 35 days...2350
TOTAL COST, \$12,988

Bond, \$6500. Surety, Massachusetts Bonding & Insurance Co. Limit, due diligence. Forfeit, none. Plans and specifications filed.

BRICK STORES AND APARTMENTS (3078) N GEARY 62-6 E Jones E 75xN 77-6. Plumbing and gas fitting for two-story brick stores and apartments.

Owner...Jeremiah Lynch.
Architect...W. H. Crim Jr., 425 Kearny San Francisco.

Contractor...Jas. H. Pinkerton Co., 119 Jessie, San Francisco.
Filed Oct. 23, '15. Dated Oct. 20, '15.

Roughed in...\$414.25
Completed and accepted...414.25
Usual 35 days...414.25

TOTAL COST, \$1105.00

Bond, \$553. Sureties, R. J. O'Brien and G. F. Bernard. Limit, 5 days after painting is completed. Forfeit, \$15. Plans and specifications filed.

LEASES.

Oct. 20, 1915—LOTS 3, 4, 13 BLK 70 South San Francisco Hd. and R R Association. Troy Invst Co to Chung Chetung. 3 years. \$900.

Oct. 19, 1915—N CALIFORNIA, bet. Drumm and Davis Nos. 48-50 California. Leon Blum to Harry and Andrew Kockos (as Kockos Bros. 5 years. \$16,500.

Oct. 16, 1915—NO. 2033 BAKER. Julia L Maris to Sylvan D and Elsa Davis. 2 years 10 months, \$2210 with option to renew.

Oct. 16, 1915—NO. 1034 SUTTER N line bet. Hyde and Larkin. Mary E McCarthy to Mary E Bragdon. Aug. 23, 1917. \$250 per month.

INCORPORATIONS.

Fell-Fletcher Auto Co. Capital Stock, \$25,000; subscribed, \$3; shares, 1 each. Directors—R. Bell, C. F. Fletcher, R. W. McKnight, 1 share each. Place of business, San Francisco.

Monarch Gravel Mining Co. of Tuolumne County. Capital Stock, \$50,000; subscribed, \$25; shares, \$50 each. Directors—M. Lichtenstein, J. Moore, H. F. Stoll, B. W. Demarais, W. F. Demarais, 10 shares each. Place of business, San Francisco.

NOTICE OF NON-RESPONSIBILITY.

Oct. 16, 1915—NW POTRERO AVE & Mariposa N 100xW 100. The John Center Co as to improvements on leased property...

NOTICE OF NON-LIABILITY.

Oct. 19, 1915—SE LOMBARD AND Fillmore S 120xE 137-6. R D McElroy as to improvements on leased property...

RELEASE OF BUILDING CONTRACT.

Oct. 19, 1915—W VALENCIA 60 N 17th 60xNS. J and Fred Braun with Ratto & Ratto Released Oct. 18, 1915

days. Forfeit, \$100. Plans and specifications filed.

(2174) **TILE WORK ON ABOVE.**
Contractor..Lowry & Daly, 1650 Page, San Francisco.

Filed Oct. 15, '15. Dated Sept. 27, '15.
Payments same as above.....
TOTAL COST, \$1290
Bond, none. Limit, 30 days. Forfeit, \$100. Plans and specifications filed.

(2175) **LATH AND PLASTER AND ornamental plaster on above.**
Contractor..Floodberg & McCaffery, Monadnock Bldg., S. F.

Filed Oct. 15, '15. Dated Sept. 23, '15.
Payments same as above.....
TOTAL COST, \$15,300
Bond, \$7650. Surety, New England Equitable Insurance Co. Limit, 70 days. Forfeit, \$100. Plans and specifications filed.

(2176) **CARPENTER WORK, MILL work, roofing, sash and doors, glass and glazing and metal frames on above,**

Contractor..Stockholm & Allyn, Monadnock Bldg., S. F.
Filed Oct. 15, '15. Dated Sept. 27, '15.
Payments same as above.....

TOTAL COST, \$4277
Bond, \$2139. Surety, New Amsterdam Casualty Co. Limit, 40 days. Forfeit, \$100. Plans and specifications filed.

(2177) **MATT GLAZED ARCHITECTURAL terra cotta work on above.**
Contractor..N. Clark & Sons, 112-116 Natoma, San Francisco.

Filed Oct. 15, '15. Dated Sept. 21, '15.
Payments same as above.....
TOTAL COST, \$3750
Bond, \$1875. Surety, Massachusetts Bonding & Insurance Co. Limit, 90 days. Forfeit, \$100. Plans and specifications filed.

(2178) **HEATING AND VENTILATING on above.**
Contractor..Robert Dalziel Jr., 218 1st, San Francisco.

Filed Oct. 15, '15. Dated Sept. 27, '15.
Payments same as above.....
TOTAL COST, \$5737
Bond, \$2869. Surety, California Casualty Co. Limit, 60 days. Forfeit, \$100. Plans and specifications filed.

(2179) **AUTOMATIC SPRINKLER system on above.**
Contractor..The Turner Co., 272 Natoma, San Francisco.

Filed Oct. 15, '15. Dated Sept. 29, '15.
Payments same as above.....
TOTAL COST, \$1630
Bond, \$815. Surety, Massachusetts Bonding & Insurance Co. Limit, 30 days. Forfeit, \$100. Plans and specifications filed.

(2180) **GALVANIZED IRON, METAL sash and metal doors on above.**
Contractor..U. S. Metal Products Co., 525 Market, S. F.

Filed Oct. 15, '15. Dated Sept. 23, '15.
Payments same as above.....
TOTAL COST, \$4190
Bond, \$2095. Surety, Massachusetts Bonding & Insurance Co. Limit, 40 days. Forfeit, \$100. Plans and specifications filed.

DWELLING
(2181) **S KINGSTON 350 S Linda, Piedmont. Two-story 8-room frame dwelling.**

Owner.....Julia N. Mitchel, Castlewood Apts., Oakland.
Architect...None.
Contractor..C. M. MacGregor, 470 13th, Oakland.

TOTAL COST, \$4218

FRAME DWELLING
(2182) **E MANOR DRIVE, Piedmont Manor Tract, Piedmont. Two-story frame dwelling.**

Owner.....Henry Nichols, 107 Broadway, Oakland.
Architect...None.
Contractor..J. Boeddeker, 1814 34th Ave., Oakland.

COST, \$3000

FRAME DWELLING AND GARAGE
(2183) **S BOWIE — W Grand, Piedmont. One-story 7-room frame dwelling and garage.**

Owner.....Abraham Bloom.
Architect...None.
Contractor..Alfred Cords, 1st Svgs. Bank Bldg., Oakland.

COST, \$3500

FRAME DWELLING
(2184) **MANOR DRIVE 75 N Bowie, Piedmont. One and one-half-story frame dwelling.**

Owner.....Wm. F. Neary, 1723 Telegraph Ave., Oakland.
Architect...None.
Day's work.

COST, \$3000

FRAME DWELLING
(2185) **W NOVA DRIVE, Nova Piedmont Tract, Piedmont. One-story frame dwelling.**

Owner.....C. W. Short, 536 Magnolia Ave., Piedmont.
Architect...None.
Day's work.

COST, \$3000

DWELLING
(2186) **W SEVENTH AVE 100 N E-20th, Oakland. One-story 4-room dwelling.**

Owner.....F. Phillips, 1641 E-11th, Oakland.
Architect...None.
Contractor..W. H. Fake, 1640 25th Ave., Oakland.

COST, \$1400

DWELLING
(2187) **W CORONADO 33 S 51st, Oakland. One-story 5-room dwelling.**

Owner.....P. Accatinna, 472 Whitmore, Oakland
Architect...None.
Contractor..E. Campomenosi, 5174 Miles Ave., Oakland.

COST, \$2400

BRICK GARAGE
(2188) **S E-FOURTEENTH 50 W 31st Ave., Oakland. One-story brick garage.**

Owner.....Derby Estate Co., 822 Mills Bldg., San Francisco.
Architect...None.
Contractor..Geo. H. Lydiksén, 1224 29th Ave., Oakland.

COST, \$3500

BARN
(2191) **THIRTEENTH AND WOOD, Oakland. Two-story barn.**

Owner.....Gordona Bros., 13th and Willow, Oakland.
Architect...None.
Contractor..Fred Hambleton, 575 43rd, Oakland.

COST, \$800

ADDITION
(2192) **NO. 6005 HILLEGASS AVE., Oakland. Addition.**

Owner.....Geo. W. Nunes, 5430 Dover, Oakland.
Architect...None.
Day's work.

COST, \$500

DWELLING
(2194) **SE FIFTIETH AND YGNACIO Aves., Oakland. One-story 6-room dwelling.**

Owner.....H. Goranson, 431 48th, Okd.
Architect...None.
Day's work.

COST, \$2500

DWELLING
(2195) **W HEMPHILL COURT 93 N Coronado Ave., Oakland. One-story 5-room dwelling.**

Owner.....Hanchaber & Picard, 477 Hardy, Oakland.
Architect...None.
Day's work.

COST, \$2200

ALTERATIONS
(2201) **NOS. 6000-10 COLLEGE AVE., Oakland. Alter flats into apartments**

Owner.....A. L. Haley, 1525 San Pablo Ave., Oakland.
Architect...None.
Day's work.

COST, \$3000

DWELLING
(2202) **SW TWENTY-NINTH AND Webster, Oakland. Two-story eight-room dwelling.**

Owner.....Rev. W. F. Keller, S. F.
Architect...Wm. Knowles, Central Bk. Bldg., Oakland.
Contractor..Wm. Knowles, Central Bk. Bldg., Oakland.

COST, \$5000

DWELLING
(2202) **S BOWIE bet. Jerome and Grand Ave., Piedmont. Two-story 6-room frame dwelling.**

Owner.....Jas. H. Young, 702 Aileen, Oakland.
Architect...None.
Day's work.

COST, \$2500

DWELLING
(2205) **E FRANCIS 70 N Fairfax Ave., Oakland. One-story 4-room dwlg.**

Owner.....Marie Gunter, 4700 Fairfax Ave., Oakland.
Architect...None.
Day's work.

COST, \$500

SHED
(2209) **E TWENTY-SECOND AVE 900 S Railroad Ave., Oakland. Shed.**

Owner.....California Cotton Mills, Premises.
Architect...None.
Day's work.

COST, \$500

DWELLING
(2210) **W PERALTA AVE 110 S Lynde Oakland. One-story 5-room dwelling**

Owner.....Henry Barkmeyer, 1730 35th Ave., Oakland.
Architect...None.
Day's work.

COST, \$2000

REPAIRS

(2211) NO. 2563 E-FIFTEENTH, Oakland. Repairs.
Owner.....Joe Mendoza, Premises.
Architect...None.
Contractor...Manuel Thomas, 910 Kennedy, Oakland.
COST, \$400

DWELLING

(2212) W ARDLEY 165 N E-37th, Oakland. One-story 6-room dwlg.
Owner.....Mrs. Agnes Larson, Turlock, Cal.
Architect...None.
Contractor...W. T. Parker, 3527 Ardley Oakland.
COST, \$2500

DWELLING

(2213) E RAWSON AVE 360 N Santa Rita, Oakland. One-story 5-room dwelling.
Owner.....O. F. Brerling, 1748 Broadway, Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING

(2214) W RHODA AVE 225 S Madeline, Oakland. One-story 4-room dwelling.
Owner.....Mr. and Mrs. Henze, 64 Delmar, San Francisco.
Architect...None.
Contractor...Fred Benson, 2630 Harold, Oakland.
COST, \$2000

DWELLING

(2216) W FIFTIETH AVE 119 N E-14th, Oakland. One-story 5-room dwelling.
Owner.....E. R. Ogden, 842 46th, Okd.
Architect...None.
Contractor...J. A. Martin, 622 20th, Okd.
COST, \$1500

ALTERATIONS

(2217) NO. 522 FORTY-FIFTH, Oakland. Alterations.
Owner.....M. E. Roberts, Premises.
Architect...None.
Contractor...E. Rodgers.
COST, \$500

DWELLING AND BARN

(2218) N FORTY-FIRST 150 E Linden, Oakland. One-story 5-room dwelling and barn in rear.
Owner.....Pete Ravazza, 1500 Cypress Oakland.
Architect...None.
Contractor...S. Clark, 1334 15th, Okd.
COST, \$2100

DWELLING

(2219) SW SHAFTER AVE AND 44TH, Oakland. One-story 6-room dwelling.
Owner.....R. B. Phillips, 410 44th, Oakland.
Architect...None.
Contractor...Woolley & Rich, 3363 Lusk, Oakland.
COST, \$2000

DWELLING

(2220) W EIGHTY-NINTH AVE 45 S Plymouth, Oakland. One-story 3-room dwelling.
Owner.....F. C. Seaver, 1647 89th Ave. Oakland.
Architect...None.
Contractor...A. E. Woods, 1709 89th Ave Oakland.
COST, \$1000

DWELLING

(2221) E EIGHTH AVE 50 N E-23rd, Oakland. One-story 5-room dwelling.
Owner.....Anne C. Petersen, 1200 E-24th, Oakland.
Architect...None.
Contractor...C. Petersen, 1200 E-24th, Oakland.
COST, \$1800

DWELLING

(2222) N TRASK 40 W Cole, Oakland. One-story 7-room dwelling.
Owner.....H. S. Patton, 2306 Telegraph Ave., Oakland.
Architect...None.
Contractor...G. W. Baumann, 5360 Trask, Oakland.
COST, \$2500

FRAME DWELLING

(2232) LOT 59 4th Ave Terrace Ext., Oakland. All work for two-story frame dwelling.
Owner.....J. B. and Anna H. Coggins
Architect...Edward E. Young.
Contractor...Paul E. Woodburn, 3965 Greenwood, Oakland.
Filed Oct. 26, '15. Dated Oct. 19, '15.
Frame up ¼
Brown coated ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$2677.50
Bond, \$1338.75. Surety, Alice E. Cochran Limit, 90 days. Forfeit, none. Plans and specifications filed.

DWELLING

(2236) E GRAND AVE 90 N 69th Ave., Oakland. Two-story 6-room dwlg.
Owner.....D. C. Baker, 744 23rd Ave., Oakland.
Architect...None.
Contractor...Oakland Bldg. & Mortgage Co., Security Bank Bldg., Oakland.
COST, \$2000

ADDITION

(2237) NOS. 324-28 E-FOURTEENTH, Oakland. Addition.
Owner.....Violet Gotting, Premises.
Architect...None.
Day's work. COST, \$400

DWELLING

(2238) E FIFTY-SEVENTH AVE 175 N Noble, Oakland. One-story four-room dwelling.
Owner.....Fred Maurer, 927 34th, Okd.
Architect...None.
Contractor...Frank C. Rounds, 820 15th Oakland.
COST, \$1000

DWELLING

(2239) S FORTIETH 250 W Telegraph Ave., Oakland. One-story 5-room dwelling.
Owner.....J. Clinkenbeard, 2709 Grove, Oakland.
Architect...None.
Day's work. COST, \$2500

(2240) S FIRST 25 W Jefferson W 155 xS 150, Oakland. All work for two 15-ft. extension to stacks of McNaul boilers at Station "C."
Owner.....Pacific Gas & Electric Co., 12th and Clay, Oakland.
Architect...None.
Contractor...Western Pipe & Steel Co. of California, 441 Market, San Francisco.

Filed Oct. 21, '15. Dated Oct. 11, '15.
Completed 75%
Usual 35 days..... 25%
TOTAL COST, \$1175
Bond, \$600. Surety, Royal Indemnity Co. Limit, 30 days. Forfeit, none. Plans and specifications filed.

DWELLING

(2241) PTN LOTS 4, 5 AND 6 Map No. 3 Sbdvn of Ptn Central Oakland Tract, E Telegraph Ave., Oakland. All work for one-story 5-room dwlg.
Owner.....Sabina A. Erickson, Mills College, Oakland.
Architect...None.
Contractor...John Kringlen, 3201½ 13th Ave., Oakland.
Filed Oct. 21, '15. Dated Oct. 15, '15.

Frame up ¼
Plastered ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$1800
Bond, \$900. Surety, National Surety Co. Limit, 75 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

(2242) LOT 5 BLK "II," Map East Piedmont Heights, Oakland. All work for two-story frame dwelling.
Owner.....Wickham Havens, Inc., Oakland Bk. of Svgs Bldg., Oakland.
Architect...None.
Contractor...R. E. Stubbe, 1209 E-19th, Oakland.
Filed Oct. 21, '15. Dated Oct. 19, '15.

Frame up ¼
Brown coated ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$3900
Bond, \$1950. Surety, National Surety Co. Limit, 95 days. Forfeit, \$5. Plans and specifications filed.

DWELLING

(2245) W LAGUNA AVE 44 N Delmer, Oakland. One-story 3-room dwlg.
Owner.....Margaret A. Pocus, 4005 Rhoda Ave., Oakland.
Architect...None.
Contractor...John Pocus, 4005 Rhoda Ave., Oakland.
COST, \$500

DWELLING

(2246) S APGAR 675 W Market, Oakland. One-story 5-room dwelling.
Owner.....Jespersen & Dippe, 578 54th, Oakland.
Architect...None.
Day's work. COST, \$2000

FACTORY

(2247) S SIXTY-FIRST PLACE 85 W Lowell, Oakland. One-story factory.
Owner.....Twin Rotary Pump Co., Premises.
Architect...None.
Contractor...Chas. Hultgreen, 3228 Adeline, Oakland.
COST, \$800

ALTERATIONS

(2248) NO. 436 ELEVENTH, Oakland. Alterations.
Owner.....Geo. Sluch, Premises.
Architect...None.
Contractor...Corbett & Bayless, 1110 Franklin, Oakland.
COST, \$400

TRANSFORMER HOUSE

(2249) FOOT MARKET ST., Oakland.
Transformer house.
Owner.....Western Fuel Co., Prem.
Architect...H. S. Howard, Holbrook
Bldg., San Francisco.
Contractor...H. A. Chalmers, Inc., New
Call Bldg., S. F.

COST, \$1900

Building Contracts Awarded

Berkeley.

2189	Ger Luth Chr....	Schmitt	300
2190	Cleveland	Kollmer	1000
2192	Povic	Valente	400
2196	Kingstone	Engelsen	4250
2197	Mohr	Mohr	2500
2198	Granquist	Owner	1600
2199	Williamson	Owner	1000
2200	Haley	Haley	3000
2203	Kingstone	Engelsen	400
2204	Roumage	Kearney	400
2206	Pape	Pape	500
2207	Taylor	Taylor	2300
2208	Same	Same	2500
2215	Goldaracena	Cooley	400
2231	Newman	Bartlett	4291
2233	Smith	Smith	1650
2234	Same	Same	1000
2235	Denbigh	Johanson	400
2243	Van Winkle	House	4603
2244	Eckert	Button	400
2250	Spitler	Spitler	3000
2251	Silva	Spitler	3000

(Correction in Location)

DWELLING

(2121) W MARIPOSA 150 S Los An-
geles, Berkeley. Two-story 7-room
dwelling.
Owner.....C. H. McCoy, 2903 Shattuck
Ave., Berkeley.
Architect...None.
Day's work. COST, \$2000

SOCIAL HALL

(2189) E GROVE 120 N Ashby Ave.,
Berkeley. Two-story 2-room social
hall.
Owner.....F. A. Koenig, President
Trustees German Lutheran
Bethlehem Church, 2315-A
Russell, Berkeley.
Architect...None.
Contractor...Carl Schmitt, 1614 Ward,
Berkeley.
COST, \$800

ADDITION

(2196) NO. 2512 CEDAR, Berkeley.
Addition.
Owner.....N. Cleveland, Premises.
Architect...H. H. Gutterson, 68 Post,
San Francisco.
Contractor...Jacob Kollmar, 2813 Stuart
Berkeley.
COST, \$1000

ALTERATIONS

(2192) NO. 1778 EIGHTH, Berkeley.
Alterations.
Owner.....Jem Povic, Oakland.
Architect...None.
Contractor...M. E. Valente, 5882 Val-
lejo, Berkeley.
COST, \$400

DWELLING

(2196) — CLAREMONT AVE 205 S
Alcatraz, Berkeley. Two-story 8-
room dwelling.
Owner.....Kingstone Invst. Co., 2722
University Ave., Bkly.
Architect...None.
Contractor...Chris Engelsen, 562 39th,
Oakland.
COST, \$4250

DWELLING

(2197) E COLBY 40 S Webster, Ber-
keley. One-story 5-room dwelling.
Owner.....Geo. L. Mohr, 2055 Uni-
versity Ave., Berkeley.
Architect...None.
Day's work. COST, \$2500

DWELLING

(2198) SE CURTIS AND VIRGINIA,
Berkeley. One-story 5-room dwlg.
Owner.....E. Granquist, 1707 Curtis,
Berkeley.
Architect...None.
Day's work. COST, \$1600

DWELLING

(2199) S HEARST 75 W California,
Berkeley. One-story 6-room dwlg.
Owner.....L. M. Williamson, 1621
Scenic Ave., Berkeley.
Architect...None.
Day's work. COST, \$1000

DWELLING

(2200) S HEARST 112 W California,
Berkeley. One-story 6-room dwlg.
Owner.....R. Martin, Emeryville.
Architect...None.
Day's work. COST, \$1000

GARAGE

(2203) S ALCATRAZ AVE 205 from
Claremont, Berkeley. One-story
garage.
Owner.....Kingstone Investment Co.,
2722 University Ave., Bkly.
Architect...None.
Contractor...Chris Engelsen, 562 39th,
Oakland.
COST, \$400

CONCRETE GARAGE

(2204) NO. 1306 HAY VIEW PLACE,
Berkeley. Reinforced concrete gar-
age.
Owner.....Mrs. F. S. Roumage, Prem.
Architect...None.
Contractor...T. Kearney, 2319 Mc-
Kinley, Berkeley.
COST, \$400

DWELLING

(2206) W STANNAGE 130 N Page,
Berkeley. One-story 2-room dwlg.
Owner.....R. B. Pape, 1043 Kains
Ave., Albany.
Architect...None.
Day's work. COST, \$500

DWELLING

(2207) E CARLOTTA 240 S Posen,
Berkeley. One-story 5-room dwlg.
Owner.....G. Taylor, 438 Walsworth
Ave., Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING

(2208) E CARLOTTA, 280 S Posen,
Berkeley. One-story 5-room dwlg.
Owner.....G. Taylor, 438 Walsworth
Ave., Oakland.
Architect...None.
Day's work. COST, \$2500

ADDITION

(2215) NO. 2030 CARLTON, Berkeley.
Addition.
Owner.....S. M. Goldaracena, Prem.
Architect...None.
Contractor...Cooley, Fruitvale.
COST, \$400

FRAME DWELLING

(2231) LOT 1 BLK 7 Map Northbrae,
Berkeley. All work for two-story
and basement frame dwelling.
Owner.....Mrs. Carrie Newman, Bkly.
Architect...E. W. Cannon, Central Bk.
Bldg., Oakland.
Contractor...John M. Bartlett, Berkeley
Filed Oct. 20, '15. Dated Oct. 20, '15.
Frame up\$1072.00
Brown coated 1072.00
Completed and accepted 1072.00
Usual 35 days 1075.50
TOTAL COST, \$4291.50

Bond, \$2145.75. Surety, Southwestern
Surety Insurance Co. Limit, 70 days.
Forfeit, \$5. Plans and specifications
filed.

DWELLING

(2233) E CORNELL 160 S Camella,
Berkeley. One-story 5-room dwlg.
Owner.....Ralph C. Smith, 1812
Franklin, Oakland.
Architect...None.
Day's work. COST, \$1050

DWELLING

(2234) W SANTA FE 170 S Cornelia,
Berkeley. One-story 4-room dwlg.
Owner.....Ralph C. Smith, 1812
Franklin, Oakland.

Architect...None.
Day's work. COST, \$1000

ALTERATIONS

(2235) NO. 2341 SHATTUCK AVE.,
Berkeley. Alterations.
Owner.....B. K. Denbigh, 2035 Shat-
tuck Ave., Berkeley.
Architect...None.
Contractor...G. Johanson, 1811 Rose,
Berkeley.
COST, \$400

DWELLING

(2243) N GARDER 217 W Claremont
Blvd., Berkeley. Two-story 8-room
dwelling.
Owner.....Walton Van Winkle.
Architect...Henry A. Monges, Hobart
Bldg., San Francisco.
Contractor...Jacob House, 1640 Allston
Way, Berkeley.
COST, \$4603

GARAGE

(2244) E McMILLAN 90 S Ocean View
Drive, Berkeley. Garage.
Owner.....E. T. Eckert, SE. Ocean
View Drive and McMillan,
Berkeley.
Architect...None.
Contractor...I. B. Button, 347 63rd, Ber-
keley.
COST, \$400

DWELLING

(2250) W MENDOCINO 150 S Indian
Eckk Path, Berkeley. Two-story 8-
room dwelling.
Owner.....E. B. Spitler, 815 Oxford,
Berkeley.
Architect...None.
Day's work. COST, \$3000

DWELLING

(2251) SW MABEL & BURNETT, Ber-
keley. Two-story 8-room dwelling.
Owner.....Mrs. M. Silva, 1211 Oregon,
Berkeley.
Architect...None.
Contractor...E. B. Spitler, 815 Oxford,
Berkeley.
COST, \$3000

Building Contracts Awarded

Alameda

2223	Portman	Portman	1500
2224	Portman	Portman	1500
2225	Port	Port	1000
2226	Ford	Martin	500
2227	Thorp	Thorp	1000
2228	Noble	Noble	1800
2229	Baker	Smith	400
2230	Muller	Strang	1500

DWELLING
(2223) NO. 1133 PACIFIC AVE., Alameda. Two-story 5-room dwelling.
Owner.....E. D. Portman, 803 Haight Ave., Alameda.
Architect...None.
Day's work. COST, \$1500

DWELLING
(2224) NO. 1131 PACIFIC AVE., Alameda. Two-story 5-room dwelling.
Owner.....E. D. Portman, 803 Haight Ave., Alameda.
Architect...None.
Day's work. COST, \$1500

REPAIRS
(2225) NO. 1422 SHERMAN, Alameda. Repairs.
Owner.....E. D. Portman, 803 Haight Ave., Oakland.
Architect...None.
Day's work. COST \$1000

ALTERATION
(2226) NO. 1716 EVERETT, Alameda. Alterations.
Owner.....N. O. Ford, Premises.
Architect...None.
Contractor..P. B. Martin, 3240 Nicol Ave., Oakland.
COST, \$500

DWELLING
(2227) NO. 439 SANTA CLARA AVE., Alameda. One-story 3-room dwlg.
Owner.....V. E. Thorp, 453 Haight Ave., Alameda.
Architect...Edwin J. Symmes, Pacific Bldg., San Francisco.
Day's work. COST, \$1000

DWELLING
(2228) NO. 1426 COTTAGE, Alameda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central Ave., Alameda.
Architect...None.
Day's work. COST, \$1800

ALTERATIONS
(2229) NO. 1160 BAY, Alameda. Alter.
Owner.....M. E. Baker, Premises.
Architect...None.
Contractor..J. W. Smith, 2103 Santa Clara Ave., Alameda.
COST, \$400

DWELLING
(2230) S BUENA VISTA AVE 85 W Nason, Alameda. One-story five-room dwelling.
Owner.....D. Muller, Santa Clara and Walnut, Alameda.
Architect...None.
Contractor..P. N. Strang, 905 Pacific Ave., Alameda.
COST, \$1500

NOTICE OF NON-RESPONSIBILITY.

ALAMEDA COUNTY.

Oct. 21, 1915—SW TWELFTH AND Alice S 75xW 52-6, Mary L, Geo

Edwin and Eleanor H Hallahan as to improvements on leased property

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED

AMOUNT

Oct. 16, 1915—SE BROADWAY AND Brook, Okd. J A McClurg to Leo L. Nichols.....Oct. 15, 1915
Oct. 16, 1915—PTN LOT 3 BLK 2 Amended Map Hopkins Terrace No. 4, Bkly. Geo T Folsom to Riddell Bldg Service Corp.....Oct. 9, 1915
Oct. 16, 1915—E GROVE 64.96 S 42nd S 21.54xE 90, Okd. Dorothea Holloway to John T Holloway.....Oct. 16, 1915
Oct. 16, 1915—NW VAN BUREN AND Perkins, Okd. Elizabeth C Castle to Anthony & Heyer.....Oct. 15, 1915
Oct. 18, 1915—S STANFORD AVE 431.95 E San Pablo Ave E 41.14 S 128.20 W 40 N 118.24, Okd. William O'Neill to W S Montgomery.....Oct. 18, 1915
Oct. 18, 1915—LOT 63 Map A. J. Snyder's Piedmont Terrace-by-the-Lake, Okd. R E Stubbe to whom it may concern.....Oct. 15, 1915
Oct. 18, 1915—W WALKER AVE 50 N Weldon, being Lot 16 Blk "K" Grand Ave Heights-by-the-Parks, Okd. Emma Weithan to H M Swalley.....Oct. 16, 1915
Oct. 19, 1915—W CLAREMONT AVE 140 S Alcatraz Ave, Bkly. Kingston Invest Co to F R Peake Co.....Oct. 18, 1915
Oct. 19, 1915—LOT 6 BLK 14 Northbrae Tract, Oakland Tp. H H Schuessler to whom it may concern.....Oct. 19, 1915
Oct. 19, 1915—LOT 18 Fruitvale Addition Tract, Okd. Wm Wenham to A L Haley.....Oct. 16, 1915
Oct. 19, 1915—LOT 17 BLK 29 Warner Tract on Cor. 96th Ave and Olive, Okd. Joseph St. Mary to whom it may concern..Completed—
Oct. 19, 1915—LOT 11 BLK "A" Kenwood Park Tract, Okd. C W Glantz to whom it may concern..Completed—
Oct. 19, 1915—LOT 32 Ardsley Hights Okd. Ernest M Welch and Joseph F Rogers to whom it may concern.....Oct. 18, 1915
Oct. 20, 1915—LOT 14 Redwood Glen Tract, Okd. Nannie A Brown to W C Brown.....Oct. 20, 1915
Oct. 20, 1915—LOT 27 Mesa Alta Tet No. 2, Okd. L Sodergren to R K Noble.....Oct. 18, 1915
Oct. 20, 1915—NE TWENTY-THIRD and Broadway 104x43½, Okd. Albert J Brown to Arthur Arlett.....Oct. 12, 1915
Oct. 21, 1915—LOT 1 AND NE 10 Lot 2 Blk 4 Key Route Heights, Okd. William J Fox to whom it may concern.....Oct. 20, 1915
Oct. 22, 1915—LOT 12 BLK 2 Map Oak Lawn, Okd. Joseph Coward to whom it may concern..Oct. 20, '15
Oct. 22, 1915—SE SANTA CLARA AV 72.65 N Valle Vista AVE S 130 N 50½ W to pt distant 33.36 N to pt beg S 33.36, Okd. Leo J Dolan to A Hammarberg.....Oct. 9, 1915
Oct. 23, 1915—LOT 2 Except W 7 Map Oak Vale Claremont, Bkly. S W

Waterhouse to L A Rose..Oct. 11, 1915
Oct. 23, 1915—LOT 3 except W 7 Map Oak Vale Claremont, Bkly. S W Waterhouse to L A Rose..Oct. 14, 1915
Oct. 23, 1915—LOT 9, Map Oak Vale, Claremont, Bkly. S W Waterhouse to L A Rose.....Oct. 14, 1915
Oct. 23, 1915—LOT 25 BLK 14 Map San Pablo Park, Bkly. Arvid E Olson to whom it may concern.....Oct. 22, 1915

LIENS FILED

ALAMEDA COUNTY.

Oct. 13, 1915—NE 35.34 and NE 107.73 Lot 14 Map Ardsley Heights, being Reshdn Ptn Blk G & H Bella Vista Park, Okd. Bruce Lumher & Mill co vs W R Oakley and C J Plunkett.....\$1120
Oct. 15, 1915—LOTS 14 AND 15 Map Ardsley Heights, Okd. Robert Howden vs W R Oakley, W R and Cyvilla J Plunkett.....\$55
Oct. 13, 1915—LOTS 14 AND 15 Map Ardsley Heights, Oakland. II L Manning vs W R Oakley, W R and Cyvilla J Plunkett and D Buckley.....\$123.55
Oct. 15, 1915—W GRAND AVE 150 N Greenbank Ave, Piedmont. Piedmont Elec Co vs Mrs H Fergie.....\$4.55
Oct. 15, 1915—W COLUSA AVE 490 S Sonoma Ave NW 105.2 SW to Posen Ave SE to Colusa Ave NE 37.47, Bkly. De Kay & Co vs D A and Anna M Clark.....\$455.84
Oct. 20, 1915—NW PINE & DIVISION W 80xN 150, Okd. Pacific Fuel & Bldg Materials Co vs Spencer Clark and Ida H Gorrell.....\$41.05
Oct. 15, 1915—N OAK 157-6 W Van Ness Ave W 89-9 N 120 E 68-9 S 40 E 21 S 80. Edwin G Benkman vs The Young Men's Institute Hall Ass'n and Martin H Carrick.....\$780.10
Oct. 15, 1915—W FORTY-SIXTH AV 145 N Cabrillo E 120xN 25. Acme Planing Mill vs D Condon.....\$363.25
Oct. 19, 1915—N OAK 157-6 W Van Ness Ave W 89-9 N 120 E 68-9 S 40 E 21 S 80. Martin Carrick vs the Young Men's Institute Hall Association.....\$7649.81
Oct. 19, 1915—NE CHURCH & ARMY N 51-6xE 96. J S Guerin & Co vs John G and Elizabeth Trapp and John Cerda and F Pardini.....\$31.90
Oct. 19, 1915—NE CHURCH & ARMY N 51-6xE 96. E D Bennett, \$23.50; Fred Pardini, \$114.10 vs John G and Elizabeth Trapp and John Cerda.

RELEASE OF LIENS

Oct. 20, 1915—(1) N TRACT formerly owned by Clarke & Carpenter and W Pearl St. N 40x133; (2) S 4.60 Acre Tract described in deed from J. C. Hayes et al to J. N. Webster et al, recorded Liber 77 of Deeds, Page 273; 70 E SE Cor said tract E 70 N 35, Alameda. Redwood Manufacturers Co to Madeline H Fontaine and O M Carlson.....\$315.49
Oct. 18, 1915—S EIGHTEENTH 108 W Myrtle W 42x 111-8, Okd. R W Kinney Co to Mary C Scheckler.....\$310.26
Oct. 15, 1915—LOT 15 BLK 6 Map Brookdale Terrace, Okd. P J Wright to O G Smith and Robert

DAVIES\$85
 Oct. 13, 1915—E SPRING 155 N Eunice
 N 45x E 135, Bkly. George H Tay
 Co to Hall Plumbing Co and Lillian
 G Lyman\$138.60
 Oct. 8, 1915—LOTS 307, 309 AND 311,
 Map Terminal Junction Tract,
 Albany. F I Peacock to A P Bu-
 chanan\$930
 Oct. 6, 1915—E GROVE and S 25th
 S 60x E 90, Okd. Hogan Lumber Co
 to St. George Hall Ass'n, F J
 Klenck and G Fake\$152.31
 Oct. 5, 1915—LOT 7 BLK 62 Map
 Tract "B" Berkeley L T I Ass'n.,
 Bkly. F W Foss Co to Christoph H
 G Runde and W Jankowski. \$109.69

BUILDING CONTRACTS.

SANTA CLARA COUNTY.

FRAME SCHOOL
 ON GARDNER SCHOOL GROUNDS,
 San Jose. All work for frame school
 building.
 Owner.....City of San Jose Board of
 Education.
 Architect....F. D. Wolfe, 1st National
 Bank Bldg., San Jose.
 Contractor...C. F. Keesling, 347 Coe
 Ave., San Jose.
 Filed Oct. 7, '15. Dated Oct. 5, '15.
 Frame up\$739.50
 Brown plastered 739.50
 When completed 739.50
 Usual 35 days 739.50
 TOTAL COST, \$2958.00
 Bond, \$1429. Sureties, R. G. Mitchell
 and E. E. Keesling. Limit, 90 days.
 Forfeit, none. Plans and specifications
 filed.

FRAME SCHOOL
 GRANT SCHOOL GROUNDS, San Jose.
 All work for four-room frame school
 Owner.....San Jose City Board of
 Education.
 Architect....A. P. Hill, Porter Bldg.,
 San Jose.
 Contractor...D. H. Main, 88 S-7th St.,
 San Jose.
 Filed Oct. 4, '15. Dated Sept. 29, '15.
 Frame up\$782
 Brown plastered 782
 When completed 782
 Usual 35 days 782
 TOTAL COST, \$3130
 Bond, \$1565. Sureties, C. Y. Pitman
 and S. H. Chase Jr. Limit, 90 days.
 Forfeit, none. Plans and specifications
 filed.

FRAME SCHOOL
 ON HIGH SCHOOL GROUNDS, San
 Jose. All work for frame school.
 Owner.....San Jose City Board of
 Education.
 Architect....C. S. McKenzie, Bank of
 San Jose Bldg., San Jose.
 Contractor...C. A. Thomas, 692 N-San
 Pedro, San Jose.
 Filed Oct. 4, '15. Dated Sept. 29, '15.
 Frame up\$2721
 1st coat plaster on 2721
 When completed 2721
 Usual 35 days 2721
 TOTAL COST, \$10,887.50
 Bond, \$6000. Sureties, J. A. and S. H.
 Chase. Limit, 115 days. Forfeit, none.
 Plans and specifications filed.
 FRAME SCHOOL
 ON MT. PLEASANT ROAD E of San
 Jose. All work for frame school.
 Owner.....Mt. Pleasant School Trus-
 tees.

Designer...Fred Aitken, Theatre Bldg
 San Jose.
 Contractor...C. N. Smith, 515 S-8th St.,
 San Jose.
 Filed Oct. 4, '15. Dated Oct. 2, '15.
 Frame up 25%
 1st coat plaster on 25%
 When completed 25%
 Usual 35 days 25%
 TOTAL COST, \$6196

Bond, \$2139. Sureties, E. C. Hamlin
 and H. R. Fay. Limit, 90 days. Forfeit,
 none. Plans and specifications filed.

FRAME SCHOOL

SAN JOSE HIGH SCHOOL, San Jose.
 All work for frame school.
 Owner.....San Jose School Depart-
 ment
 Architect....C. S. McKenzie, Bank of
 San Jose Bldg., S. J.
 Contractor...C. A. Thomas, 692 N-San
 Pedro St., San Jose.
 Filed Oct. 4, '15. Dated Sept. 29, '15.
 As work progresses 75%
 Usual 35 days 25%
 TOTAL COST, \$975
 Bond, \$500. Sureties, J. A. and S. J.
 Chase. Limit, forfeit, none. Plans and
 specifications filed.

FRAME RESIDENCE

POPE ST. AND PALO ALTO AVE., Palo
 Alto. All work for frame residence.
 Owner.....J. M. Moore, Palo Alto.
 Architect....W. G. Mitchell and C. E.
 Hodges, Bankers' Invest.
 Bldg. San Francisco.
 Contractor...Currie & Currie, 698 33rd
 Ave., San Francisco.
 Filed Oct. 7, '15. Dated Oct. 4, '15.
 Frame up and boarded\$1438
 Rough plastered 1438
 When completed 1438
 Usual 35 days 1438
 TOTAL COST, \$5755
 Bond, \$2877. Surety, Globe Indemnity
 Co. Limit, 90 days. Forfeit, \$5 per
 day. Plans and specifications filed.

FRAME DWELLING

AT PERRY STATION, South San Jose.
 All work for frame dwelling.
 Owner.....F. D. Barnhart, near San
 Jose.
 Architect....A. P. Hill, Porter Bldg.,
 San Jose.
 Contractor...P. J. Schmidt, 1222 Delmas
 Ave., San Jose.
 Filed Oct. 9, '15. Dated Oct. 2, '15.
 Frame up\$750
 Brown plastered 750
 When completed 750
 Usual 35 days 750
 TOTAL COST, \$3000

Bond, \$1500. Sureties, O. E. Schnable
 and J. A. Chase. Limit, 90 days. For-
 feit, none. Plans and specifications
 filed.

APARTMENTS

ON SAN ANTONIO near First St., San
 Jose. All work except painting and
 papering for apartments.
 Owner.....C. J. Kuhn, San Jose.
 Architect....L. T. Lenzen, 110 S-Second
 St., San Jose.
 Contractor...P. E. Peterson, San Jose.
 Filed Oct. 5, '15. Dated Oct. 5, '15.
 All roughed in\$1195
 1st coat plaster on 1195
 When accepted 1195
 Usual 35 days 1195
 TOTAL COST, \$4780

Bond, \$2400. Sureties, Geo. Dobson and
 N. O. Berg. Limit, 75 days. Forfeit
 none. Plans and specifications filed.

COMPLETION NOTICES

SANTA CLARA COUNTY.

RECORDED ACCEPTED
 Oct. 6, 1915—SEVENTH & KEYES,
 San Jose. W W Albright to C S
 Rhea.Sept. 29, 1915

LIENS FILED

SANTA CLARA COUNTY.

RECORDED AMOUNT
 Sept. 27, 1915—SW SANTA TERESA
 and Julian Sts., San Jose. Glen-
 wood Lumber Co vs Florence Clay-
 ton\$367.20
 Oct. 8, 1915—S ½ OF SE ¼ OF SEC.
 36 Twp 8 South Range 2 West M D
 M. F Berryman vs E P Thigpen.
\$263.94

COMPLETION NOTICES.

SAN MATEO COUNTY.

RECORDED ACCEPTED
 Oct. 15, 1915—LOT 8 BLK "K," San
 Mateo Heights, San Mateo. M G
 Buckley to Croop & Keegan.....
Oct. 11, 1915
 Oct. 16, 1915—LOTS 18, 19 BLK 22,
 Crocker Tract. Michael Kemmitt
 to whom it may concern.Oct. 8, 1915
 Oct. 18, 1915—CAROLANDS, Hills-
 borough. Harriett Pullman Carolan
 to Mangrum & Otter.Oct. 15, 1915
 Oct. 18, 1915—CAROLANDS, Hills-
 borough Harriett Pullman Carolan
 to Mangrum & Otter.Oct. 15, 1915
 Oct. 18, 1915—CAROLANDS, Hills-
 borough. Harriett Pullman Carolan
 to American Marble & Mosaic Co
Oct. 15, 1915
 Oct. 18, 1915—LOT 9 BLK 29, Red-
 wood Highlands, Redwood City. H
 H Putnam to whom it may con-
 cern.Oct. 18, 1915
 Oct. 19, 1915—LOT 3 BLK 7 Redwood
 Highlands, Redwood City. Redwood
 Highlands Co to whom it may con-
 cern.Oct. 18, 1915
 Oct. 19, 1915—LOT 12 BLK 28, Red-
 wood Highlands. Redwood City.
 Redwood Highlands Co to whom it
 may concern.Oct. 18, 1915

BUILDING CONTRACTS.

MARIN COUNTY.

GARAGE
 SAUSALITO, Marin Co. All work for
 garage.
 Owner.....Sylvester Pearl, Sausalito.
 Architect....T. Patterson Ross, 310 Cal-
 ifornia, San Francisco.
 Contractor...R. De Luca, 2256 Jones,
 San Francisco.
 Filed Oct. 20, '15. Dated Oct. 18, '15.
 Walls built\$715
 Steel trusses set 715
 When completed 715
 Usual 35 days 715
 TOTAL COST, \$2865
 Bond, \$1433. Surety, Massachusetts
 Bonding & Insurance Co. Limit, 75
 working days. Forfeit, none. Plans
 and specifications filed.

LIENS FILED.

MARIN COUNTY.

RECORDED AMOUNT
Oct. 20, 1915—SAN RAFAEL Neal
Ring vs Sam Smith.....\$25
Oct. 20, 1195—SAN RAFAEL E D
Bennett vs Sam Smith.....\$74.15

RELEASE OF LIENS

MARIN COUNTY.

RECORDED AMOUNT
Oct. 20, 1915—SAUSALITO H W
Collins, Aeme Lumber Co and F
Heine to E A Lowe.....

BUILDING CONTRACTS.

CONTRA COSTA COUNTY.

FRAME BUILDING

LOT 5 BLK "B," Homestead Tract of
Town of Martinez. Carpenter work,
mill work, concrete and brick work,
plastering, plumbing, excavating,
lathing, painting, etc., for two-story
and basement frame building.

Owner.....Geo. E Barnett, Martinez.
Architect...None.

Contractor...C. C. Blair, Martinez.

Filed Oct. 13, '15. Dated Oct. 9, '15.

Frame up and rafters in place.....\$500

Ready for lathing..... 500

Plastering finished, windows in... 500

Building accepted..... 500

Usual 35 days..... 700

TOTAL COST, \$2700

Bond, none. Limit, within 30 days.

Forfeit, none. Plans and specifications
filed.

BRICK & FRAME ADDITION

ADJOINING PRESENT STORE BUILD-
ing on Lot 37-3 facing Ferry street,
Martinez. All work for one-story
brick and frame addition to present
Morgan Store Building.

Owner.....Mrs. M. J. Morgan, 1207

Escobar St., Martinez.

Architect...James I. Narbett, 704 Mac-

donald Ave., Richmond.

Contractor...The Neilson Co., Martinez.

Filed Oct. 18, '15. Dated Oct. 16, '15.

Brick walls up to height of

ceiling joists including pressed

brick.....\$395.00

Brick work completed, roof

work and plastering done..... \$95.00

Completed and accepted..... \$95.00

Usual 35 days..... \$95.40

TOTAL COST, \$2380.40

Bond, \$1190.20. Sureties, W. J. John-

son and J. E. Calton. Limit, within 40

and specifications filed.

working days. Forfeit, none. Plans

BUILDING CONTRACTS.

FRESNO COUNTY.

DWELLING

LOTS 28 AND 29 BLK 16 North Park
Terrace Add'n, Fresno. All work for
two-story dwelling.

Owner.....A. R. Jack, 348 Glenn St.,
Fresno.

Plans by...C. B. and J. Wade Hanner,

Contractor...C. B. Hanner, 1828 I St.,
Fresno.

Filed Oct. 19, '15. Dated Oct. 18, '15.

Enclosed..... 25%

1st coat plaster on..... 25%
Completed..... 25%
Usual 35 days..... 25%
TOTAL COST, \$3542

Bond, \$1771. Sureties, S. L. Platt and
Chas. Chess. Limit, Dec. 22, 1915.
Forfeit, none. Plans and specifications
filed.

DWELLING

NO. 233 MARY ST., Fresno. Dwelling

Owner.....Lydia Abbott, Premises.

Architect...None.

Day's work..... COST, \$1000

LOTS 6 AND 7 BLK 127, Fresno. All
work for garage.

Owner.....C. J. Craycroft, 206 Griffith

-McKay Bldg., Fresno.

Architect...None.

Day's work..... COST, \$1000

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED ACCEPTED

Oct. 20, 1915—LOT 2 BLK 10, 11 Park

Add'n, Fresno. Ben A Riege to

whom it may concern...Oct. 20, 1915

Oct. 20, 1915—LOTS 10, 11 BLK 11,

Fresno Heights, Fresno. Jas C

Morris to whom it may concern....

.....Oct. 20, 1915

Oct. 18, 1915—LOTS 14 AND 15 BLK

A Terry Tract, Fresno. W S Scott

to E A Turner.....Oct. 16, 1915

Oct. 18, 1915—LOTS 6 AND 7 BLK

120, Fresno. Leon Kyudjian to S

Boloian.....Oct. 13, 1915

LIENS FILED.

FRESNO COUNTY.

RECORDED

AMOUNT
Oct. 19, 1915—LOT 13 SE ½ LOT 12

Blk 163, Fresno. Fresno Lumber

Co, \$705; L P and R J Christie, \$417

vs J P Williams, M R De Viese and

Minnie D Clinch.....

BUILDING CONTRACTS

SACRAMENTO COUNTY.

ALTERATIONS

NO. 1729 G ST., on Lot 5, P, Q, 7th and

8th Sts., Sacramento. Replace

wooden floor with concrete floor in

barn.

Owner.....F. G. Fay, Premises.

Architect...None.

Day's work..... COST, \$5000

FRAME RESIDENCE

LOT 37 West Curtis Oaks, Sacramento.

Two-story 7-room frame residence.

Owner.....A. W. Clevenger, 34th and

M Sts., Sacramento.

Architect...None.

Contractor...Corum & White, 2523 1st

Ave., Sacramento.

COST, \$3100

REPAIRS

NO. 505 J ST., on Lot 8 Blk 1, J, 5th

and 6th Sts., Sacramento. Repair

and remodel furnace room in five-

story brick building.

Owner.....Y. M. C. A., Premises.

Architect...None.

Contractor...Latourette & Fleal Co.,

35th and Sacramento Ave.,

Sacramento.

COST, \$100

DWELLING

NO. 1901 SHASTA AVE., on Lot 6 Blk 2,

Maple Park, Sacramento. One-story

5-room and bath dwelling.

Owner.....John L. Johnson, 2725 W

St., Sacramento.

Architect...None.

Day's work..... COST, \$2200

DWELLING

WABASH AVE., on Lot 26 Alta Vista

Add'n, South Sacramento. One-story

five-room and bath dwelling.

Owner.....W. T. Foster, 35th and

Cypress Aves., Sacramento.

Architect...None.

Contractor...W. B. Phillips, 4011 Cy-

press Ave., Sacramento.

COST, \$1500

ADDITION

NO. 1915 J ST., on E ½ Lot 7, I, J, 19th

and 20th Sts., Sacramento. Two-story

frame addition to dwelling.

Owner.....Song Hing, 725 J St., Sacra-

mento.

Architect...None.

Contractor...H. H. Weeks, Lower Stock-

ton Road, Rural Dist 515-A,

R. D. 3, Sacramento.

COST, \$1250

ALTERATIONS

NO. 522 K ST., on E ½ Lot 3, K, L, 5th

and 6th Sts., Sacramento. Install in-

terior fixtures in store.

Owner.....F. W. Woolworth Co.

Architect...None.

Contractor...E. Hook, 1718 18th St., Sacra-

ramento.

COST, \$900

GARAGE

NO. 2417 M ST., on W ½ Lot 6, L, M,

24th and 25th Sts., Sacramento. All

work for garage.

Owner.....L. A. Bloomberg, Premises

Architect...None.

Contractor...Geo. W. Kopp, 1514 15th

St., Sacramento.

COST, \$550

PUMPS, ETC.

FRONT AND 1 STS., on Blk H, 1, 2nd

St., Sacramento. Install pumps and

header chambers in City Water Wks.

Owner.....Sacramento City.

Architect...None.

Contractor...Teichert & Ambrose, 288

Ochsner Bldg., Sacramento.

COST, \$19,000

FRAME RESIDENCE

NO. 2817 D ST., on W ½ of Lot 6, Blk

C, D, 28th and 29th Sts., Sacramento.

One-story 5-room frame residence.

Owner.....Antone R. Gomes, 227 S

St., Sacramento.

Architect...None.

Contractor...C. Valine, 2417 15th St.,

Sacramento.

COST, \$1700

REPAIRS

PARK AVE Lot 22 Monte Vista Tract,

Sacramento. Remodel and repair

frame residence.

Owner.....S. C. Forrester, 620 ½ J St.,

Sacramento.

Architect...None.

Day's work..... COST, \$900

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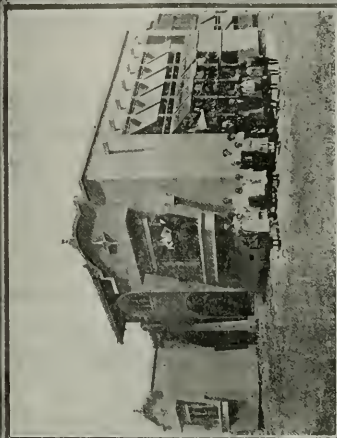
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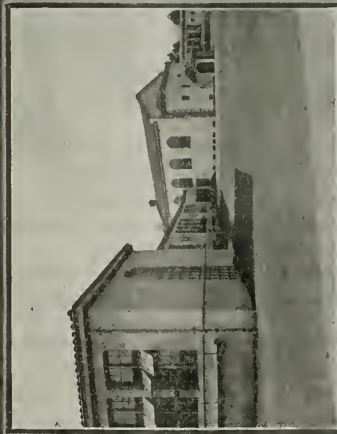
62 POST STREET

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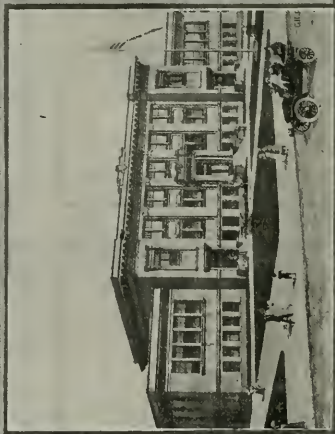
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COLLEGE PARK SCHOOL - SAN JOSE. - Frank D. Wolfe Architect



ROCK RIDGE SCHOOL, OAKLAND. - J.J. Donovan Supervising Arc.



WOODLAND SCHOOL - W.H. Weeks Architect



INTERIOR VIEW - MACCHESNEY SCHOOL - J.J. Donovan Supervising Arc.

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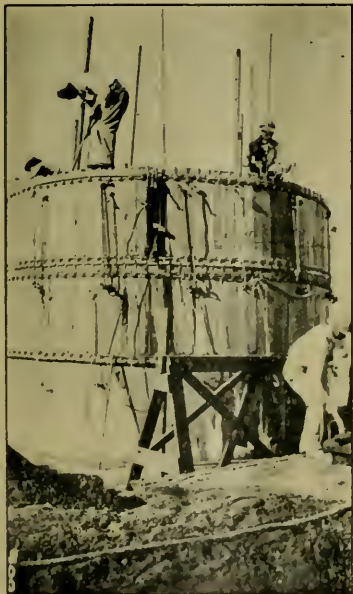
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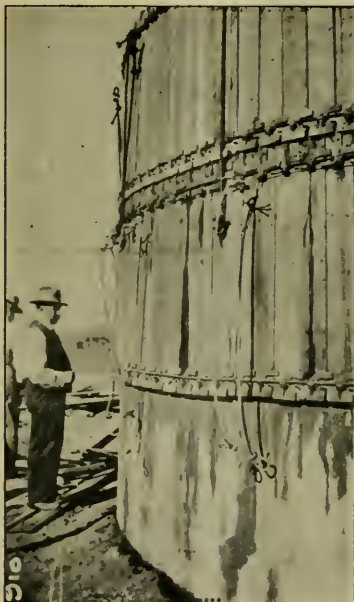
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George Nelson, C. E., Editor.

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W. D. Manville, News Editor.

November 3, 1915

Leading Articles in this Issue:

Concrete Chimneys

By George Nelson C. E.

Pasadena Municipal Light Plant

by C. W. Koiner

International Engineering Congress

By W. A. Cattell.

Public Works in Japan

By Bureau of Public Works, Ministry of Home Affairs, Tokyo.

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George Nelson, C. E., Editor.

Devoted to the Engineering, Architectural, Building and Industrial Activities of the Pacific Coast.

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W. D. Manville, News Editor.

November 3, 1915

Leading Articles in this Issue:

Concrete Chimneys

By George Nelson C. E.

Pasadena Municipal Light Plant

by C. W. Koiner

International Engineering Congress

By W. A. Cattell.

Public Works in Japan

By Bureau of Public Works, Ministry of Home Affairs, Tokyo.

ABOUT OURSELVES.

Building and Engineering News offers the best medium in the entire west for the Engineering Profession to get in touch with and keep in touch with all the activities of this great and undeveloped western country that requires engineering service, skill and brains.

Our "Technical Section" contains illustrated descriptions of construction work now going on all over the western hemisphere in all the countries bordering on the Pacific Ocean by the men who are actually doing the work, the engineers designing the work, the contractors executing the work and the inspecting engineers supervising the details of the work.

We bring descriptive articles of the workings and activities of the various Government Engineering Bureaus in the different countries and will in course of time have brought our readers a complete birdseye view of all the important engineering undertakings inaugurated as a direct result of the determination of the American People to build the Panama Canal.

We bring the up-to-date reports of all the important decisions of the State Commissions on all matters of interest to Engineers.

We bring short descriptions of contemplated work with the preliminary estimates of the engineers in charge.

We also bring important discussions by the most prominent engineers the world over on the vital engineering questions of the day.

We bring articles on important development enterprises, both private and governmental.

Our "News Section" brings **each week a complete** advance summary of new work contemplated, arranged both as to character of work and location of work with a ready reference index of both, making it possible for the engineer and contractor at a glance to find out what is going on in his special line and in his locality. Our "Sealed Proposals" contains the official notices of all the most important work going on in the west.

We desire to be of real practical service to the entire profession and invite the engineers and professional men to send to this office news items of professional interest such as new construction work, completion of construction work, surveys, changes in engineering personnel, change of location of engineering offices, engagement of engineers on new projects, appointment of engineers to new positions.

It often happens that engineers who have worked together on a large piece of construction work, but through the vicissitudes of this kind of work become separated, would like to be together again when opportunities offer themselves, and here the best way to keep track of each other is by making this journal a clearing house of information regarding your whereabouts.

By constantly keeping us advised of your professional doings and location, your friends will always know where they can find you when a big job comes up where your efficient services are desired.

Therefore send in your subscription and all the professional information about yourself and your work. It will do all of us some good some day and you will be helping to build up a paper whose object is to serve you better and better.

Yours for efficient service,

BUILDING & ENGINEERING NEWS.

Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
of the Pacific Coast.

Issued Weekly, \$3.00 per year

San Francisco, November 3, 1915

Fifteenth Year, No 44

Concrete Chimneys

By

George Nelson, C. E.



Standard Oil Company Refinery Concrete Chimneys.

The use of reinforced concrete in the construction of factory chimneys is of rather recent date and a review of some of the most typical examples of this kind of construction in Southern California is hereby presented to our readers.

In the summer of 1911 the Standard Oil Company bought the 840 acres at El Segundo on the Santa Monica Bay in Los Angeles County and immediately began the construction of their refinery.

Bent Bros. were chosen as the contractors to build the outlet tunnel for the waste water, and when the question of the chimneys came up they were also authorized to build these, eight in number and of various sizes, according to plant requirements.

The forms used are made of yellow pine and consist of "straight" units and "reducer" units, the same number of "reducer" units is used in large chimneys as in small ones, and they are uniformly distributed in the form and the same number is kept in the form no matter how high the chimney is. A certain number of straight units are removed as the work goes on, to give the taper.



Roller Chimney Exterior Wash at of Neat Cement. This Chimney 10 feet in Diameter at Top and 125 feet High.



One of the Still Chimneys, Completed and Being Given a Brush Coat of Neat Cement on the Exterior. This Chimney is 80 Feet High.



Three Still Chimneys, two complete, third up 22 feet.

The outside forms are held in position by cables and the inside forms by flat steel bars bent to the proper curvature.

The forms are evenly and accurately spaced and great care is taken to have them plumb and level before the platforms and scaffold is carried up ready for the pouring of the concrete.

The foundation for the chimney is heavily reinforced with $\frac{1}{2}$ -inch square twisted steel bars, laid at right angles with each other and parallel to the sides and also diagonally.

The concrete for this is made of 1 part of cement, 3 parts of sand and 5 parts of crushed stone or gravel, largest size $\frac{1}{4}$ inch.

The reinforcement for the chimney consists of $\frac{1}{2}$ -inch square twisted steel bars spaved according to the requirements of height of the chimney, evenly spaced overlapping about 30 inches and the horizontal rings are composed of $\frac{1}{2}$ -inch square twisted steel bars, overlapping 16 inches and wired to the vertical bars and spaced 14 inches apart, making 3 bars for every $3\frac{1}{2}$ feet of form.

The concrete for the chimney is made of 1 part of Portland cement, $2\frac{1}{2}$ parts of sand and 4 parts of gravel. All sand and gravel is measured in boxes to secure uniform mixture.

The concrete is mixed on the ground and hoisted in buckets.



Still Chimney, Showing Scaffold and Hoist.



Concrete Chimney for Main Boiler Plant.



Still Chimney Under Construction.

At El Segundo there is one large chimney for the main boiler plant and seven small ones for the different stills and the acid plants.

The large chimney is 125 feet high and 10 feet inside diameter at the top and about 12.25 feet at the bottom with uniform taper.

The wall is $9\frac{1}{2}$ inches thick at the bottom and 5 inches thick at the top. The large chimney took 230 barrels of cement, 94 cubic yards of sand, 15

International Engineering Congress, 1915.

W. A. CATTELL, Mem. Am. Soc. C. E., Secretary.

(Concrete Chimneys Continued.)



Reinforced Concrete Chimney 100 Feet High Built in Los Angeles for the Huser Packing Co.

vic yards of gravel and 5 tons of ure twisted steel bars for reinforcement.

It took about nine weeks to build it. The small chimneys took each 79 rrels of cement, 32 cubic yards of nd, 52 cubic yards of gravel and 2 ns of reinforcing steel. It took from ur to five weeks to complete a small inney.

The four small chimneys were 80 tch and 6 feet in diameter at the p. The wall was 6 3/4 inches thick at botom and 4 inches thick at top. They re filled with common brick laid in elay and were built for the stills. Two small chimneys were 50 feet h and were built for the acid plant. Bent Bros. also built three reinforced ccrete chimneys for the Standard oil npany at their plant at Bakersfield. ch of these chimneys was 80 feet h and 7 feet in diameter at top. ese chimneys each took 85 barrels of ent, 25 cubic yards of sand, 30 ic yards of gravel, 33 cubic yards crushed rock and 3,155 pounds of oncing steel. Each of these chims took about six weeks to complete.

(Continued from Oct. 26.)

Saturday, September 25.

10:00 A. M. The Influence of the Electric Motor on Machine Tools, A. L. De Leeuw. Effects of Electrolysis on Engineering Structures, Albert F. Ganz. The Mechanical Problem of the Electric Locomotive, G. M. Eaton. On the Production of High Permeability in Iron, Ernest Wilson. Electric Illuminants, S. H. Blake.

MINING ENGINEERING.

Tuesday, September 21.

10:00 A. M. Economic and Social Influence of Mining, W. H. Shockley. Valuation of Metal Mines and Prospects, T. A. Rickard. The Valuation of Oil Lands and Properties, M. E. Lombardi. Valuation of Anthracite Mines, R. V. Norris. Valuation of Coal Lands, Samuel A. Taylor. Evaluating Coal Properties in Western Canada, R. W. Coulthard. Status of Coal Mines in France, E. Gruner. Workmen's Compensation and Mine Safety, H. M. Wilson.

Wednesday, September 22.

10:00 A. M. Functions and Work of Exploration and Development Companies, H. W. Turner. European Mining Finance, J. L. Gallard. The Financing of Mines in the United States, Lucius W. Mayer.

Thursday September 23.

10:00 A. M. Organization and Staff of Mining Companies, W. H. Shockley; R. E. Cranston. Relation of Governments to Mining, Horace V. Winchell. Mine Inspection, J. W. Paul.

METALLURGY.

Tuesday, September 21.

2:00 P. M. Symposium on Iron and Steel, edited by Henry M. Howe. Iron and Steel Castings, John Howe Hall. Metallurgy and the Hardening of Steel, Albert Sauveur. Case Hardening of Steel, Prof. F. Giolitti. The Duplex Process of Steel Manufacture, F. E. Lines. Methods of Preventing Piping in Steel Ingots, Emil Gathmann. Steel Alloys, George L. Norris. Steel Making in the Electric Furnace, James H. Gray. Electro-Metallurgy, E. F. Roerber.

Thursday September 23.

10:00 A. M. Symposium on Copper, Edited by E. P. Mathewson. Progress in Copper Metallurgy, Thomas T. Read. Advances in Copper Smelting, Frederick Laist. Metallurgy of Copper in Japan, R. Kondo. Copper Metallurgy in the Southwest, James Douglas. Reduction Works—Copper Queen Consolidated Mining Company, Douglas, Arizona. Forest Rutherford. Advances Made in the Metallurgy of Copper, Globe District, Arizona, L. O. Howard. Improvements in Design and Construction of Modern Copper Plants, Charles H. Repath. 2:00 P. M. Leaching Copper Ores, W. L. Austin. The Metallurgy of Copper, William Campbell. Boronized Cast Copper, Dr. E. Weintraub. Electrolytic Refined Copper, A. C. Clark. The Development of Electrolytic Copper Refining, Lawrence Ad-dicks. Physical Properties of Copper, Carle R. Hayward. Metallurgy and

Technology of Non-Ferrous Alloys, William Campbell.

Friday, September 24.

10:00 A. M. Symposium on Gold and Silver, edited by C. W. Merrill. Coarse Crushing Plant; 1,000 tons Capacity, G. O. Bradley. Crushing and Grinding, L. D. Mills; M. H. Kuryla. Solution of Gold and Silver, M. H. Kuryla. Filtration or Separation of Metal Bearing Solution from Slime Residue, L. D. Mills. Precipitation, G. H. Clevenger. 2:00 P. M. Symposium on the Metallurgy of Zinc, edited by Walter Renton Ingalls. Some Main Points in the Economics of the Metallurgy of Zinc, Walter Renton Ingalls. The Development of Zinc Smelting in the United States, George C. Stone. The Smelting and Refining of Lead, Dr. H. O. Hofman. Symposium on the Utilization of Fuels in Metallurgy, edited by C. H. Felton. Pulverized Coal in Reverberatory Furnaces, D. H. Browne. Burning Pulverized Coal in Copper Reverberatories, E. P. Mathewson. Gas Producer Development, Z. C. Kline. Surface Combustion (What is it), C. E. Lucke. Ore dressing: Robert H. Richards.

NAVAL ARCHITECTURE AND MARINE ENGINEERING.

Tuesday, September 21.

10:00 A. M. Ship Calculation, Resistance and Propulsion, D. W. Taylor. Ocean Freighters, Ernest H. Rigg. Recent Developments in Japanese Shipbuilding, Dr. E. Terano. Bulk Freight Vessels of the Great Lakes, Herbert C. Sadler. 2:00 P. M. River, Lake, Bay and Sound Steamers of the United States, Andrew Fletcher. Special Types of Cargo Steamers for the United States Coast to Coast Trade Through the Panama Canal, George W. Dickie. The Development of the Sail Yacht, Steam Yacht and Motor Yacht in American Waters, William Gardner. The Lightship, George Crouse Cook.

Wednesday, September 22.

10:00 A. M. Warships of the First Line of Battle, Colonel E. Ferretti. The Submarine, R. H. M. Robinson; L. Y. Spear. Present Conditions of the Submarine, Ma A. Laubeuf. Modern Marine Gun Armament, Lieutenant H. F. Leary. General Problem of Naval Warfare, Lt. Commander D. W. Knox.

Thursday September 23.

10:00 A. M. Marine BOLLERS and Boiler Room Equipment, Charles F. Bailey. The Development of the Marine Steam Turbine, Lt. Commander H. C. Dinger. The Application of the Steam Turbine to Marine Propulsion, J. F. Metten. Recent development in Marine Engineering in Japan, Dr. M. Tsutsumi. 2:00 P. M. Coating Plants and Floating Cranes of the Panama Canal, F. H. Cooke. Cargo Handling Methods and Appliances, H. McL. Harding. Some Economic Fundamentals of Freight Handling, David B. Rushmore. The Modern Trend in American Marine Terminals, Roht. H. Rogers. Cargo Handling Methods and Appliances, James A. Jackson.

(Continued in next issue.)

Pasadena Municipal Light Plant.

By C. W. KOINER, Chief Engineer.

EIGHTH ANNUAL REPORT OF PASADENA'S MUNICIPAL LIGHTING WORKS DEPARTMENT; 1914-15.

Commissioners, City of Pasadena.

A. L. Hamilton, Commissioner of Finance.

T. D. Allin, Commissioner of Public Works.

W. B. Loughery, Commissioner of Public Safety.

M. H. Salisbury, Commissioner of Municipal Utilities.

W. F. Creller, Commissioner of Parks and Buildings.

C. W. Koiner, General Manager and Electrical Engineer Municipal Lighting Works Department.

Office of the Municipal Lighting Works Department.

Pasadena, Cal., August 27th, 1915

Mr. M. H. Salisbury,

Commissioner of Municipal Utilities,
Pasadena, California.

Dear Sir:

I have the pleasure to submit, herewith the eighth annual report of this Department, for the year ending June 30th, 1915. There has been included in the report considerable detailed information on the operation of the Department. However, we have eliminated considerable of the minor details which might not prove of interest to the average citizen. All essentials are included and the Department is ready at all times to answer any ques-

plant equipment. The balance on these contracts will be paid after all details are completed in connection with the installation of this equipment. The \$18,677.76 cash balance on hand at the end of the year will be sufficient to complete all payments on these contracts.

Two thousand dollars was paid during the month of June on the loan from the General Fund, and other payments will follow until this obligation is disposed of. Our extensions have all been made with Interest Reserve, Depreciation, and Surplus funds, as has been the practice in previous years. Instead of having all of this money in the bank we have it in property, wire, pole lines, meters, services, transformers, power plant equipment, etc.

Depreciation.

A great deal has been said on the part of our critics about depreciation, especially at the time we started the operation of this Department. It will be noted that we have written off \$161,216.35 to cover deferred maintenance, obsolescence, and all those things which pertain to depreciation. Considerable of the plant has been in operation for eight years, and during this period the plant has been maintained and kept in a high state of repair. The fact is, we are writing off more depreciation than is necessary. However, we think it best for the present to continue to depreciate our

Surplus.

By deducting from the gross earnings all operating expenses, depreciation and interest on the total average investment, we have a surplus for the year of \$37,246.23. This sum added to our previous surplus makes a grand total of \$108,356.31. It will be understood that this is invested in the property. Instead of issuing bonds or Depreciation Reserve, Interest Reserve and Surplus funds have been used for construction purposes.

Construction.

The cost of extensions during the year is segregated and shown in another column.

Saving Effectuated.

In all previous reports we have placed emphasis on the saving resulting to the people of Pasadena since they started their light and power plant.

This is by reason of the difference in rates charged before the city entered the light and power business and the rates charged our neighboring cities since. The saving amounted to \$731,083.96 at our last report, and adding the saving for the past year calculated in the same way, we have a total sum of \$905,033.96, which is more than the cost of the whole plant. However, the people still have the plant, which has been more than self-sustaining by earning all its operating charges, depreciation and a safe margin of surplus to cover emergencies.

The rate was 15 cents per K. W. when the city began talking about municipal light and power plant. At the time the plant was built the rate was 12½ cents per K. W. H. for the first 666 K. W. H., less 10% for prompt payment. While the rate was low to meet the 8-cent rate established by the city, for current supplied by municipal plant, the 12½-cent rate was continued in force in various of Southern California cities by our competitor. Subsequently the base rate of some of the various other cities was reduced to 10 cents, and so remained until January, 1913, when a base rate of 8 cents was established. On April 1st, 1914, a base rate of 7 cents was made by the city's competitor in various other Southern California cities. However, this is considerably higher when compared with the rate of 5 cents charged by Pasadena's municipal light plant for lighting service, show that the City of Pasadena is generating with a steam plant, and distributing to its customers, in competition with a large hydro-electric company electrical energy at a profit, for less than its competitor offers in any of Southern California cities, except Los Angeles, where the rates are regulated to 5½ cents.

Increases.

	1914-15 over 1913-14	1913-14 over 1912-13
Commercial Light receipts increased.....	20.68%	24.25%
Commercial Power receipts decreased.....	14.75%	In. \$7.73%
By deducting the sales to the Water Department the power receipts increased.....	1.02%	32.08%
Street Lighting receipts increased.....	6.49%	6.2%
Gross Receipts increased.....	9.6%	27.03%
By deducting the sales to the Water Department, the gross receipts increased.....	13.64%	19.19%
Net Receipts increased.....	15.83%	15.94%
Output in K. W. H. sold decreased.....	.77%	In. 50.15%
By deducting the sales to the Water Department the output in K. W. H. sold increased.....	9.8%	
Number of consumers increased.....	15.68%	40.34%
Total cost of all current sold per K. W. H. increased.....	7%	De. 9.05%
Surplus increased.....	26.86%	24.27%

tions from our inquiring citizens concerning any detailed information that may be desired.

I wish to call attention to the increased sales of electrical energy for lighting and domestic uses, which were more than sufficient to offset the decreased use of electrical energy by the Water Department. The net results for the year are best in the history of the plant.

The cost of extensions during the year was \$70,016.73. Of this sum \$31,052.48 was paid on contracts for power

property in the same manner as in the past. No credit has yet been extended to Depreciation Reserve on account of money used for extension purposes.

Interest on Total Average Investment.

As has been practiced heretofore, we have charged interest on the total average investment in the plant. This interest the past year amounted to \$24,968.50. Of course we do not have to pay interest on the total average investment, only interest on outstanding bonds, which amounted to \$11,153.44 the past year.

YEAR	DEPRECIATION		INTEREST	
	Current	Current	Current	Current
	Sold	Generated	Sold	Generated
1907-08 .....		.0112		.0131
1908-09 .....		.0104		.0101
1909-10 .....	.01104	.0087	.01040	.0082
1910-11 .....	.00777	.0065	.00798	.0067
1911-12 .....	.00743	.0059	.00823	.0066
1912-13 .....	.00777	.0061	.00657	.00516
1913-14 .....	.00578	.00473	.00486	.00397
1914-15 .....	.00646	.00518	.00531	.00425
Total Interest and Depreciation for the year 1914-15				
Current Sold .....				.01177
Current Generated .....				.00944

BALANCE SHEET AS OF JUNE 30TH, 1915.

ASSETS		LIABILITIES	
Property Account	\$606,305.41	Funded Indebtedness	\$266,9
Real Estate, Station Equipment, Overhead and Underground Lines, Transformers, Meters, Etc.	\$767,521.79	Total Bonds Issued	\$327,000.00
Less Depreciation Reserve to June 30, 1915	161,216.35	1992 4 %	\$ 2,000.00
		1996 4 %	125,000.00
		1908 4½%	50,000.00
		1909 4 %	150,000.00
		Less Bonds Redeemed	60,025.00
		Paid out of Taxes	51,900.00
		Paid out of Operating Surplus	8,125.00
		Premium Received on Bonds	3.8
		Contribution from Taxes	228.5
		Taxes of Year 1906	52,332.35
		Street Lighting Appropriation 1906	2,299.95
		Land for Power Plant Buildings	6,000.00
		Land for Pearl Street Warehouse	1,900.00
		Bonds Redeemed	51,900.00
		Bond Interest Paid	76,112.01
		Loan from General Fund	\$ 10,000.00
		Less Amount Repaid	2,000.00 38,000.00
			\$499.33
	\$606,305.41	Balance carried down	106.94
Balance from Capital Acct.	\$106,919.70		\$606.30
Inventories	19,869.87	Accounts Payable and Deposits	\$ 73
Accounts Receivable	18,541.04	Reserve for Interest—Net Balance	54.92
Commercial Light and Power	\$ 12,235.52	Charged on Total Aver. Investment	\$113,868.30
City Streets and Buildings	4,697.15	Paid Bond Interest from Taxes	\$ 76,112.01
Sundry Accts	1,608.37	Paid Bond Int. from Surplus	12,818.75 88,930.76
Cash	18,677.76	Surplus	108.35
Municipal Lighting Fund	\$ 18,377.76	Balance of Account July 1, 1914	\$71,110.08
Office Cash	200.00	Gain for Year Ending June 30, 1915	37,246.23
		Actual Operating Gain	50,997.23
		Less Increase in Int. Reserve	13,751.00
	\$164,038.37		\$161.03

OUTPUT REPORT.

Output K. W. H. for the Year Ending June 30, 1915.

	Output	Receipts Per	K. W. H.
Street Lighting			
Clusters and Alleys	398,159	\$ 12,620.60	.03421
Arcs and Series of Tungstens	810,639	38,108.81	.01701
	1,208,858	\$ 51,729.41	.041279
Commercial System			
Lighting, including City Depts.	2,253,960	111,169.35	.01932
Power, including City Depts.	1,237,762	70,168.00	.02161
	3,491,722	\$141,637.35	.04056
Total current sold	4,700,580	193,366.79	.04111
Lighting at plant	32,028		
Lighting at office and stockroom	14,789		
	46,817		
Core loss of transformers	355,973		
Shunt loss of meters	128,213		
Copper and transmission losses, and unaccounted for losses	634,775		
	1,118,961		
Total current generated	5,866,358		
Received for all current generated .....		.03296	
Received for all current sold .....		.04114	
	Prod.	Dist.	Gen.
Cost of all current generated .....	.00763	.00451	.00507
Cost of all current sold .....	.00952	.00563	.00633
Efficiency of distributing system .....			.04531
Load factor .....			.00646
Capacity factor .....			.03325
Revenue per K. W. H. station capacity			80.937%
Maximum demand			31.08%
			21.96%
			\$63.40
			1963

COUNCIL ADOPTS HARBOR REVENUE ON NAVAL BASE.

The campaign for the establishment of a naval base at the Los Angeles harbor was advanced when the Council adopted the report of the harbor committee urging that the harbor commission be instructed to select a site which will be offered to the government for the naval base.

Both the west basin of the harbor at Wilmington and the 147 tract inside the breakwater at outer harbor are being discussed as possible sites for the naval base.

ORDINANCE FOR PORT FAVIN ADOPTED.

The final ordinance for the port of a road to the Government fortifications at Fort MacArthur, Point Fermin was adopted by the City Council of Los Angeles.

This road was urgently requested by the United States authorities to facilitate the construction of the fortifications, and the hauling of the big guns for the defense of the harbor to port.

The Municipal Bond Market is looking up, and the Bond Buyers are the "Building and Engineering News" up. A proposal for bonds in our columns will competition.

PUBLIC WORKS IN JAPAN.

By Bureau of Public Works Ministry of Home Affairs, Tokyo.

(Continued from October 20.)

to the mouth improvement, the work on the west side of the channel of the Shiono will be carried out with stones and concrete to the height of 12 feet above low water level and extending to a length of 1,000 feet with an upper breadth of 100 feet, and the channel is to be deepened to a depth of from 25 feet to 30 feet. The work was commenced in the year 1911 with the expectation of completing it by 1919.

The Takahashi.

One of the main rivers in the western part of the main island. The work is the enlargement of the channel for 15 miles above the mouth, by the supposed highest water carrying 250,000 cubic feet may be enlarged; the shutting up of the course of the eastern distribution of the two lines into which the river splits on its middle course, so the total body of water may be divided by the other channel, which is being enlarged to 800 feet of width in its upper part and 4,200 feet at its mouth; and lastly the construction of a long jetty of 10,290 feet on the right bank of the mouth. The work was commenced in 1907 and is completed by the year 1920.

The Yoshino.

One of the greatest rivers in Shikoku. Beside the main river which is improved for 33 miles upward to the mouth, the Bekku, a distributary, will be greatly improved so that it will discharge 400,000 cubic feet out of the total high water measuring 1,000,000 cubic feet, the remaining 100,000 cubic feet being left to flow through the main channel. The breadth of the main channel at its junction, being gradually enlarged as it goes down to its mouth it will have a width of 100 feet, and embankments will be constructed on both banks. Above the junction, the present embankments will be extended and improved. On Utsunomiya Island, which lies between the Yoshino and the Zennuyji, a dike, a dike, and embankment and other works will be removed that it may be used as a large reservoir. The work was commenced in 1907 and is to be completed in 1921.

The Yodo.

One of the greatest rivers in the neighborhood of the cities Kyoto and Osaka. Its drainage basin of 3,275 square miles. Early, from 1864 to 1878, low water operations were executed for the improvement of the main channel that extends from bridge Kanetsu near Fushimi, to the town of Moriguchi, and Kawachi, below which the work was checked owing to the improvement of Osaka harbor. Later, in the year 1896 to 1910, the high water works were carried out for the improvement of the Yodo from its source near Biwa near Kyoto to its mouth

at Osaka. For the third time, the work was commenced in the year 1907, when the improvement scheme of Osaka harbor was decided on and commenced, on the channel below Moriguchi where low water works had not been touched until then.

For the high water works, the volume of water was estimated at 200,000 cubic feet at its highest, and the work consists chiefly of—the improvement of the whole channel from Lake Biwa down to its mouth; the construction of a cut-off, measuring from 1,800 to 2,700 feet in width near Kema, a suburb of Osaka, by which the whole volume of flood is discharged, so that the main channel need not convey any more than the low water—for this purpose a lock and a weir were made at the junction; construction of a lock at a place some two miles below Lake Biwa, by the operation of which the water of the lake is balanced; in winter the water is kept in by shutting up the opening and in summer when floods are frequent the water line has previously been lowered by opening the sluice, so that inundation may be prevented below, and in time of extraordinary floods the lock is totally closed in order to free the adjoining districts from fear of being inundated. For the low water works of the channel below Moriguchi, the low water of the main course was estimated at 5,000 cubic feet of which 4,000 cubic feet are to be carried by the old channel below the town, which is dredged so as to preserve a depth of above 5 feet. The channel below bridge Aikawa in the city of Osaka is dredged to the depth of 18-20 feet under the lowest tide level, in order to enable middle sized boats to navigate it at any time.

The Arakawa.

This is a large river, flowing along the outskirts of the Imperial capital Tokyo. The whole area to be improved covers 59 miles of the main channel from the neighborhood of Kumagae, Saitama prefecture, to its mouth, of which 16 miles upwards from the mouth is the first line to be improved. Of the whole high water of 200,000 cubic feet, 30,000 only shall be admitted into the natural channel, while the remaining water will flow through an artificial channel which it is intended to cut at the bank near Kawaguchi, slightly below the railway bridge and which will enter the sea, passing on its way Senju, a north suburb of Tokyo and then round the capital. In the village of Hirai it crosses the river Naka, necessitating one more parallel channel for the passage of the latter's water. The breadth of the new bed is 1,500 feet for the upper part of the Arakawa, being gradually extended till it reaches 1,920 feet at the mouth and 600 feet for the whole line of the new river channel of the Naka. At the junction where the new bed of the Ar-

akawa rises, a lock and a weir are to be constructed. The work was put in hand in 1911 and is to be completed by 1916.

The Kitakami.

This is one of the greatest rivers in the North Japan and is navigable for upwards of 150 miles. Before the northeast railway line was opened, most of the products of this region were transported by this river, but they had to overcome many difficulties caused by the rapids, rocks and shallows which occurred in the current. In order to improve this condition, the low water work was set about in 1870 for 125 miles of the main river, and was completed in 1902. In 1911, a new scheme of high water work was commenced and is expected to be completed in 1921. A brief explanation of this scheme is given below: The area projected to be improved is about 33 miles of the main channel from the village of Nishigori, Tome district, to its mouth. Highest water 200,000 cubic feet. The whole channel within this area will be dredged, while the embankments on both banks will be extended, and a five miles long cut-off shall be made between two towns Yamaizu and Iino, in order to discharge the floods into the Oppa, a distributary, with which the artificial channel joins at its mouth. At this junction, the Oppa is shut up against the upper water, and below the point as far as the mouth the channel is to be greatly enlarged. A lock and a weir will be made at the junction from which this cut-off derives its source and a lock in the dam which shuts up the natural channel of the Oppa in the neighborhood of Iino. At Ishinomaki where the Kitakami meets the sea, a long jetty will be constructed on each side of the mouth, the length being 3,000 feet on the right and 1,200 feet on the left, so as to keep the depth at 15 feet under the low tide level.

Improvement Works by Local Authorities.

As the readers will acknowledge, great improvement works are executed or projected by the state, so far as the important rivers are concerned. But the complete accomplishment of the object in view will not be attained, unless their tributaries, distributaries and other minor streams are well attended to at the same time. In consideration of this, all prefectures with other local corporations, are doing their utmost in the maintenance and repairs of the river works, and even themselves undertake improvement works so far as their finances allow.

(To be continued.)

The Municipal Bond Market is looking up, and the Bond Buyers are looking the "Building and Engineering News" up. A proposal to put your bonds in our columns will bring competition.

ITEMS OF INTEREST.

Collected by GEORGE NELSON, C. E.

Oil Town in Imperial Valley.

With the commercial possibilities of the oil fields west of Brawley yet undetermined, promoters will at once launch the first oil town in the valley. In one of the few level stretches in the hummocky desert forty miles from Brawley, John Rice, formerly City Engineer of Imperial, will start surveys for the townsite, which will be called Gateway. It will be in section 3, T. 12, R. 10, about two miles south of the Curley Hole, in which oil was discovered.

Attorney Harry Dyke, one of the promoters, said that several persons had already declared themselves desirous of securing locations for stores, lodging house, a restaurant and similar establishments. Water will be secured by drilling. Negotiations are underway for a wireless outfit, which will bring the proposed town into communication with the valley. John B. Curley, Sam and Will Dick, William Wessel and A. Hudson are backers of the project.

The surveys will be made off the third standard parallel in order to obviate any danger of lawsuits through erroneous surveys. Much litigation is certain from this source if any of the three drilling rigs now on the way tap a paying supply of oil and the claims are shown of sufficient value to fight for. Other contests will develop through double filings.

According to the books of the County Recorder's office, filings are plastered too deep on some half sections. As the available land has become scarcer and the oil fever intenser, sentries with rifles and shotguns have become thicker, there are threats a-plenty for any adventurous "jumper."

Fillings on 6,400 acres were recored at El Centro. One of the groups was made up of Richard Woelffel, secretary of the Brawley Chamber of Commerce; Kuy Pearson, C. W. Dietrich, C. E. Harrington, a local oil driller, and Jerry Sullivan of San Diego. They are in section 22, T. 11, R. 10. A San Diego group, made up partly of Bepcher Sterne, F. M. Ridler and W. H. Jarvis, also filed. They are in the Yuba country. An Imperial group, made up partly of Roy McPherrin, R. K. McGuffin, S. L. Loffer, M. V. Dutcher and W. A. Mackie also filed. The area filed upon this month is 35,000 acres.

C. C. Toney of El Centro took a party of San Diego men to a gas hole in the bed of New River, near the south end of the Superstition Mountains. There he showed them a hole three feet in diameter, which periodically emits gasses which, when lighted, give off a flame that flares up three or four feet. Heavy fillings have been made in the surrounding country.

Claus Spreckels and a party of San Diego men interested with him in the exploitation of the Brawley field have again visited their claims.

NEW PLASTERING BASE.

A plastering base—the E-Cod Fabric—that is comparatively new on the coast is being introduced here by the Standard Fence Company of Oakland, and has already been successfully used on several fine residences in Piedmont and Oakland.

E-Cod Fabric is a combination of waterproof felt and galvanized steel wires, so devised as to secure the maximum efficiency of the two materials and produce a fabric of unequalled value as a plastering base, at reasonable cost.

A building covered with E-Cod Fabric coated with cement mortar is not simply a building covered with plaster. It is a building encased in a monolithic, reinforced concrete slab.

The slab is reinforced continuously by the wires of the fabric, made weather proof by the cement mortar, waterproof by the felt portion of the fabric, fireproof by the close bond between the felt and the mortar so that the felt will not ignite; rust-proof by the embedding of the galvanized wires within the mortar.

The steel reinforcement is composed of No. 14 gauge, hard-drawn, galvanized steel wires crossing the felt sheet diagonally in a diamond pattern, one set being woven through the felt, while the second set passes between the first set and the felt. The pressure of the trowel forces the mortar against the felt sheet (which is held to the frame by the wires and their attachments) and completely embeds the wires, making a reinforced plate or slab of mortar of whatever thickness it may be. No deterioration of the wires can take place now so embedded.

The wire used in E-Cod Fabric is of the strongest and most durable form for that purpose, and is woven so as to serve its purpose best, both in shipment, application and in place.

The tarred felt backing of the fabric accomplishes three things: (a) the initial bond with the mortar, which adheres readily, at any consistency, to the fibrous surface, and after setting cannot be separated from the felt; (b) prevents the enormous waste of plaster which falls through an open lathing; (c) furnishes an additional layer of protection against the weather (on partitions reduces passage of sound waves) or takes the place of the inferior building paper usually employed.

The E-Cod Fabric has been used for about ten years in the east and has always given satisfaction and is very adaptable to all classes of buildings.

A petition for the recall of C. W. Brockman, Calexico director of the Imperial Irrigation District, has been filed. It contains 100 names. A petition against Director Hamilton has been on file several days.

GRAND PRIZE FOR ARMCO IRON.

A recent development in open hearth furnace practice, resulting in the manufacture of a special product known commercially as ARMCO IRON, has the following special characteristics:

Chemical Purity, Rust - Resistant Property, Welding Quality, Enamel Property, Electrical Conductivity, Panama-Pacific International Exposition, San Francisco, 1915.

Big September Business.

To celebrate a record breaking September business about thirty members of the Detroit Steel Products Company, Detroit, Mich., were the guests of General Manager J. G. Rumney at a banquet given Tuesday, October 19th, one of the private dining rooms of Detroit Athletic Club.

The September output of the company including both Fenestra Steel Windows and Detroit Steel Lubricating Springs also made by the company, was the biggest in the history of the company. And from present indications the remaining months of 1915 are going to be no exception to the rule. The September record was a combination of a series of record breaking months throughout the year.

At the banquet, speeches were made by Mr. Walter S. Russell, President of the Rusel Wheel & Foundry Company of Detroit, and by Mr. R. S. Drummond, Vice-President of the Detroit Steel Products Company.

During the evening, stereopticon views, reproduced from photographs taken by Mr. Rumney on a recent business and pleasure trip throughout the West, were thrown on the screen.

Magnesite in Demand.

Magnesite interests the world of late have turned covetous eyes on California.

Since the war exportation of magnesite from Austria, its greatest producer, has not been possible, months after the European conflict began Greece supplied the mine. Now that source has failed.

Outside of Florida, where there is very small deposit, California is the only known place on the globe where there are magnesite fields.

As a result this State has become the Mecca of representatives of magnesite interests. A score of agriculturists and engineers, prominent among whom is A. F. Williamson of the Fort Mines Limited of London, representing the Rothschilds, has invaded California. They are offering almost any price for magnesite deposits.

Humboldt County Grand Jury Report.

Staff Article

The Grand Jury for 1915 of Humboldt County, Cal., has filed its report, and as it is full of pertinent suggestions and commentary on matters of interest to engineers and contractors a reprint here said portions of the report.

Bridges and Roads.

A committee appointed on roads and bridges made recommendation that we have adopted in full as follows:

1. "That a temporary free pontoon bridge be constructed early next spring across Eel River above Scotia to connect the state highway at that point, pending the completion of the permanent bridge.
2. "That a new bridge be constructed across the North Fork of the Mattole River on the Petrolia-Ferndale road.
3. "That the bridge over the Eureka-Klamathville road, via Kneeland, known as the 'Long Bridge' be reconstructed, the same being reported to be in dangerous condition, and said to have been condemned for some time.
4. "That roads to the ocean beaches at Centerville, Loleta and Mad River, be placed in good condition.
5. "That brush be cut away from the sides of the main highways, and dangerous turns eliminated throughout the county. We also desire to call attention to numerous dangerous railroad crossings that should receive attention.
6. "That the road known as the Mattole River road, constructed last year, not be placed in condition for travel after last winter's storms, be opened as soon as possible, and the Kendall Gulch bridge on said road strengthened.
7. "That the county bridge at Dyerville be placed in condition to stand the storms of the approaching winter.
8. "That the Bull Creek road be extended, so as to give the people of the Mattole Valley an outlet to the railroad at South Fork.
9. "That as we recognize the benefit of constant work on the roads during the winter season, in order to keep the roads properly drained and free from holes, we recommend that this be demonstrated on the Arcata-Eureka road during the coming winter season by the constant employment of at least 10 men who should take care of certain sections of the road allotted to them.
10. "That the Supervisors be asked to consider the matter of limiting the storing of stock on public highways.
11. "That the road over Humboldt Bluff be reopened for travel."

A Bad Ditch.

Our attention has been called to a well maintained in an open ditch along the public highway leading west from the town of Loleta, to the crossing of the Hungan Ferry road, thence north to a small creek near the Sunset cemetery, a distance of about three-fourths of a mile, the fumes from which are obnoxious to the traveling

public, and we fear a menace to the public health. We have called the attention of the county health officer to the matter, and after he had interviewed the parties responsible for the same, received the assurance that it would be taken care of by them, working in conjunction with the proper county officials.

Rights-of-Way Matters.

We have investigated the securing of rights-of-way for the state highway and find that in many instances the highway has been built through private property before the rights-of-way had been secured. Such rights-of-way were promised by the Supervisors to the state and the responsibility for securing them rests with those officers who are legally the agents of the county.

Several disputes and complications have arisen from such haphazard and unjust methods of business; notably the disagreement between the Supervisors and The Pacific Lumber Company over a right-of-way through Dyerville, and the charges of Mr. E. L. Linsler of East Branch and of Mr. W. G. Press that their property rights have been taken away without due process of law.

We therefore recommend that in future no public roads be built or authorized by the Supervisors until rights-of-way for the same have been secured and settlement made for the same.

Report on Destroyed Bridges.

We have also investigated the building of bridges and roads during the past fiscal year and have come to the following conclusions:

The bridge built at Scotia in 1914 at a cost of \$30,651 lacked suitable piers to withstand the floods common to Eel River at this place, and in our judgment the loss of this bridge was due to the blind faith of the Supervisors in the former County Surveyor who drew the plans and specifications for this structure.

The Ballou Ford bridge erected in 1914 at a cost of \$10,475 was contracted for too late in the summer so that the contractor did not complete his job until midwinter; the width of the bridge was 13 feet, making this bridge inadequate for the vast amount of travel between Ferndale and Ferndale; and the length of the one span was 114 feet, making a long fill across the remainder of the Salt River bridge necessary. The fill was far too narrow for safe travel while the fill itself acted as a dam for the flood waters of Salt River, causing a rise in the waters at the place which floated the bridge approach away and destroyed part of the fill and rendered the bridge useless.

The Supervisors should not have accepted the plans for this type of a bridge and if uncertain as to their rights as to rejecting the Surveyor's plans they should have consulted the District Attorney.

The specifications for the road from Rosecoen to Hunters on the south side of Mattole River were very loosely drawn and made possible the building of a very dangerous bridge across the Kendall Gulch. The mudsills called for in the specifications for that bridge seemed to be absent and the poles used are not hewed as called for. The specifications should not have been accepted by the Supervisors. And the work contracted for should not have been accepted until the contractor had met every requirement called for.

We most earnestly recommend that all specifications for bridges or public works of importance be submitted by the Supervisors to some engineer of established reputation after being drawn by the County Surveyor and not finally accepted by the Supervisors until declared satisfactory by such engineer. This is in line with modern business methods and this recommendation is no reflection on our present County Surveyor.

We feel that greater care should be taken in the acceptance of work done under contract. The Supervisors and not the County Surveyor are the legal agents of Humboldt County, and as such are responsible for the county's interest in all contracts between the county and contractors.

We recommend, therefore, that the Supervisors each and all visit and personally inspect all roads, bridges, etc., built for the county under contract and satisfy themselves by every means within their power that all specifications have been complied with.

We further recommend that as far as possible the specifications for all county improvements be made to include all work to be done in connection with that particular improvement to the end that payments for extras be eliminated and the public be informed of the actual cost of an improvement when the contract is let.

The Detention Home we found in good condition, clean and well cared for. We believe a few additional pieces of furniture in some of the rooms would make the quarters more cheerful. The heating system was found defective and should be improved upon.

New Hall of Records.

We recommend that the Supervisors take steps to secure a site for the building of a Hall of Records, as we believe the erection of such a building will soon be an absolute necessity.

We recommend that an alteration be made in the present manner of supplying fuel oil to the oil burner in the jail, by removing and doing away with the oil tank which is placed above ground, and connecting up the power and feed pump with the main underground oil tank, and thus avoiding the necessity of pumping the oil by hand, by which latter method more or less oil is unavoidably spilled on the walks.

EDITORIALS.

The buying public is a hard and unjust master. It clamors for cheapness in the articles it uses, but when the manufacturer yields to the pressure and turns out an article of the cheapness desired, the buying public, after a brief rush to purchase the object at the attractive price, soon discovers the cheapness in quality which made the low price possible, and then their clamor is louder than ever and entirely refutes that entire class of article, forgetting that they were the prime movers in dragging the material down from its previous satisfactory standard. The case of the Terne Plate Roofing is an interesting example of this unsatisfactory cheapening of a good article in order to cater to public demand.

During the last generation the old iron base Terne Plate Roofing was rightfully looked upon as a standard of good roofing. On thousands of American homes and factories, the old Charcoal Iron Welsh Process Terne Plate Roofing is still giving perfect service after practically a half century of use. The tinniers in those days enjoyed a flourishing business in roofing buildings with Terne Plate. Now, however, the great majority of tinniers will state that installing Terne Plate Roofs, is a very small source of business. The reason is simple, that the manufacturer gave into the popular demand for a cheaper Terne Plate and the short life of this cheaper product soon reflected on the entire industry and "killed the goose that laid the golden egg."

Old fashioned Terne Plates were made of the purest iron base obtainable, coated by what was known as the "seven-pot process," in which the clean iron sheet was first submerged in pure Lagos Palm Oil for a short time, then slowly and carefully passed through the remaining six pots by expert workmen, coming out at the end as a soft iron plate carrying a uniform coating in which only the best of materials were used. By this process it required the eight men at the pots forty-five minutes to coat a case of plate, but the plates, when finished, were good for a lifetime of useful work.

The Terne Plate brought forth to meet the buyer's clamor for a cheaper article is a far different product. The manufacturer with true ingenuity has evolved a machine which requires only one operator and a boy assistant and which in the short space of ten minutes can coat a case of Terne Plate, and what is more, turn them out looking very much like those plates which spent forty-five minutes in taking on their coating in the old Welsh Process. In the new process, in which tonnage is the object, the iron base is done away with, steel sheets being used instead. The Lagos Palm Oil Flux is abolished and the steel sheet is first plunged into an acid flux before being rapidly passed through the Terne mixture, by machinery. A quick dip in Lagos Palm Oil at the end of the pro-

cess gives same the oily finish characteristic of the plates made by the old process.

The buying public is gradually awakening to the fact that true cheapness lies, not in low first-cost, but in first-cost in relation to the length of satisfactory service. In line with this policy and, feeling that the qualities which made the old Terne Plate so satisfactory would still be appreciated, if the buyer was sure he could obtain same, The American Rolling Mill Company installed an old fashioned seven-pot process equipment and secured enough of the Terne Plate makers to operate same. They are now manufacturing Armo Iron Terne Plate using exactly the procedure which was used so successfully in the manufacture of the old fashioned plates and the base plate they use being of Armo Iron is purer and more uniform than the Charcoal Iron of the old plates. When the public realizes that they can again purchase a Terne Plates which is superior to the plates of the last generation, the once flourishing business of Terne Plate Roofing will again be revived.

It is interesting to note the manner in which development in one branch of endeavor will benefit another industry with no direct connection. American Ingot Iron, which is now generally known as Armo Iron, was originally developed at the request of certain manufacturers who possessed patent-rights to the corrugated culvert. This type of culvert is a decided innovation and possesses great advantages in the way of lightness and strength. No satisfactory metal, however, was available for the manufacture of these culverts, as it was demonstrated that steel sheets corroded too fast. At the instigation of these manufacturers, The American Rolling Mill Company, then a small steel mill in southwestern Ohio, worked for four years in an effort to manufacture a more durable metal with an iron base. After years of expensive and nerve racking experimentation and research, the company's metallurgist, Mr. Carnahan and his colleagues, accomplished a striking metallurgical advance, which results in the manufacture of a very pure iron suitable for rolling into sheets and plates in large quantities.

Culvert manufacturers immediately took up this iron and applied same to the strenuous and widely varied conditions which their culverts meet in service, and the severe tests which these Armo Iron Culverts satisfactorily withstood, were of great assistance in bringing promptly and strikingly to the public eye, the value of this new iron as a material to be used where corrosion is an element. Naturally the roofing field at once suggested itself and in the last six years thousands of buildings have been covered with Armo Iron Roofing, particularly where the corrosive conditions

were very severe, as in thickly populated manufacturing districts close to the sea, and in certain industries where acid fumes, etc., are evolved. On the west coast many interesting applications have been made in this Armo Iron Roofing, such as the docks at Los Angeles, Seattle and San Diego, and the sheet metal work on such buildings as the Oakland Auditorium, San Francisco City Library and the San Francisco City Hall.

The process of mutual benefit still continues and the success of Armo Iron in the roofing and culvert fields has led it to be adopted in a consistent list of other products, such as boiler tubes, metal lath, wire fencing, Terne Plate, and, in fact, in all applications where resistance to corrosion is the prime factor.

"Great," said Thomas A. Edison as he and Henry Ford viewed the exhibit of the Diesel Engine in the center of the Palace of Machinery. Both Mr. Ford and Mr. Edison examined this engine with the utmost interest, expressing their admiration for the excellent workmanship and operation of this latest and most marvelous prime mover. Mr. Edison was especially interested in the engine and its adaptation to submarines, and stated that the engine and the space allowed for it in the boat must be given more consideration in the construction of submarines to have them an absolutely reliable means of defense.

Mr. Ford spoke of the power plant in his factory at Detroit being a combination of a producer gas engine and a steam engine, the exhaust gases from the gas engine being used to jacket the steam engine cylinder and the exhaust from the steam engine being used to assist in scavenging the gas engine cylinder. Due to Mr. Ford's intimate knowledge of the gasoline engine he could hardly believe it possible that an engine of such size as the 500 H. P. Busch-Sulzer Bros. Diesel Engine operating in the Palace of Machinery used no spark whatever for the burning of the oil and that the fuel used in the engine was of such a cheap character.

PORTO RICO OUR GOOD ROADS RIVAL

Few California motorists are aware that the nearest approach to California's boulevard system in American territory is found, not in one of the rich eastern States, but in one of the smallest islands over which Uncle Sam holds domain. Porto Rico, with its acres of rich tobacco plantations, boasts a highway system, which, while not extensive, is second to none in quality.

The Municipal Bond Market is looking up, and the Bond Buyers are looking the "Building and Engineering News" up. A proposal ad for your bonds in our columns will bring competition.

News From the California State Commission.

STATE CORPORATION DEPARTMENT

A revival in the California mining industry of considerable magnitude is indicated in the business of the State Corporation Department. New companies are being formed to take over and develop old and new properties and a considerable number of older companies are renewing activity.

Butte Gold Mining Company, Los Angeles, which has issued 400,000 shares of its capital stock in exchange for mining property and equipment in Butte County, makes application for permission to sell 100,000 shares at 15 cents per share for the purpose of raising funds with which to install a mill, reduction plant and compressor.

San Pedro Mining and Milling Company makes application to issue \$250,000 par value of its shares to Peter Bagoye, Blass Pusich, Baldo Bupich and Luca Radovich in exchange for mining property in Orange County and to sell 5,000 shares at \$5 per share to develop the mines and install a stamp mill.

The Shell Oil Company of California has been authorized by Commissioner of Corporations H. L. Carnahan to sell an additional \$5,000,000 par value of its preferred shares to net the company not less than 90. As in the case of the recent authorization for a like amount of preferred the shares will be taken up by Holland capitalists and the proceeds will be used in the development of the Shell oil interests in this state.

Broadway Theatre Co. is permitted to sue \$75,000 par value of its shares to L. H. Collier and Andrew M. Strong, or a Superba Theatre Co. in exchange for a lease-hold interest to premises at 527 South Broadway, Los Angeles, on condition that the shares shall be deposited and held as an escrow, to be withheld from sale except by permission of the Commissioner.

Beardslee Electric Co., Los Angeles, is permitted to sell 476 shares of its capital stock at par, to net the company the full amount of the selling price.

Madera Farmobile Company is permitted to issue 60 shares to J. B. High, V. H. Gibbs, J. G. Roberts, C. J. Eastman and F. N. Wright at par for cash in accordance with their subscriptions and to sell an additional 60 shares at par, the funds to be used in developing leased farm lands.

Neptune Sea Food Company is permitted to sell 30,000 shares of preferred to F. W. Johnson at par to raise funds for engaging in the fish canning business on San Diego Bay and to issue 1/2 shares of common stock for each share of preferred sold in consideration of the assignment to the corporation of a lease to harbor front property. It is required that the common shares be deposited as an escrow and withheld from sale or transfer until the company pays dividends of at least 10 per cent on them.

American Portland Stone and Cement Company of Oakland is permitted to issue 48,333 1/3 shares of its capital stock in exchange for the plant and equipment of the Interlocking Stone Company located on the Oakland estuary and to sell 15,000 shares at par, to net the full amount of the selling price. All shares issued to Interlocking Stone Company and 25,000 shares previously issued to John C. Henderson will be held as an escrow pending the financing of the company which is engaged in the manufacture of building blocks.

INCORPORATIONS.

Ellis Street Improvement Co., principal place of business San Francisco. Capital \$1,000,000. Incorporators: A. E. Kern, Allen Moyer, B. G. McDougal.

California Profit Sharing Oil Company. Principal place of business Los Angeles. Capital, \$50,000. Incorporators: Thos. Dugar, A. Fraffton, Natalie Girard, G. E. Scott and B. F. Woodman.

Kuby M. & M. Co. Principal place of business Los Angeles. Capital \$250,000. Incorporators: Glenn Brinkethoff, N. L. and Mary J. Breckenridge.

Table Rock Mining Co. Principal place of business Reno, Nevada. Capital \$500,000. Incorporators: J. H. and E. B. Hartley and A. R. Hathaway, all of Berkeley, Cal.

Texas Canyon Mining Co. Principal place of business Los Angeles. Capital \$250,000. Incorporators: Henry Denomie, Antoine Denomie, Geo. McKenzie, J. F. Mitchell and Everell C. Moore.

Fidelity Security Corporation. Principal place of business Los Angeles. Capital \$100,000. Incorporators: Fred De Augustine, Fred L. Boruff, Geo. A. Eastman, N. L. Marvin and E. J. Votaw.

Imperial Valley Oil and Cotton Co. Principal place of business Riverside. Capital \$150,000. Incorporators: John R. Loftus, E. R. Willis, L. F. Farnsworth, E. E. Bennet, A. F. Andrade, Geo. A. Carter, Ira Aten, L. L. Bond and L. E. Straet.

Star Realty and Improvement Co. Principal place of business Los Angeles. Capital \$10,000. Incorporators: Frank Stewart, Samuel D. Well and Wm. A. Brand.

Hill Mfg. Co. Principal place of business Los Angeles. Capital \$1,000. Incorporators: Luther Holl, Clark Hill, J. C. Hill, C. U. Bangs and A. K. Wagner.

Higgins Mining and Realty Co. Principal place of business Los Angeles. Capital \$500,000. Incorporators: Thomas Higgins, P. J. Higgins, James O. Sword, D. P. Kearney, Teresa Sword and Margaret Kearney.

Hamiltons, Inc. Principal place of business Los Angeles. Capital \$20,000. Incorporators: A. J. Hamilton, Agnes Hamilton, E. M. Hamilton, R. M. Adams and W. H. H. Adams.

Big Springs Olive Ranch. Principal place of business Long Beach. Capital \$10,000. Incorporators: John Hodges, S. B. Barker, S. F. Barker.

Mutual Water Association. Principal place of business Los Angeles. No capital. Incorporators: F. J. Whiffen, W. W. Humphreys and Hartley Shaw.

RAILWAY COMMISSION.

The Los Angeles and San Diego Beach Railway Company has filed with the Railroad Commission an application for authority to sell bonds of the par value of \$370,000 before November, 1915. The company was given authority some time ago to issue bonds of the value of \$375,000, and says that it has not sold but \$5,000 of them.

Carl G. Bell and John L. Butler of Colfax, Placer County, have filed with the Railroad Commission an application for permission to sell the Colfax Exchange to Mrs. S. K. Morrison of Reno, Nev. The exchange is value at \$3,500, and Mrs. Morrison offers this amount in cash to the owners.

The Railroad Commission has issued an order authorizing the sale of the property of the Annex City Water Company to the city of Los Angeles for \$15,875. The company furnishes water to 9,000 consumers in the territory bounded by Slauson avenue, Hoover street, 50th street, Florence avenue, Figueroa street and South Park avenue.

The Modesto Gas, Light, Coal and Coke Company of Modesto, Stanislaus County, has applied to the Railroad Commission for authority to sell at not less than 90 per cent par, an issue of \$200,000 30-year 6 per cent bonds, said issue to be secured by a trust deed held by the Union Trust Co. of San Francisco. The company wishes to sell \$65,000 of this issue at once.

The Railroad Commission has extended the time to November 15, 1916, within which the Los Angeles and San Diego Beach Railway Co. may issue bonds authorized by the Commission November 25, 1914. The company operates a railway in San Diego city.

San Bernardino Highway Bonds.

The highest figure said to have ever been offered for 5 per cent bonds in this country was given as a premium by the Anglo and London-Paris National Bank of San Francisco in purchasing the last block of \$625,000 in county highway bonds out of the total bond issue of \$1,750,000 of San Bernardino County. The premium is not announced but it is reported to be in excess of the \$20,312 paid for the former block of bonds by the same company, and indicates that the big war loan in the East has had no visible effect on financial conditions on the Pacific Coast.

The Municipal Bond Market is looking up, and the Bond Buyers are looking the "Building and Engineering News" up. A proposal, ad for your bonds in our columns will bring competition.

Technical Societies.

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PERSONAL.

The American Rolling Mill Co., of Middletown, Ohio, have recently, owing to the rapid increase in the demand for ARMCO IRON products on the West Coast, established a district office in the Monadnock Building in San Francisco and is now carrying a complete stock in that city.

This office is in charge of Mr. H. O. Stevens and Mr. E. A. Emerson.

Mr. Stevens was formerly connected with the Pacific Hardware and Steel Co. in San Francisco and also for several years in charge of the Iron Department in the Los Angeles branch of that company; while Mr. Emerson was in charge of the American Rolling Mill Co.'s Rio Janeiro office.

JEFFERSON STREET STORM DRAIN SHELFED FOR A YEAR.

The Jefferson street storm drain project was filed for one year by the City Council of Los Angeles.

The project calling for an expenditure of \$1,100,000 was urged for immediate action by the public works committee, but the Council refused to advance it, when President Bekkouski, Councilmen Roberts and Wright all made vigorous objection on the grounds of the excessive cost.

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APARTMENT HOUSES.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$20,000. Architect, P. Righetti, Phelan Bldg., S. F. Owner, F. Tomasini. Location, southeast Judah and 5th avenue. Will contain fourteen suites and one store. Interior finished in pine, elm panels and some hardwood floors. Central heating system and hot water supply. Wall beds. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and contract to be awarded within a few days.

SAN FRANCISCO—Apartment house alteration, frame, \$6,000. Architect, Theo W. Lenzen, Humboldt Bank Bldg., S. F. Owner, A. Burkhart. Location, 38-40 Belvedere street. Work will consist of altering two large flats into six apartments and the addition of one story. Interior finish pine. Wall beds. Exterior covered with rustic and cement plaster. Plans being prepared.

SAN FRANCISCO—Apartment house and stores, 4 story and base. Class C construction, \$65,000 to \$70,000. Architects, Fabre & Bearwald, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location, Mission District. Will cover a large ground area and will contain several stores and 40 suites of two and three rooms. Interior finish pine with some elm panels. Steam heat, oil burning system, hot water system and patent store fronts. Wall beds. Bath rooms finished in tile. Exterior faced with cement plaster and pressed brick. Plans being prepared and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 4 story and base. Class C construction, \$40,000. Architect, E. H. Denke, 1317 Hyde street, S. F. Owners, Max and Dora Kolander. Location, south Bush west of Jones, covering an area of 54 feet 10 inches by 100 feet. Will contain sixteen suites of four rooms and bath. Interior finish pine, mahogany and white enamel. Hardwood floors. Steam heat, oil burning furnace, hot water system and automatic elevator. Bath rooms tile. Exterior faced with pressed brick trimmed with terra cotta. Plans revised and new figures being taken.

SAN FRANCISCO—Apartment house, 6 story and base. Class C, reinforced concrete, \$90,000. Architect, J. C. Hladik, Monadnock Bldg., S. F. Owner, Goede Urloste. Location, northeast corner Van Ness and McAllister street. Will contain 200 rooms and a number of stores. Interior finish pine and hardwood with hardwood and tile floors. Steam heat, oil burning system, hot water supply and automatic elevator. Patent store fronts. Bath rooms tile. Exterior faced with cement plaster. Plans complete and work being done by Day Labor.

SAN FRANCISCO—Apartment house, 4 story and base, reinforced concrete, \$25,000. Architect, Albert Schroepfer,

Foxcroft Bldg., S. F. Owner, L. D. Steff. Location, south Sutter east of Hyde, covering an area of 25 by 96 feet. Will contain eight large suites. Interior finish pine and hardwood with hardwood and tile floors. Steam heat, elevator service, hot water system and oil burning equipment. Wall beds. Exterior faced with cement plaster. Plans complete and segregated figures being taken.

SAN FRANCISCO—Apartment house, 3 story and base, frame. Cost not stated. Architect, E. H. Denke, 1317 Hyde street, S. F. Owner's name withheld. Location, Lake near 25th avenue. Will contain six modern suites of three and four rooms. Interior finish pine and hardwood panels. Hardwood floors. Steam heat and hot water system. Bath rooms tile. Wall beds. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

SACRAMENTO, CAL.—Apartment house, 3 story and base, brick and frame, \$10,000. Architect, none. Owner, Frank Mead, Sutterville road and Mead avenue, Sacramento. Location, 624 M street. Will contain 12 suites of two and three rooms. Interior finish pine. Wall beds. Hot water system. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SEATTLE, WASH.—Apartment house, 5 story and base, brick and steel, \$75,000. Architects, Blackwell & Baker, Northern Bank Bldg., Seattle. Owners, Gardner & Lessey. Location, 4th near Virginia street, covering an area of 60 by 108 feet. Will contain a total of 126 suites of two and three rooms. Interior finish pine and hardwood. Wall beds and tile baths. Steam heat, elevator service, hot water system and oil burning equipment. Exterior faced with pressed brick and terra cotta. Plans complete and figures to be called for at once.

SAN FRANCISCO—Apartment house, 7 story and base, brick and steel. Cost not stated. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Girard Investment Co. Location, southeast corner of Geary and Leavenworth streets. Will contain a large number of two and three room suites with wall beds and private baths. Interior finish pine, hardwood and white enamel. Hardwood floors. Steam heat, elevator service, hot water system and vacuum cleaning. Bath rooms tile. Marble and tile vestibule. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house and stores, 6 story and base, brick and steel, \$85,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. Location, close in to theatre and retail districts. Will contain three stores besides lobby on 1st floor and 50 suites of two and three rooms on upper floors. Interior

finish pine and hardwood. Bath rooms tile. Wall beds. Steam heat, hot water system and automatic elevator. Exterior faced with pressed brick trimmed with terra cotta. Preliminary plans prepared.

OAKLAND, CAL.—Apartment house, 3 story and base, frame, \$14,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Clyde Investment Co. Location, southeast corner of 3rd avenue and East 15th street. Will contain 42 rooms arranged in two and three room suites with private baths and wall beds. Interior finish pine and white enamel. Some hardwood floors. Central heating system and hot water supply. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Apartment house, 2 story and base, frame, \$10,000. Architect, Alvin J. Stern, 306 14th street, Oakland. Owners, Coit Investment Co. Location, Grand avenue near Perkins. Will contain six suites of three rooms and bath. Wall beds. Interior finish pine with some hardwood floors. Exterior covered with cement plaster. Plans being prepared, work to be done by Day Labor.

OAKLAND, CAL.—Apartment house, 3 story and base, frame. Cost not stated. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. Location, Miles and College avenue. Will contain two, three and four room apartments with baths and sleeping porches. Interior finish pine and hardwood with some hardwood floors. Bath rooms finished in tile. Central heating system and hot water system. Exterior covered with cement plaster. Plans complete and figures to be taken next week.

OAKLAND, CAL.—Apartment house, 2 story and base, frame, \$20,000. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owner's name withheld. Location, Bellevue facing Lake Merritt. Will contain twelve suites of two and three rooms. Interior finish pine with some hardwood veneer and hardwood floors. Central heating system and hot water supply. Bath rooms finished in tile. Exterior faced with cement plaster. Plans being prepared.

OAKLAND, CAL.—Apartment house, 3 story and base, frame and brick, \$18,000. Architect, Alvin J. Stern, 306 14th street, Oakland. Owners, Sommarstrom Bros. Location, Jackson street. Will contain twelve suites of three rooms and bath. Interior finish pine and elm panels with some hardwood floors. Wall beds. Bath rooms tile. Central heating system and hot water supply. Exterior covered with rustic and brick veneer. Plans are complete and work to be done by Day Labor.

Contracts Awarded.

SAN FRANCISCO—Apartment house, 4 story and base. Class C construction, \$38,700. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Standard Securities Co. Contractor, William Martin, 110 Jessie street, S. F. Contract price, \$28,700.

PASADENA, LOS ANGELES CO., CAL.—Apartment house, 3 story and base, frame, \$28,000. Architect, Albert Reed, Long Beach. Owner, Mrs. F. C.

Pratt, Contractors, J. H. Woodworth & Son, Chamber of Commerce Bldg., Pasadena. Contract price, \$28,000.

BONDS

SAN LEANDRO, ALAMEDA CO., CAL.—A special election has been called for November 20th by the School Trustees to decide the question of issuing and selling bonds in the sum of \$125,000. If carried, the proceeds of the issue will be expended in purchasing sites, erecting new school and repairing the present structures. Further information may be had from the Clerk of the School Trustees at San Leandro.

MILPITAS, SANTA CLARA CO., CAL.—The Milpitas School District voted bonds of \$12,000 for the erection of a new school building last week. An architect will be selected to design plans for the proposed structure in the near future.

NEWCASTLE, PLACER CO., CAL.—The election to vote bonds of \$12,000 carried by a vote of 181 to 22. The proceeds of the sale will be used in the construction of a new school. It is proposed to raze the present school and erect a cement structure in its place.

SAN BRUNO, SAN MATEO CO., CAL.—An election will be held on November 8th in the San Bruno Park School District to vote bonds of \$20,000. The proceeds of the sale of the bonds will be expended in the purchase of a site and the erection of a school. Further information may be had from Henry Spalding, Clerk of the School Board.

WEAVERVILLE, TRINITY CO., CAL.—To provide for the construction of a system of highways throughout Trinity County, to cost about \$400,000, citizens are circulating petitions asking that Congress appropriate that amount. The citizens are determined to profit by Secretary of Agriculture Houston's recommendation that the Government mortgage the future output of the Trinity National forest by advancing large sums for the construction of the proposed highway system.

SAN FRANCISCO, CAL.—The sale of all of the remaining Hetch-Hetchy bonds, amounting to \$43,287,000, is proposed in a resolution drafted last week by the Supervisor's Finance Committee. The resolution states that bids will be received on December 6th for all or any portion of these bonds, delivery to be made within five years as follows: \$2,000,000 prior to January 1, 1916; \$3,000,000 in July, 1916; \$5,000,000 in January, 1917; and \$5,000,000 every six months thereafter until July, 1920.

SACRAMENTO, CAL.—Attorney General U. S. Webb has rendered an opinion to State Treasurer Richardson that the University of California bonds, amounting to \$1,800,000, voted by the people at the last election, are valid. Bids are now being received for the sale of the bonds.

SEATTLE, WASH.—The proposed bond issue of \$750,000 for the construction of schools and the purchase of sites will be held on December 4th and not on November 4th, as stated in these columns recently.

SACRAMENTO, CAL.—E. H. Rollins & Sons and Kountze Bros. of New

York have purchased the University of California building bonds. The amount of the bonds is \$1,800,000. Six firms from California and two from New York submitted bids.

YISALIA, TULARE CO., CAL.—Members of the Board of Supervisors have approved the engineering plans for the Lindsay-Strathmore Irrigation District and have passed an official order for an election to vote bonds of \$1,750,000 to finance the work, which will consist of the construction of storage reservoirs and a distributing system. The date of the election will be announced shortly.

This project, with changes in boundaries recently made, will include 17,500 acres of foothill citrus land stretching from Exeter to within a short distance of Porterville.

MARICOPA, KERN CO., CAL.—With a vote of 152 for and 2 against, the election to bond the city for a new high school building carried. The bonds amounted to \$15,000. After the sale of the bonds construction will be started.

EAGLE ROCK, CAL.—For the third time within a year the local school board has called an election to vote bonds of \$65,000 to finance the construction of a new school. The last election was lost by five votes. November 29th is the date set for the election.

GLENDALE, LOS ANGELES CO., CAL.—The City Engineer has submitted a report to the Board of Trustees stating that the cost of necessary improvement work in the Verdugo Wash will amount to \$70,880. The Trustees are contemplating the calling of a special election to vote bonds to carry out the work. The engineer is also preparing an estimate of the cost of necessary work in Sycamore Canyon Wash.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—The County Supervisors have sold the last block of county highway bonds, amounting to \$675,000.

KINGSBURG, FRESNO CO., CAL.—The Trustees of the Kingsburg Joint Union High School District have received the money from the sale of the \$40,000 bond issue and will advertise for bids at once for the erection of the proposed new high school building.

DAVIS, YOLO CO., CAL.—A committee of prominent men and women of Davis have been appointed to complete final arrangements for the extension and improvement of the water system.

SAN RAFAEL, MARIN CO., CAL.—The Central Marin Chamber of Commerce, through its secretary, Mr. Edmiston, is perfecting arrangements for the calling of a bond issue, which, if carried, will take the place of the \$40,000 canal bonds voted by the city several years ago. The original \$40,000 bond issue contained a reservation that unless the State or the National Government provided a like sum for dredging purposes, the canal bonds were not to be issued. The present bond issue is being called to eliminate this reservation so that the money may become available.

The last State Legislature appropriated \$12,500 to be applied to a fund for deepening the canal, providing the city of San Rafael appropriated a like sum.

STOCKTON, SAN JOAQUIN CO., CAL.—At the meeting of the board of directors of the South San Joaquin Irrigation District it was unanimously decided to call for bids for \$150,000 worth of reservoir bonds, which they have on hand, for the purpose of constructing at once the large Woodward reservoir. About \$150,000 worth of bonds will remain in the treasury.

SEATTLE, WASH.—At a recent meeting of the City Council the resolution for the submission to the voters of a proposition of issuing bonds in the sum of \$75,000 for the construction of the Beacon Hill standpipe, was introduced.

MARTINEZ, CONTRA COSTA CO., CAL.—The Mt. Diablo District boulevard, as proposed, will be thirty miles long extending from the county line near Livermore through Tassajara, Diablo Park, Green Valley, Stone Valley, Alamo, Moraga to Bryant and connect with the Tunnel road, the Redwood Canyon road will also be improved to connect with the Snake road.

It is proposed to build this boulevard by a bond issue, not to exceed 50 cents tax for every \$100 assessed valuation. A bond election will be called in the near future.

EL CENTRO, IMPERIAL CO., CAL.—Demonstrating the good credit of the two cities, \$150,000 in bonds issued by El Centro and Imperial to build a joint outfall sewer were sold to Torrance-Marshall Company of Los Angeles, the First National Bank here acting as agent.

SANTA CRUZ, SANTA CRUZ CO., CAL.—At the last meeting of the City Council it was decided to call off the section to vote bonds to purchase the Hahn water works.

EVERETT, WASH.—Revised plans for the permanent highway system proposed by the Snohomish County Good Roads Association have been completed. The work will cost in the neighborhood of \$1,812,000. A bond election will be held in the near future to finance the construction of the system.

PETALUMA, SONOMA CO., CAL.—The warehouse owned by G. P. McNear is now being razed to clear the site for a modern brick building.

RED BLUFF, TEHAMA CO., CAL.—At their last meeting the Woman's Improvement Club decided to arrange for plans for a new club house building. A site in Riverview Park has already been purchased and a fair sum remains to construct a new building.

BRIDGES AND DAMS

SAN FRANCISCO—Pier construction and repairs. Cost not stated. Engineer, Assistant State Engineer, Ferry Bldg., S. F. Owners, State of California. Bids will shortly be called for by the State Board of Harbor Commissioners for repairs to Pier No. 9 and for a bulkhead between Piers Nos. 9 and 11. Plans for this work together with plans and specifications for an approach to the upper floor of the Ferry Building have been approved. Bids may not, however, be called for on the approach for some time.

BRIDGEPORT, MONO CO., CAL.—Bridge, steel and concrete. Cost not stated. Engineer, County Surveyor,

Bridgeport. Owners, Mono County. Bids will be opened on January 3rd for the construction of a pony truss steel bridge with reinforced concrete abutments to be built across the East Walker River, about six miles north of Bridgeport. Span, 50 feet, 3 panel, 16-foot roadbed.

PETALUMA, SONOMA CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, Engineering Dept. Northwestern Pacific Railroad, S. F. Owners, C. C. Winn and Mr. Neff. According to information obtained here Superintendent Neff and C. C. Winn of the Northwestern Pacific Railroad, accompanied by members of the City Council of Petaluma, visited their land in East Petaluma where the water flow has caused considerable damage during the winter. After many suggestions, it was decided to construct a culvert on the site. Plans for the culvert will be prepared in the offices of the railroad company.

REDWOOD CITY, SAN MATEO CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The Supervisors have ordered the County Surveyor to prepare plans and specifications, secure separate bids and award the contract for building a culvert on the county road near Beresford. Further information may be had from the County Engineer at Redwood City.

REDWOOD CITY, SAN MATEO CO., CAL.—Culverts, reinforced concrete. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. At the last meeting of the County Supervisors, the Clerk was authorized to advertise for bids for building certain culverts along the Middlefield road in the Third Township. Further information may be had from the County Engineer.

SACRAMENTO, CAL.—By-pass, steel and concrete. Cost not stated. Engineer, State Highway Commission, Sacramento. Owners, State of California. At the last meeting of the State Reclamation Board the State Highway Commission advised the Board that it had not yet been able to close a favorable contract for the construction of a bascule bridge over the borrow-pit on the east side of Yolo by-pass adjoining the levee of West Sacramento. This bridge was to serve as a part of the 11,000-foot concrete highway crossing the by-pass, and was to permit the passage of dredges necessary for protective work in connection with the flood control project. A temporary structure around this crossing has built, so that on completion of the balance of the highway traffic may be accommodated. It is hoped the bascule can be constructed within the next few months.

VENTURA, VENTURA CO., CAL.—Culverts and grading. Cost not stated. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be opened on November 6th for culverts and grading of the Santa Ana road. The road is located along the west side of the Ventura River, beginning at a point 3,700 feet north of Foster Park and extending northerly a distance of one and one-half miles. The grading consists of side hill work in earth and shale. Approximate quantities are as

follows: Item 1, 82,350 cubic yards excavation unclassified; 2, 300 linear feet of 18-inch corrugated iron pipe; 3, 134 linear feet of 24-inch corrugated iron pipe; 4, 258 linear feet of 30-inch corrugated iron pipe; 5, 130 linear feet of 42-inch corrugated iron pipe; 6, 64 linear feet of 18-inch corrugated iron pipe; 7, 85 cubic yards Class B concrete; 8, 3,000 pounds reinforcing steel.

RIVERSIDE, RIVERSIDE CO., CAL.—Bridge, reinforced concrete and steel. Cost not stated. Engineer, County Surveyor, Riverside. Owners, Riverside County. Bids will be received on November 10th for the construction of a bridge across the Santa Ana River on Hammer avenue in the First Road District. Plans can be secured from the County Surveyor.

SEATTLE, WASH.—Bridge, steel and reinforced concrete, \$500,000. Engineer, City Engineer Rapp, Seattle. Owners, City of Seattle. City Bridge Engineer Rapp has the plans for a proposed city bridge over the Lake Washington Canal at 10th avenue N. E. practically complete. Specifications, etc., will probably be in shape to permit calling of bids the early part of this month. The bridge will have a central span of 216 feet, will be 80 feet wide of the double leaf baseule type, similar to the Fremont bridge. Temporary wooden approaches 3,000 feet long are called for. The sub-structure will cost \$135,000 and superstructure about \$365,000.

Contracts Awarded

SAN JOSE, SANTA CLARA CO., CAL. Bridge, reinforced concrete, \$2,295. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, F. F. Moore, Monterey. Contract price, \$2,295.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridges, reinforced concrete. Cost as follows. Engineer, Flaherty, Santa Barbara. Owners, Santa Barbara County. Contractors, Security Construction Co., 38th and Alameda streets, L. A., Dos Pueblos bridge, \$9,720. Boardman Construction Co., Story Bldg., L. A., Eagle Canyon Creek bridge, \$10,961.

SAN FRANCISCO—Pier construction, \$283,000. Engineer, Assistant State Engineer, Ferry Bldg., S. F. Owners, State of California. Contractors, Clinton Fireproofing Co., Mutual Bank Bldg., S. F. Contract price, \$283,000.

FACTORIES AND WAREHOUSES.

SAN PEDRO, LOS ANGELES CO., CAL.—Warehouse, 7 story, reinforced concrete, \$117,138.75. Engineer, Los Angeles Harbor Commission, L. A. Owners, Port of Los Angeles. The Merchants' Realty and Investment Co., Van Nuys Bldg., L. A., was the lowest bidder at \$117,138.75 for the erection of the seven story and basement reinforced concrete warehouse to be erected at San Pedro by the Harbor Commission. The F. O. Engstrom Co., 5th and Seaton streets, L. A., was the next lowest bidder at \$118,165. The bids were referred to the harbor engineer with instruction to present a report containing an estimate of the cost of the work if done by force account.

Contracts Awarded.

SAN PEDRO, LOS ANGELES CO., CAL.—Factory, 1 and 2 story, steel and concrete. Cost not stated. Engineer,

Charles P. Greenwood. Owners, American Tuna Co., Pacific Electric Bldg., L. A. Contractors, F. O. Engstrom Co., 5th and Seaton streets, L. A. Contract awarded on the percentage basis. First unit only included, complete plant to cost \$650,000.

NORTH POMONA, LOS ANGELES CO., CAL.—Packing plant, 1 story and base, reinforced concrete, \$25,000. Architect, none. Owners, Indian Citrus Association. Contractor, D. C. Crook-shank, Pomona. Contract price, \$25,000.

WHITTIER, LOS ANGELES CO., CAL.—Parking plant, 1 story and base, Class A construction, \$56,434. Architects, A. W. Rea and C. E. Garstang, Black Bldg., L. A. Owners, Murphy Oil Co. Contractor, E. M. Wheatland, Whittier. Contract price, \$56,434.

EUGENE, ORE.—Warehouse, 2 story and base, hollow tile, \$25,000. Architect, J. R. Ford, Eugene. Owners, Allen & Lewis, Portland. Contractors, Applewhite & Ford, Eugene. Contract price, \$25,000.

FIRE HOUSES AND JAILS.

PATTERSON, STANISLAUS CO., CAL.—Jail, 1 story and base, reinforced concrete. Cost not stated. Architect, none. Owners, Town of Patterson. The proposed jail and court room building will be under construction shortly. The preliminary plans for the building have been completed by Supervisor A. E. Clary. The sketches provide for a building about 22x53 feet in size, the court room being 20 by 20 feet. Lavatories, steel cages, baths and heating system is included in the work.

FIRE REPORT

CHICO, BUTTE CO., CAL.—At a loss of \$3,000 the warehouse of F. H. Hinton at First and Cedar streets was destroyed. The loss is partly covered by insurance.

ELKO, NEV.—The town of Deeth, about 37 miles east of Elko on the Southern and Western Pacific railroads, was partly destroyed by a disastrous fire last week. The loss is estimated between \$20,000 and \$25,000.

SEATTLE, WASH.—Pier 14, used by the Blue Funnel British steamers, was destroyed by fire last week, causing a loss of \$600,000.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$6,000. Architect, none. Owner, Ralph McLeran, Sharon Bldg., S. F. Location, north Fulton east Arguello, covering an area of 25 by 80 feet. Will contain two flats of five and six rooms. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms tile. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,400. Architect, W. S. Rhodes, 3372 16th, S. F. Owner, Victor Sutherland. Location, west Church south of Cumberland. Will contain four flats of three rooms and bath.

Interior finish pine and elm panels. Some hardwood floors. Wall beds. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architect, Theo S. Boehm, 4419 19th street, S. F. Owner, Joseph P. Alexander. Location, west 20th avenue north of Anza. Will contain two flats of five and six rooms. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

GARAGES

SAN FRANCISCO—Garage, 1 story and base, steel and reinforced concrete. Cost not stated. Architect, P. Righetti, Phelan Bldg., S. F. Owner's name not given. Location, north Pacific east of Powell, covering an area of 75 by 129 feet. Designed for a large commercial garage with additional storage space in basement; complete shop equipment and special gasoline storage tanks. Steel roof trusses and concrete floors. Exterior faced with cement plaster. Plans complete and figures taken.

SAN FRANCISCO—Garage, 1 story, galvanized iron, \$3,000. Architect, none. Owners, People's Bread Co. Location, southwest corner of Bryant and 17th streets. Will contain storage space for 75 machines. No interior finish. Concrete floors. Exterior covered with corrugated iron. Plans complete and work to be done by Day Labor.

PORTLAND, ORE.—Garage, 2 story and base, reinforced concrete, \$25,000. Architects, Sutton & Whitney, Lewis Bldg., Portland. Owners, Kissel Kar Automobile Salesroom Co. Location, Broadway and Davis streets, covering an area of 100 feet square. Construction fireproof. Interior finish pine, hardwood and ornamental plaster in salesrooms. Elevator service. Exterior faced with cement plaster. Plans complete and figures being taken.

GOVERNMENT WORK & SUPPLIES

Berkeley, Cal., Vault Shelving.

The contract for installing metal vault shelving in the U. S. public building at Berkeley, Cal., has been awarded to the Berger Mfg. Co., Canton, Ohio, at \$356.

Raising Earthwork and Structures.

No bids were received by the project manager of the U. S. Reclamation Service, Carlsbad, N. Mex., for raising earthwork and structures on the Carlsbad, N. Mex., project.

Medford, Ore., Elevator.

As previously reported, the contract for installing an elevator in the U. S. post office and court house at Medford, Ore., was awarded to Kaestner & Hecht, Chicago, Ill., at \$3,394. In the prosecution of the work fixtures and material manufactured by the following firms will be used: Elevator motor, Westinghouse; elevator controller, Kaestner & Hecht; ammeter and voltmeter, Westinghouse.

Canal Requisitions

Bids will shortly be invited by the general purchasing officer of the Panama Canal, Washington, D. C., for furnishing the following material, due notice of which will appear in our columns:

Kalamain, millwork, and hardware for pier 7 at Cristobal.

29 inner and 20 outer seat gaskets.

1 drill press, 20-in.

1 lathe, 24-in, 2-cutting.

381 cast iron keel blocks for dry dock No. 1.

102 cast iron bilge block slides and accessories.

Pearl Harbor, Elevator.

The contract for furnishing pneumatic freight elevators at Pearl Harbor, under bids originally opened on August 28 and supplemental opening of October 12, has been awarded to the Otis Elevator Co., of Washington, D. C., at \$4,876.

Reclamation Service, Gate Machinery.

The following bids were received by the chief engineer, U. S. Reclamation Service, Washington, D. C., for furnishing the operating mechanism for two cylinder gates of 12-ft diameter for Sherburne reservoir, Milk River project, and a duplicate set for Kachelius reservoir:

Stacy-Schmidt Mfg. Co., York, Pa., \$2,600; time January 15 to January 31.

Rosedale Foundry and Machine Co., Pittsburgh, Pa., \$2,100; time December 20 to January 1.

Minneapolis Steel and Machine Co., Minneapolis, Minn., \$1,650; time 40 to 50 days.

Webster Mfg. Co., Tiffin, Ohio, \$1,950; time 75 to 90 days.

Vulcan Iron Works, Denver, Colo., \$1,463; time December 20 to January 15.

Ellicott Machine Corp., Baltimore, Md., \$2,460.30; time 120 to 150 days.

J. & J. B. Milholland Co., Pittsburgh, Pa., \$1,448.52; time December 20 to December 30.

Grass Valley, Cal., Vault Shelving.

The contract for installing metal vault shelving in the U. S. public building at Grass Valley, Cal., has been awarded to the Keyless Lock Co., Indianapolis, Ind., at \$175.

Submarines and Destroyers.

The contract for constructing 16 submarines and 6 torpedo-boat destroyers, bids for which were recently opened by the Secretary of the Navy, has been awarded as follows:

Wm. Cramp & Sons Ship & Engine Building Co., 2 torpedo-boat destroyers, \$845,000 each.

Seattle Construction & Dry Dock Co., Seattle, Wash., 1 destroyer, \$885,000.

Bath Iron Works, Bath, Me., 1 destroyer, \$879,500.

One torpedo-boat destroyer will be constructed at the Mare Island navy yard at a cost of \$762,638 and one at the Norfolk navy yard at a cost of \$706,305.

Electric Boat Co., Bridgeport, Conn., 8 submarines at \$545,000 each.

Lake Torpedo Boat Co., Groton, Mass., 3 submarines at \$545,000 each.

California Shipbuilding Co., Long Beach, Cal., 3 submarines of Lake Co.'s designs at \$548,500 each.

Two submarines will be built at government navy yards on designs furnished by the Electric Boat Co.

Peking, China, Cold-Storage Plant.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for furnishing f. o. b. cars, San Francisco, and the installation at Peking, China, of an ice-making and cold-storage plant at the U. S. marine barracks, Peking, China:

Item 1, plant, complete; 2, do, modified specifications; 3, deduct for omitting one ammonia compressor; 4, deduct for omitting all labor except the services of the expert mechanic to superintend the installation and conduct preliminary operation and tests; 5, price for 'all machines, mechanical equipment, insulating material and other accessories for a complete plant, f. o. b. cars, San Francisco, Cal., packed for export shipment; 6, price for labor and expert superintendence, as well as material ordinarily procurable in the local market for erecting and installing the complete plant in accordance with the specifications, machinery, etc., to be furnished under item 5; 7, price for all expert superintendence to install a complete plant.

The York Mfg. Co., York, Pa., item 1, \$7,795; 2, \$7,870; 3, \$675; 4, \$600; 5, \$5,295; 6, \$2,500; 7, \$1,600.

The Triumph Electric Co., Cincinnati, Ohio, item 3, \$450; 5, \$4,800.

The Cyclops Iron Works, San Francisco, Cal., item 1, \$9,500; 3, \$500; 4, \$1,200; 5, \$5,300; 6, \$4,200; 7, \$2,000.

The Vilter Mfg. Co., 872 Clinton street, Milwaukee, Wis., item 1, \$8,970; 2, \$8,950; 3, \$720; 4, \$1,650; 5, \$4,260; 6, \$3,500; 7, \$1,140; 8, \$350; 9, \$300.

PRESIDIO OF SAN FRANCISCO—Nurses' dormitory addition, 1 story, reinforced concrete. Cost not stated. Engineer, Constructing Quartermaster's office, Fort Mason. Owners, United States Government. Bids will be opened on November 24th for constructing addition No. 3 to the nurses' dormitory at the Letterman General Hospital. Work includes plumbing, tile, electric and radiators. Exterior will be faced with cement plaster. Plans can be secured from the office of the Constructing Quartermaster. An official proposal appears in another column of this issue.

HALLS AND SOCIETY BUILDINGS

SANTA CLARA, SANTA CLARA CO., CAL.—City hall completion, frame construction. Cost not stated. Architect, William Binder, Rea Bldg., San Jose. Owners, Town of Santa Clara. The Town Trustees at their last meeting considered the plans and specifications of Architect William Binder for the completion of the uncompleted section of the town hall. Action was laid over until next meeting. H. R. Roth is a member of the Board of Trustees.

VISALIA, TULARE CO., CAL.—Municipal auditorium, 2 story and base, brick, \$35,000. Architects, Coates & Traver, Howell Bldg., Fresno. Owners, City of Visalia. Will contain large auditorium, stage, offices and rifle range. Interior finish pine, maple floor. Central heating system. Exte-

rior faced with pressed brick. Bids being taken.

HOSPITALS.

SAN FRANCISCO—Hospital construction, Class A. Cost as follows. Architect, Lewis P. Hobart, Crocker Bldg., S. F. Owners, Regents of the University of California. Bids opened on October 25th for various parts of the work at the University Hospital at the Affiliated Colleges show the following firms low: Kiernan & O'Brien, plumbing, \$31,298; Vulcan Iron Works, refrigerating, \$12,600; Siebert Co., heating, \$28,987; Rex Electric Co., electric work, \$15,246; Otis Elevator Co., elevator work, \$10,985 and Siebert Co., power plant, \$20,955. A complete list of all bids received will be found under the heading of San Francisco in this issue.

IRRIGATION PROJECTS

SUISUN, SOLANO CO., CAL.—Irrigation project. Cost not stated. Engineer not selected. Owners, Glide Estate, William Denman, et al. According to word received a movement is under way to form an irrigation system, covering a large area of land situated between Suisun and Rio Vista, the project being fathered by some of the most extensive land owners within the bounds of the district, among whom are Dr. E. E. Brownell, William Denman and the Glide Estate, who own many hundreds of acres. Probably three-fourths of the land owners within the district have already signed a contract authorizing a survey to ascertain the probable cost of obtaining water from the Sacramento River at a point above Rio Vista, the course of a canal, as now figured on, being some distance north of the ditch made by the defunct Solano Irrigated Farms concern. The scheme as outlined for the new project is for the land owners to unite and form a co-operative organization, contributing toward the expense of building the system so much per acre. The preliminary proceedings of the proposed project have been worked up quietly and nothing has yet been done except to make provisions for a preliminary survey, but those interested in promoting this scheme express confidence that something definite will be accomplished if a sufficient number of landowners will co-operate in the enterprise.

OROVILLE, BUTTE CO., CAL.—Irrigation project. Cost not stated. Engineer not selected. Owners, Thermalito Irrigation District. The committee chosen by property owners of Thermalito to formulate plans for an irrigation district has practically abandoned the project of securing water from the Oro system. The committee favors the project of procuring a water supply from the west branch of the Feather River, the water to be diverted at Cape Horn. It is estimated a thousand inches of water will be available at this point. Oscar Warner, chairman of the committee, has asked the Chamber of Commerce of Oroville to aid in financing the preliminary campaign in behalf of the new plan. It is planned to irrigate 5,000 acres.

OROVILLE, BUTTE CO., CAL.—Irrigation canals. Cost not stated. Engineer's name not given. Owners, Dry and Butte Creek Irrigation Districts. The Great Western Canal Company has begun work on the second and third units of the Western Canal. Teams, scrapers and a steam shovel are at work west of Biggs, the second unit extending from Dry Creek to Butte Creek. Work is also under way on the third unit, which will bring water to the 7,000 acre tract of rice land west of Nelson. The contract specifies that work must be completed by April 1st.

VISALIA, TULARE CO., CAL.—Irrigation project, \$1,750,000. Engineer's name not given. Owners, Lindsay-Strathmore Irrigation District. Members of the County Supervisors have formally approved the engineering plans for the Lindsay-Strathmore Irrigation District and passed an official order for an election to vote bonds to finance the construction. Further information will be given of this work at a later date.

MERIDIAN, SUTTER CO., CAL.—Levee construction and repairs, \$20,000. Engineer, State Engineer McClure, Sacramento. Owners, State of California and Levee District No. 70. The State Engineering Department will soon establish a repair gang at Meridian for the purpose of strengthening the west levee of District 70. The levee is declared to be weak in places and liable to damage unless it is strengthened. The work will be started in the near future and by the time the floods come the levee will be in good condition.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Reclamation work. Cost not stated. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. The Board of Supervisors at a recent meeting in discussing the construction of the pile and barb wire jetty for reclamation work at Santa Maria River allowed John Grace, the contractor who was awarded the contract, to withdraw his bid, what action will be taken has not been mentioned.

BYRON, CONTRA COSTA CO., CAL.—Irrigation ditch. Cost not stated. Engineer's name not given. Owners, Byron-Bethany Irrigation Co. Excavating bids for digging a ditch or canal from Indian Slough to the Bruns Hill, a distance of 6,000 feet, were opened by the directors of the Byron-Bethany Irrigation Company last week. All of them were rejected as being too high. There were four bidders. The lowest bid was that of A. B. Munson & Son of Stockton for 17½¢ per cubic yard. The directors believe the work can be done for considerably less, as they have thoroughly examined the nature of the earth to be removed. The work will be done by Day Labor according to the directors.

DOYLE, LASSEN CO., CAL.—Irrigation project. Cost not stated. Engineer, William L. Wales, Woodland. Owners, Southern Lassen Irrigation District. The Southern Lassen Irrigation District has obtained the services of Attorney L. L. Bennett of Modesto. William L. Wales of Woodland is the engineer. A majority of land owners have signed the petition and

the Supervisors will meet on November 8th, at which time the Board will declare the district and call an election. The district comprises 21,500 acres in the southern end of Honey Valley. Bonds to finance the construction will be voted as soon as possible.

LIBRARIES.

LOS ANGELES, CAL.—Library, 1 story and base, brick, \$30,000. Architect, Lester Hibbard. Marsh-Strong Bldg., L. A. Owners, City of Los Angeles. Location, corner of Workman street and Avenue 26. Will contain two reading rooms, office and stack rooms. Interior finish pine and hardwood with maple floors. Metal book stacks. Steam heat, oil burning furnace. Exterior faced with cement plaster and pressed brick. Plans being revised and bids to be called for shortly.

PIPE LINES.

McKITTRICK, KERN CO., CAL.—Pipe line construction. Cost not stated. Engineer's name not given. Owners, Kern Trading and Oil Co., Bakersfield. An immense pipe line project will soon be started here by the Kern Trading and Oil Co., who will lay a 6½-inch pipe line from the Maricopa camp to the McKittrick field, for the purpose of conveying gas from the local properties to the McKittrick leases of the company, furnishing fuel for steam and gas power plants to run the several leases in that field. It will be constructed along different lines than any other in the field. Instead of regular screw joints and couplings, the pipe will be welded at the joints by oxy-acetylene process, making one solid line of the many joints of pipe. An extra heavy grade of pipe will be used, weighing 12.9 pounds to the foot. The total length of the line when it is constructed will be 18 miles.

McKITTRICK, KERN CO., CAL.—Pipe line construction. Cost not stated. Engineer, Engineering Dept. Shell Oil Co., 343 Sansome street, S. F. Owners, Shell Oil Co. The announcement that the Kern Trading and Oil Company and the General Petroleum Company, respectively, each will build a pipe line from the Midway and Sunset districts, traversing the vicinity of McKittrick en route, has revived the rumor circulated extensively some time ago, that the Royal Dutch Shell or Shell Company of California, intends to construct a pipe line from Coalinga to its tank farm, four miles in a southeasterly direction from McKittrick. Further information may be had from the company's engineer.

POST OFFICES

WILLOWS, GLENN CO., CAL.—Post office, 2 story and base, brick and steel, \$75,000. Architects, Bliss & Faville, Balboa Bldg., S. F. Owners, United States Government. Official approval has been given preliminary plans for this building and the architects are now at work on the detail drawings. Bids will be called for shortly.

RAILROAD CONSTRUCTION AND EQUIPMENT.

RICHMOND, CONTRA COSTA CO., CAL.—Spur tract construction. Cost not stated. Engineer, Engineering Dept. Santa Fe Co., L. A. Owners, Santa Fe Railroad Co. The City Council granted permission to the Atchison, Topeka and Santa Fe Railway Company to construct a spur track from its main line south of the municipal tunnel to the plant of the Richmond Brick Company. Work will be started in about two weeks.

RICHMOND, CONTRA COSTA CO., CAL.—Municipal railroad. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. Preparations are being made by the City Council to operate a municipal street car line through the tunnel at Ashland avenue.

SAN JOSE, SANTA CLARA CO., CAL.—Street railroad extension. Cost not stated. Engineer, Engineering Dept. San Jose Railroads, San Jose. Owners, San Jose Railroads Co. Application has been made to the County Supervisors by the San Jose Railroads for permission to construct and maintain for a period of 12 years a single or double tract standard gauge electric railroad, together with the necessary poles, wires, appliances and appurtenances, upon, along and over the following route and streets in the County of Santa Clara, to wit: Upon Alum Rock avenue from a point where said Alum Rock avenue is intersected by the easterly or northeasterly boundary line or limits of the City of San Jose; thence along said Alum Rock avenue in an easterly or northeasterly direction to a point thereon where said Alum Rock avenue would be intersected by the westerly or southwesterly line of Kirk avenue prolonged southerly and southeasterly. F. E. Chapin is general manager of the San Jose Railroads.

RESIDENCES.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,700. Architect, none. Owners, Johnson & Johnson, 818 14th avenue, S. F. Location, north Cabrillo east 46th avenue. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood veneer and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Furnace heat. Tile bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$3,000 each. Architect, none. Owner Charles E. Reinhardt, 17th and Kansas streets, S. F. Location, north 19th avenue west of Lamson. Each will contain six rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Tile bath rooms. Automatic water heaters. Exteriors covered with rustic and brick veneer. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architect, C. E. Gottschalk, Phelan Bldg., S. F. Owner, A. McBarnes. Location,

east 47th avenue north Cabrillo. Will contain seven rooms, bath and sleeping porch. Interior finish pine, elm panels and hardwood floors. Open fire place and tile or brick mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$6,500. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Mrs. John W. Proctor. Location, southeast Scenic Way and 26th avenue. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and hot water circulating system. Tile bath rooms. Mantels tile wood and white enamel. Hardwood floors. Furnace heat, open fire places and hot water circulating system. Bath rooms finished in tile. Mantels tile and stone. Exterior covered with cement plaster. Contract price excavating and grading let to H. N. McClure for \$1,400. Working drawings being prepared.

SAN FRANCISCO—Residences, 2 1 story and base, frame, \$4,000. Architect, Joseph A. Leonard, 85 Cerritos avenue, S. F. Owners, Urban Realty Co. Location, west Urbano Drive north Victoria. Each will contain eight rooms, bath and sleeping porch. Interiors will be finished in pine, white enamel and hardwood. Hardwood floors. Furnace heat and open fire place. Mantels tile and brick. Tile bath rooms. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame. Cost not stated. Architect, Nathaniel Blaisdell, 255 California street, S. F. Owner, John H. Sherry. Location, Lake and 22nd avenue. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, white enamel and hardwood. Hardwood floors. Open fire places and furnace heat. Automatic water heater. Bath rooms finished in tile. Mantels tile or brick. Exterior covered with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Residence, 2 and 3 story and base, frame. Cost not stated. Architect, G. A. Applegate, Claus Spreckels Bldg., S. F. Owner, John A. Buck. Location, southwest Washington and Locust. Will contain twelve rooms, baths and sleeping porches. A separate garage will be erected. Interior of dwelling finished in pine, hardwood and brick. Exterior covered with cement plaster. Plans being prepared.

SAN FRANCISCO—Residence, 1 story and base, frame, \$4,000. Architect, M. T. Schwartz, Nevada Bank Bldg., S. F. Owner, J. S. Malloch. Location, Forest Hill. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and automatic water heater. Mantels tile or brick. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, \$2,750 each. Architect, none. Owner, Emil Nelson, 244 Rivalto, S. F. Location, west 15th avenue north

Bathos. Each will contain six rooms and bath. Interior finish pine and elm. Hardwood floors and open fire places. Mantels tile or brick. Imitation tile in baths. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

ALAMEDA, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$6,000. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owners, Banning & Stewart. Location, Alameda avenue near Grand. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and automatic water heater. Tile bath rooms. Exterior covered with cement plaster. Plans being prepared.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$6,500. Architect, none. Owners, Moore & Thomas, 2195 62nd avenue, Oakland. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire place. Automatic water heater. Mantel tile or brick. Tile bath room. Exterior cement plaster on metal bath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$6,000. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owners, Banning & Stewart. Location, Lake Shore avenue near Walla Vista. Will contain eight rooms, bath and sleeping porch. Interior finish pine, white enamel and hardwood veneer. Hardwood floors. Furnace heat, open fire places and automatic water heater. Mantels tile or brick. Bath room finished in tile. Exterior covered with cement plaster. Plans being prepared.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,000. Architect, M. I. Diggs, 2444 Bowditch, Berkeley. Owner, J. C. O'Connor. Location, west Carlton south Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Bath room tile. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

ALBANY, ALAMEDA CO., CAL.—Residence, 3, 1 story and base, frame, \$2,500 each. Architect, none. Owner, M. P. Brasch, 5826 Ocean View, Oakland. Location, east Ventura north Marin. Each will contain five rooms and bath. Interior finish pine and white enamel. Some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$1,000. Architect, none. Owners, Fuller & Robbins, Athens Hotel, Oakland. Location, east Thomas south Prospect. Will contain eight rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Furnace heat, open fire place and automatic water heater. Hardwood floors, tile bath and tile or brick mantel. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence 2 story

and base, frame, \$6,000. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owners, Banning & Stewart. Location, Rockridge Boulevard. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, automatic water heater and open fire place. Mantel tile or brick. Tile bath room. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,750. Architect, none. Owner, George H. Hollridge, 5926 Taft avenue, Oakland. Location, east Broadway south Manila. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

ALBANY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$3,000. Architect, none. Owner, H. E. Pfirang, 3359 Shafter avenue, Oakland. Location, southeast Marin and Ventura. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile mantel. Imitation tile in bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, G. W. Baumaon, 5360 Trask, Oakland. Location, north Trask west Davis. Will contain six rooms and bath. Interior finish pine. Hardwood floors. Open fire place and tile mantel. Tile bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

CHICO, BUTTE CO., CAL.—Residence, 1 story and base, frame, \$3,500. Architect, none. Owner, George H. Taber, Chico. Location, south Chestnut and Salem streets. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Furnace heat and open fire place. Mantel tile or brick. Tile bath. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

Contracts Awarded.

BEVERLY HILLS, LOS ANGELES CO., CAL.—Residence, 2 story and base, frame, \$15,000. Architect's name not given. Owner, W. C. Campbell, Rodeo Land and Water Co., L. A. Contractor, Frank E. Hartigan, Story Bldg., L. A. Contract price, \$15,000.

SCHOOLS.

BERKELEY, ALAMEDA CO., CAL.—College building exterior facing. Cost as follows. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. The Raymond Granite Co. presented the low bid at \$225,000 for granite facing for the Benj. H. Wheeler Hall, and H. Bosch the low bid for cement facing at \$18,750. Bids have been taken under advisement by

the Regents. A complete list of the bids received will be found under the heading of Oakland and Alameda County in this issue.

OAKLAND, CAL.—School addition, 2 story, frame, \$15,000. Architect, J. J. Donovan, Dalziel Bldg., Oakland. Owners, City of Oakland. Plans are being prepared for a two story frame addition to the Fremont School. Interior will be finished in pine with maple floors in the class rooms. The steam heating system will be extended into the new portion of the building. Exterior will be faced with cement plaster. Plans are being prepared.

RED BLUFF, TEHAMA CO., CAL.—School, 2 story and base, reinforced concrete or brick, \$90,000. Architect, W. H. Weeks, 75 Post street, S. F. Owners, Red Bluff Union High School District. Bonds have recently been sold, working drawings are complete and construction of the building will be started at once. The building will contain twelve class rooms, auditorium, office and laboratories. Interior finish pine with maple floors. Steam heat, coal burning furnace, program clocks and vacuum cleaning. Exterior faced with pressed brick or cement plaster. Bids will be called for at once.

ROSAMOND, KERN CO., CAL.—School, 1 story, frame and plaster, \$2,000. Architect, J. M. Saffell, New Fish Bldg., Bakersfield. Owners, Rosamond School District. The building will contain one class room with south and west porches, office and library. Interior finish pine and redwood. Hylo blackboards. Exterior rustic and cement plaster. Plans complete and figures to be called for at once.

WOODLAKE, TULARE CO., CAL.—School, 1 and 2 story, brick, \$29,780. Architect, O. L. Clark, Brower Bldg., Bakersfield. Owners, Woodlake School District. Phillbrick & Colin of Modesto submitted the low figure for the construction of this building at \$29,780. D. B. Day of Woodlake was second at \$30,250. All bids were taken under advisement, the local School Board wishing to favor Day if possible.

WOODBURN, ORE.—School, 2 story and base, hollow tile, \$30,000. Architect, Aaron H. Gould, Henry Bldg., Bldg., Portland. Owners, City of Woodburn. Will contain 12 class rooms, auditorium and offices. Interior finish pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior faced with cement plaster.

SALEM, ORE.—School addition, 2 story, brick, \$11,000. Architect, Dept. of Indian Affairs, Washington, D. C. Owners, United States Government. Location, Salem Indian School. Plans are complete and figures are being taken for an addition to the Salem Indian School. The work was figured sometime ago and included additions to the steam heating system. All bids were rejected. Bids will be opened on November 15th. Plans can be secured from the superintendent or from the Department of Indian Affairs at Washington, D. C. An official proposal appears in another column of this issue.

Contracts Awarded.

WEED, SISKIYOU CO., CAL.—School addition, 1 story, frame, \$1,705. Architects name not given. Owners, Town of Weed. Contractor, O. B. Cooper, Weed. Contract price \$1,705.

SEWERS, STREET WORK & WATER SYSTEMS.

PRESIDIO OF SAN FRANCISCO—Roads and walks, \$2,697.50. Engineer, Constructing Quartermaster, Fort Mason. Owners, United States Government. The Fay Improvement Co. submitted the lowest figure for constructing roads, walks and gutters at the Letterman General Hospital at \$2,697.50 and will probably be awarded the contract. A complete list of the figures appears under the heading of San Francisco in this issue.

EASTON, SAN MATEO CO., CAL.—Street improvement, \$250,000. Engineer, City Engineer, Easton. Owners, City of Easton. Trustee Edward Chevalier of Burlingame states that preparation is under way for 10 miles of new paved streets in the Easton section of that city. The property owners are signing petitions to the Trustees to order the work on practically every street in the Easton additions, including Burlingame Grove.

SAN JOSE, SANTA CLARA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, San Jose. Owners, City of San Jose. At a recent meeting of the Council resolutions of intention for the improvement of the roadway of a portion of William street near Third street, another near Sixth street, and also a portion of Eighth street near San Carlos were given a second reading and adopted. Bids on this work will soon be called for.

SAN JOSE, SANTA CLARA CO., CAL.—Crushed rock. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The County Supervisors have directed the Clerk of the Board to advertise for bids for Saratoga crushed rock to be delivered at the following places: Kennedy road, 1,630 cubic yards or more; Roberts road, 750 cubic yards; San Tomas Aquino, 1,440 cubic yards; Bryant street, 1,083 cubic yards; California avenue, 455 cubic yards; Ashby avenue, 389 cubic yards.

SAUSALITO, MARIN CO., CAL.—Sewer construction, \$11,458.70. Engineer, City Engineer, Sausalito. Owners, City of Sausalito. At the last meeting of the City Trustees one bid was received for doing the sewer work in Sewer District F. T. J. Tobin, 735 Filbert street, Oakland, bid \$11,458.70. Action on the bid was laid over until the next meeting.

RICHMOND, CONTRA COSTA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. A resolution of intention providing for the construction of lateral sewers was passed at the last meeting of the City Council. The streets affected are the intersections of Felton avenue and Wall street, Waller, Ohio, Florida and Center streets.

RICHMOND, CONTRA COSTA CO., CAL.—Outfall sewer. Cost not stated. Engineer, City Engineer Chapman, Richmond. Owners, City of Richmond. City Engineer Chapman presented plans and specifications for the construction of an outfall sewer for the Bay Shore Division at the last meeting of the City Council. The plans include that district from Crest avenue to Washington avenue and south to the

bay. Action was laid over until next week.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction, \$32,813.75. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans and specifications have been adopted by the Stockton City Council for the sewer of the Homestead, Kidd's addition, Lane's addition, the Vischer tract, Lane's addition, Sunset addition, county survey No. 3847, county survey No. 3227, part of the Thomas F. Walsh addition and part of Jackson's addition, in accordance with resolution of intention No. 534; also certain lots fronting on the north side of South street, as described in the resolution.

SACRAMENTO, CAL.—Street paving. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. A resolution of intention providing for street work to be done in the alley between Magnolia and Madrone avenue, has been passed by the City Council. Bids on this work will soon be called for.

AUBURN, PLACER CO., CAL.—Tunnel construction. Cost not stated. Engineer, Engineering Dept. Pacific Gas and Electric Co., S. F. Owners Pacific Gas and Electric Co. The Pacific Gas and Electric Co. is making big preparations to resume construction work on its system in the vicinity of Auburn and Clipper Gap. The first work will be done on the partly completed tunnels which are to be about 10,000 feet in length, and of which 4,000 feet is already constructed.

SAN LEANDRO, ALAMEDA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, San Leandro. Owners, City of San Leandro. Bids will be received until November 15th for improvement of Hyde street from south line of Chumalia street to north line of Calland avenue, be curbed with redwood and sidewalked with oil macadam sidewalks, 10 feet in width. Also that a cast iron and concrete culvert be constructed in the opposite termination of Hyde street in Calland avenue.

LOS ANGELES, CAL.—Open cut, \$4,000,000. Engineer, City Engineer, Los Angeles. Owners, City of Los Angeles. The major project for an open cut through Bunker Hill at First and Second streets has been decided upon by the Public Works Committee of the City Council as that which the committee will act upon, according to an announcement made by Councilman John Topham, chairman of the committee. That the scheme for a small cut at First street, embracing only that street and 140 feet on each side of it, had been discarded by the Public Works Committee, and the bigger project for an 880-foot cut, extending from a line 140 feet north of First street to a line 140 feet south of Second street, had been revived by the committee was Topham's statement. The City Engineer was instructed to prepare the ordinance of intention for the open cut upon the basis of this project, and to fix the westerly boundary of the assessment district at Lakeshore avenue instead of Vermont avenue, as originally proposed.

SEATTLE, WASH. Stand pipe, brick and steel, \$50,000. Engineer, City Engineer Daniel Huntington, Seattle.

Owners, City of Seattle. The City Engineer has been instructed to prepare plans and specifications for the construction of a stand pipe on Beacon avenue near Fountain street. The structure will be about five stories high, 30 feet in diameter, of brick construction, enclosing a steel tank with a capacity of 200,000 gallons. L. B. Youngs is superintendent of the water department.

SACRAMENTO, CAL.—Transformer station, concrete construction, \$3,325. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The lowest bid received for this work was from J. W. Terrell, 1111 29th street, Sacramento at \$3,325. He will probably be awarded the contract.

RIVERSIDE, RIVERSIDE CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Riverside. Owners, Riverside County. All bids received by the County Supervisors for the construction of 24 miles of desert highway from Palm Springs to Indio have been rejected and new bids will be received up to November 10th, 10 a. m. Further information may be had from the County Engineer at Riverside.

Contracts Awarded.

SAN FRANCISCO—Beach esplanade, \$18,500. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractor, C. E. Lamburth, 118 Capp street, S. F. Contract price, \$18,500.

SAN FRANCISCO—Furnishing cement, \$10,613.25. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Santa Cruz Portland Cement Co. Contract price, \$10,613.25.

SAN JOSE, SANTA CLARA CO., CAL.—Street improvement, \$14,340. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractors, Raich Improvement Co., Crocker Bldg., S. F. Contract price, \$14,340 for topeka top. Engineer's estimate, \$17,050.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Street improvements, \$10,994.54. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. Contractors, Howard Construction Co., Syndicate Bldg., Oakland. Contract price, \$10,994.54.

HILLSBOROUGH, SAN MATEO CO., CAL.—Road work, \$10,000. Engineer, City Engineer, Hillsborough. Owners, City of Hillsborough. Contractors, Raich Improvement Co., Crocker Bldg., S. F. Contract price, \$10,000.

PITTSBURG, CONTRA COSTA CO., CAL.—Sewer construction, \$1,132. Engineer, Town Engineer, Pittsburg. Owners, Town of Pittsburg. Contractor, L. N. Withers, Y. M. C. A. Bldg., Berkeley. Contract price, \$1,132.

STEVENSON, WASH.—Road construction, \$18,000. Engineer, County Surveyor, Stevenson. Owners, Skamania County. Contractor, H. M. Ambrose, Bates Dock Bldg., Portland. Contract price, \$18,000.

RIVERSIDE, RIVERSIDE CO., CAL.—Road construction, \$61,825. Engineer, County Surveyor, Riverside. Owners, Riverside County. Contractors, Conner Construction Co., Higgins Bldg., L. A. Contract price, \$61,825 for 8.9 miles.

SAN JOSE, SANTA CLARA CO., CAL.—Light tower steel, \$6,087. Engineer's name not given. Owners, City of San Jose. Contractors, Golden Gate Iron

Works, S. F., structural steel, \$6,051, and Lyden & Bickel, 269 Fell street, S. F., concrete work, \$942.

STORES AND OFFICES.

SAN FRANCISCO—Stores, 2 story and base, brick and steel. Cost not stated. Architect, Alfred Henry Jacobs, 110 Sutter street, S. F. Owner's name withheld. Location, northwest corner of Sutter and Mason streets, covering an area of 45 by 137½ feet. Will contain one large store with mezzanine floor. Elevator service. Interior finish pine, hardwood and ornamental plaster. Patent store fronts. Exterior faced with cement plaster. Plans being prepared.

OAKDALE, STANISLAUS CO., CAL.—Irrigation offices, 1 story and base, reinforced concrete, \$10,000. Architects, Stone & Wright, 24 South California street, Stockton. Owners, Oakdale Irrigation District. All bids received for this work have been rejected. The lowest figure submitted was from Johnson Bros., Tracy, at \$12,994. Plans will be revised.

LOS ANGELES, CAL.—Store and offices addition, 5 story and base. Class A, \$200,000. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, Pacific Mutual Life Insurance Co. Location, northwest corner of 6th and Olive streets, covering an area of 62 by 50 feet. Complete steel frame, concrete foundations and brick exterior walls. Interior finish pine, hardwood and metal trim. Steam heat, elevator service and vacuum cleaning. Metal window sash and frames and hollow tile interior partitions. Exterior faced with pressed brick trimmed with terra cotta. Special vaults and marble wainscot. Plans being completed and figures to be called for shortly.

CALEXICO, IMPERIAL CO., CAL.—Stores and offices, 2 story and base, reinforced concrete, \$50,000. Architect, Ralph Swearington, Calexico. Owners, Imperial Valley Hardware Co. Location, corner of Rockwood and Second streets, covering an area of 112 by 152 feet. The entire first floor will be occupied by the owners and upper floor will be arranged for offices. Interior finish pine and hardwood. Patent store fronts. Exterior faced with cement plaster. Plans are complete and figures are being taken. Both brick and reinforced concrete are being figured.

Contracts Awarded.

FRESNO, FRESNO CO., CAL.—Stores and theatre, 1 story and base, brick, \$16,000. Architects, Swartz & Swartz, Rowell Bldg., Fresno. Owners, Kutner & Goldstein, Fresno. Contractor, Emitt Rigglin, 1908 Fresno street, Fresno. Contract price, \$16,000.

MODEL PORCELAIN FACTORY IN KIANGSI.

[Consul General Edwin S. Cunningham, Hankow, China, July 26.]

The following translation from the Chinese newspaper Kuo Ming Hsin Pao has been made:

The King Teh Cheng porcelain manufactory in Kiangsi was established in the time of the Ming dynasty. It was an imperial concern, which supplied all the fine porcelain for its maintenance and its products attained to a state of perfection. Later, manufactories were organized by the people and, on ac-

count of the lack of funds their products were far inferior in quality. It is said this was the only place that preserved the ancient ways of making porcelain, with beautiful ancient colors and exquisite designs, to the present time. It was largely destroyed during the late revolution, and the various samples and patterns which were kept there were all partitioned among themselves by the great men of the republican period. Recently Mr. Ko, the customs (taotai) of Kiukiang, obtained direct sanction from the President and a grant of \$20,000 gold to restart the works. This will be the national model manufactory of porcelain, and the productions will be limited to two special departments—one for the manufacture of porcelain of the highest quality to be used solely for presentation to the rulers of other powers as gifts, and one for the manufacture of articles for the supply of the market. The work will begin in the month of August.

Ching Teh Cheng is situated on the Yangtze River, near the open port of Kiukiang. Since 1396 the imperial porcelain has been produced, though the output has been small. It seems that the continuation of such a plant would be a commendable undertaking, as this is an art in which China has always excelled.

SWISS COMMERCIAL ORGANIZATIONS.

Washington, D. C., Oct. 25, 1915. In order that American business men may be able to procure condensed, authoritative information with respect to the way in which the European nations carry on trade campaigns and organize their commercial activities at home, the Bureau of Foreign and Domestic Commerce, Department of Commerce, has been issuing pamphlet presentations of the subject, covering several of the leading European countries. Monographs on Germany, France, and the United Kingdom have already appeared, and one on Switzerland is the latest to come from the press.

This booklet, entitled "Commercial Organization in Switzerland," reviews the history of chambers of commerce and trade, explains the independent and official types of organizations and their functions, and gives particular attention to the Swiss Commercial and Industrial Association, which comprises in its membership all Swiss commercial organizations of consequence. There is a discussion of the Swiss Federal Department of Commerce and an outline of its evolution, as well as general information concerning such matters as the localization of industries, principal products, and commercial publications.

It is No. 101 in the Special Agents Series, and 5 cents will bring it from the Superintendent of Documents, Washington, D. C.

E. E. PRATT,
Chief of Bureau of Foreign and Domestic Commerce.

GOVERNMENT AIDS IN TESTS OF INGOTS.

Representatives of the United States Bureau of Standards has been assisting in the securing of data regarding 100 tons of Hadfield ingots acquired by an Eastern railroad, which were rolled at a near-by steelworks, and also a companion lot of Maryland ingots. The bureau, in co-operation with these concerns, is making a study of the prop-

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erties of the rails rolled, and an examination of representative ingots and of blooms. Valuable information as to the relative properties of the two types of ingot is expected.

The Bureau of Standards has also continued its test ingot research, to determine to what extent the presence of blowholes should cause rejection of samples.

The bureau, in its monthly report, states that the use of the plant of a Maryland steel company for experimental purposes is of great value to the bureau, as it permits the taking of observations under actual manufacturing conditions and on a scale that would otherwise be impossible. Among the experiments conducted at the plant were those to determine whether it is possible to control the operation of the Bessemer, open-hearth, and other furnaces by aid of the pyrometer.

The Municipal Bond Market is looking up, and the Bond Buyers are looking the "Building and Engineering News" up. A proposal ad for your bonds in our columns will bring competition.

OFFICIAL PROPOSALS.

PROPOSALS FOR CLEARING.

CLEARING—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the U. S. Reclamation Service, Meadow Creek, Wash., until 2 o'clock p. m. December 1, 1915, for clearing the reservoir site at Lake Keechelus, Wash., of all timber, undergrowth and brush and for the purchase of sawmill machinery at the site. Bids are also invited on about 150,000 feet, board measure, of lumber and 200,000 feet, board measure, of logs in accordance with data contained in the specifications. For particulars address the U. S. Reclamation Service, Meadow Creek, Wash.; Denver, Colo., or Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR BUILDING.

BUILDING—Department of the Interior, Office of Indian Affairs, Washington, D. C.—Sealed proposals plainly marked on the outside of the sealed envelope "Proposals for Addition to Brick Assembly Hall, Salem School, Oregon," and addressed to the Commissioner of Indian Affairs, Washington, D. C., will be received at the Indian Office until 2 o'clock p. m. of November 15, 1915, for furnishing materials and labor for the construction of an addition to the brick assembly hall, in strict accordance with the plans, specifications and instructions to bidders, which may be examined at the United States Indian warehouses at Chicago, Ill.; St. Louis, Mo., and Builders' Exchange at St. Paul, Minn., and at the office of the superintendent of the Salem Indian School, Chemawa, Ore. For further information apply to the superintendent of the Salem School, CATO SELLS, commissioner.

PROPOSALS FOR BUILDING.

BUILDING—Fort Logan, Colo.—Sealed proposals, in triplicate, for furnishing all materials and labor required in constructing basements under noncommissioned officers' quarters here will be received until 11 a. m. November 15, 1915. Information on application to quartermaster.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 986—Proposals for the purchase of Miscellaneous Iron and Steel Scrap Offered For Sale by the Panama Canal and Which is no Longer Needed.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. November 22, 1915, at which time they will be opened in public, for purchasing the above-mentioned articles. Blanks and general information relating to this circular (No. 986) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 987—Proposals for Steel Wire, Fences and Bars, Galvanized Steel or Iron, Spring Steel, Steel Drill Rods, Wire Cable, Wire, Horseshoes, Nails, Boat Spikes, Nuts, Bolts, Turnbuckles, Joining Shackles,

Missing Links, Cable Clips, Reamers, Twist Drills, Sheet Copper, Sheet Brass, Bronze Bars, Yellow Metal, Bronze Wire Cloth, Zinc Plate, Solder, Lead Pipe, Pipe Fittings, Ferrules, Foot Valves, Cocks, Kitchen Sinks, Shovels, Wheelbarrows, Harness, Basil Leather, Rubber Tires, Manila Rope, Oakum and Sandpaper.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. November 10, 1915, at which time they will be opened in public for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 985) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC WORKS OF THE CITY AND COUNTY OF SAN FRANCISCO.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m. on Wednesday, the 24th day of November, 1915, for doing the following work, including the furnishing of the necessary labor and materials therefor, to wit:

The construction of the Hetch-Hetchy Railroad.

Progressive payments will be made in the manner set forth in the specifications.

Said work must be done in accordance with the plans and specifications on file in the office of the Board of Public Works, to which reference is hereby made, and must be commenced within fifteen (15) calendar days and completed within three hundred (300) calendar days from the date of the contract to be made and entered into therefor.

The amount of bond for faithful performance of contract has been fixed at two hundred thousand dollars (\$200,000.00).

The attention of bidders is also called to Act 2892 of the Legislature of the State of California entitled "An act to secure the payment of claims of material men, mechanics, or laborers, employed by contractors on public work," which act provides that every contractor to whom is awarded a contract for the execution of public work in the State of California shall, before entering upon the performance of such work, file a good and sufficient bond in an amount not less than one-half of the total amount payable by the terms of the contract. (Approved March 27, 1897, Statutes 1897, Amended 1911, Statutes of 1911).

All proposals offered shall be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors of said City and County for an amount not less than ten per centum of the aggregate of the proposal, and no proposal will be considered unless accompanied by such check.

Printed proposal forms will be furnished gratuitously upon application at the office of the City Engineer, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids. By order of the Board of Public Works.

F. J. CHURCHILL,
Secretary.

NOTICE TO HOUSE MOVERS.

FOR SALE for immediate removal two frame buildings, Nos. 28 and No. 7, Bartlett Street, bet. 21st and 22nd Sts. Address Reid Bros, 104 Montgomery St., San Francisco. (*)

NOTICE TO CONTRACTORS.

OFFICE CONSTRUCTION QUARTERMASTER, Fort Mason, Cal.—SEALED PROPOSALS will be received here until November 24th, 1915, and then opened for constructing (including plumbing, heating and lighting). Addition to Nurses Dormitory, Letterman General Hospital. Further information on applications. (*)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, noon, Monday, November 8, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of a building to be known as "Hay, Storage and Feed Barn," Stockton State Hospital Farm, near Stockton, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Hay, Storage and Feed Barn," Stockton State Hospital Farm, near Stockton, California." (Signed) W. F. MCCLURE, State Engineer.

PROPOSALS FOR BUILDING REPAIRS.

BUILDING REPAIRS—Treasury Department, Supervising Architect's Office, Washington, D. C.—Sealed proposals will be opened in the office at 3 p. m. November 18, 1915, for the extension, remodeling, etc., of the U. S. post office at Boise, Idaho. Drawings and specifications may be obtained from the custodian at Boise, Idaho, or at this office, in the discretion of the supervising architect, JAMES A. WETMORE, acting supervising architect.

NOTICE TO CONTRACTORS.

FOR SALE.

The Swedish Government Building on the Exposition Grounds will be sold to highest bidder. Purchaser to remove said building from the premises, clear and grade the lot to level of curb, between January 15th and March 15th, 1916, and this work must be com-

opened on or before February 1st, 1916. Sealed bids, addressed to "Commissioner General for Sweden, Swedish Building, Exposition Grounds, San Francisco, Cal.," will be received up to November 10th, 1915.

For further particulars apply to A. Elbsson, Secretary, Swedish Building, Exposition Grounds, between the hours of 10 A. M. and 5 P. M. (11)

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 981—Office of the General Purchasing Officer, Panama Canal, Washington, D. C.—Sealed proposals will be received here until November 14, 1915, under proposal 981 or furnishing two steel oil storage tanks. Bids are desired both for delivery and erection. Each tank to be 60 feet in diameter and 35 feet high. For further information address F. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

PROPOSALS FOR MARINE RAILROAD.

MARINE RAILWAY — Sealed proposals indorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. November 27, 1915, and then there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Proposals are invited on separate component parts of the complete railway. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 979—Proposals for Copper Cable and Wire, Steel Reinforcing Bars, Steel Wire, Poultry Netting, Bolts, Nuts, Rivets, Nails, Lag Screws, Boat Spikes, Washers, Pipe Fittings, Ship Augers, Twist Drills, Winch, Hinges, Key Blanks, Hammers, Coal Baskets, Street Lamps, Water Gauge Lamps, Hose, Packing, Rubber Bands, Pencils, Cardboard, Japan Oil, Locomotive Black, Yellow Ocher, Yellow Chrome and Lumber.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 9:30 a. m. November 15, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 979) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 977—Proposals for Fuel Oil.—Annual Estimate for the period Beginning January 1, 1916, and ending December 31, 1916.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 9:30 a. m. November 4, 1915, at which time they will be opened in public, for furnishing the above mentioned oil. Blanks and general information relating to this circular (No. 977) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

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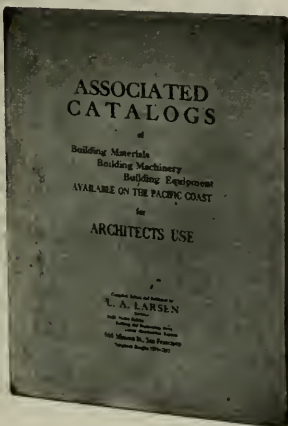


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ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

PIER CONSTRUCTION AND REPAIRS—Cost not stated. San Francisco. Engineer, Assistant State Engineer, Ferry Bldg., S. F. Owners, State of California. Bids will shortly be called for by the State Board of Harbor Commissioners for repairs to Pier No. 9 and for a bulkhead between Piers Nos. 9 and 11. Plans for this work together with plans and specifications for an approach to the upper floor of the Ferry Building have been approved. Bids may not, however, be called for on the approach for some time.

APARTMENT HOUSE—3 story and base, frame, \$20,000. San Francisco. Architect, P. Righetti, Phelan Bldg., S. F. Owner, E. Tomasini. Location, southeast Judah and 8th avenue. Will contain 14 suites and one store. Interior finished in pine, elm panels and some hardwood floors. Central heating system and hot water supply. Wall beds. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and contract to be awarded within a few days.

APARTMENT HOUSE ALTERATION—Frame, \$6,000. San Francisco. Architect, Theo. W. Lenzen, Humboldt Bank Bldg., S. F. Owner, A. Burkhardt. Location, 38-40 Belvedere street. Work will consist of altering two large flats into six apartments and the addition of one story. Interior finish pine. Wall beds. Exterior covered with rustic and cement plaster. Plans being prepared.

APARTMENT HOUSE AND STORES—4 story and base. Class C construction, \$65,000 to \$70,000. San Francisco. Architects, Fabre & Bearwald, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location, Mission District. Will cover a large ground area and will contain several stores and 40 suites of two and three rooms. Interior finish pine with some elm panels. Steam heat, oil burning system, hot water system and patent store fronts. Wall beds. Bath rooms finished in tile. Exterior faced with cement plaster and pressed brick. Plans being prepared and work to be done by Day Labor.

APARTMENT HOUSE—4 story and base. Class C construction, \$40,000. San Francisco. Architect, E. H. Denke, 1317 Hyde street, S. F. Owners, Max and Dora Kollander. Location, south Bush west of Jones, covering an area of 54 feet 10 inches by 100 feet. Will contain sixteen suites of four rooms and bath. Interior finish pine, mahogany and white enamel. Hardwood floors. Steam heat, oil burning furnace, hot water system and automatic elevator. Bath rooms tile. Exterior faced with pressed brick trimmed with terra cotta. Plans revised and new figures being taken.

APARTMENT HOUSE—6 story and base. Class C, reinforced concrete, \$300,000. San Francisco. Architect, J. C. Hladik, Moonadnock Bldg., S. F. Owner, Goede Urioste. Location, northeast corner Van Ness and McAllister street. Will contain 200 rooms and a number of stores. Interior finish pine and hardwood with hardwood and tile floors. Steam heat, oil burning system, hot water supply and automatic elevator. Patent store fronts. Bath rooms tile. Exterior faced with cement plaster. Plans complete and work being done by Day Labor.

APARTMENT HOUSE—4 story and base, reinforced concrete, \$25,000. San Francisco. Architect, Albert Schroepfer, Foxcroft Bldg., S. F. Owner, L. D. Stoff. Location, south Sutter east Hyde, covering an area of 25 by 96 feet. Will contain eight large suites. Interior finish pine and hardwood with hardwood and tile floors. Steam heat, elevator service, hot water system and oil burning equipment. Wall beds. Exterior faced with cement plaster. Plans complete and segregated figures being taken.

APARTMENT HOUSE—3 story and base, frame. Cost not stated. San Francisco. Architect, E. H. Denke, 1317 Hyde street, S. F. Owner's name withheld. Location, Lake near 25th avenue. Will contain six modern suites of three and four rooms. Interior finish pine and hardwood panels. Hardwood floors. Steam heat and hot water system. Bath rooms tile. Wall beds. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

ROADS AND WALKS—\$2,697.50. Presidio of San Francisco. Engineer, Constructing Quartermaster, Fort Mason. Owners, United States Government. The Fay Improvement Co. submitted the lowest figure for constructing roads, walks and gutters at the Letterman General Hospital at \$2,697.50 and will probably be awarded the contract. A complete list of the figures appears under the heading of San Francisco in this issue.

RESIDENCE—2 story and base, frame, \$3,700. San Francisco. Architect, none. Owners, Johnson & Johnson, 818 14th avenue, S. F. Location, north Cabrillo east 46th avenue. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood veneer and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Furnace heat. Tile bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$3,000 each. San Francisco. Architect, none. Owner, Charles E. Reinhart, 77th and Kansas streets, S. F. Location, north 19th avenue west of Lamson. Each will contain six rooms and bath. Interior finish pine with

some elm panels and hardwood floors. Open fire places and tile or brick mantels. Tile bath rooms. Automatic water heaters. Exteriors covered with rustic and brick veneer. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,000. San Francisco. Architect, C. E. Gottschalk, Phelan Bldg., S. F. Owner, A. McBarnes. Location, east 47th avenue north Cabrillo. Will contain seven rooms, bath and sleeping porch. Interior finish pine, elm panels and hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$6,500. San Francisco. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Mrs. John W. Proctor. Location, southeast Scenic Way and 26th avenue. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and hot water circulating system. Tile bath rooms. Mantels tile and brick. Exterior covered with cement plaster. Plans being prepared.

RESIDENCES—2, 1 story and base, frame, \$4,000. San Francisco. Architect, Joseph A. Leonard, 85 Cerritos avenue, S. F. Owners, Urban Realty Co. Location, Urbano Drive north Victoria. Each will contain eight rooms, bath and sleeping porch. Interiors will be finished in pine, white enamel and hardwood. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Tile bath rooms. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame. Cost not stated. San Francisco. Architect, Nathaniel Blaisdell, 255 California street, S. F. Owner, John H. Sherry. Location, Lake and 22nd avenue. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, white enamel and hardwood. Hardwood floors. Open fire places and furnace heat. Automatic water heater. Bath rooms finished in tile. Mantels tile or brick. Exterior covered with cement plaster. Plans complete and figures being taken.

RESIDENCES—2 and 3 story and base, frame. Cost not stated. San Francisco. Architect, G. A. Applegarth, Claus Spreckels Bldg., S. F. Owner, John A. Buck. Location, southwest Washington and Locust. Will contain twelve rooms, baths and sleeping porches. A separate garage will be erected. Interior of dwelling finished in pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and hot water circulating system. Bath rooms finished in tile.

Mantels tile and stone. Exterior covered with cement plaster. Contract price excavating and grading lot to H. N. McClure for \$1,100. Working drawings being prepared.

RESIDENCE—1 story and base, frame, \$1,000. San Francisco. Architect, M. T. Schwartz, Nevada Bank Bldg., S. F. Owner, J. S. Mallock. Location, Forest Hill. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and automatic water heater. Mantels tile or brick. Bath rooms tile. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 2 story and base, \$2,500 each. San Francisco. Architect, none. Owner, Emil Nelson, 244 Rivoli, S. F. Location, west 15th avenue north Balboa. Each will contain six rooms and bath. Interior finish pine and elm. Hardwood floors and open fire places. Mantels tile or brick. Imitation tile in baths. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—7 story and base, brick and steel. Cost not stated. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Girard Investment Co. Location southeast corner of Geary and Leavenworth streets. Will contain a large number of two and three room suites with wall beds and private baths. Interior finish pine, hardwood and white enamel. Hardwood floors. Steam heat, elevator service, hot water system and vacuum cleaning. Bath rooms tile. Marble and tile vestibule. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and figures being taken.

APARTMENT HOUSE AND STORES—6 story and base, brick and steel, \$85,000. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter St., S. F. Owner's name withheld. Location close in to theatre and retail districts. Will contain three stores besides lobby on first floor and 80 suites of two and three rooms on upper floors. Interior finish pine and hardwood. Bath rooms tile. Wall beds. Steam heat, hot water system and automatic elevator. Exterior faced with pressed brick trimmed with terra cotta. Preliminary plans prepared.

PLATS—2 story and base, frame, \$6,000. San Francisco. Architect, none. Owner, Ralph McLeran, Sharon Bldg., S. F. Location, north Fulton east Arguello, covering an area of 25 by 80 feet. Will contain two flats of five and six rooms. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms tile. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

PLATS—2 story and base, frame, \$5,400. San Francisco. Architect, W. S. Rhodes, 3372 16th, S. F. Owner, Victor Sutherland. Location, west Church south of Cumberland. Will contain four flats of three rooms and bath. Interior finish pine and elm panels. Some hardwood floors. Wall beds, Ex-

terior covered with cement plaster on metal lath. Plans complete and figures being taken.

PLATS—2 story and base, frame, \$1,000. San Francisco. Architect, Theo S. Boehm, 1119 19th street, S. F. Owner, Joseph P. Alexander. Location, west 20th avenue north of Anza. Will contain two flats of five and six rooms. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

GARAGE—1 story, galvanized iron, \$3,000. San Francisco. Architect, none. Owners, People's Bread Co. Location, southwest corner of Bryant and 17th streets. Will contain storage space for 75 machines. No interior finish. Concrete floors. Exterior covered with corrugated iron. Plans complete and work to be done by Day Labor.

GARAGE—1 story and base, steel and reinforced concrete. Cost not stated. San Francisco. Architect, P. Righetti, Phelan Bldg., S. F. Owner's name not given. Location, north Pacific east of Powell, covering an area of 75 by 129 feet. Designed for a large commercial garage with additional storage space in the basement. Complete shop equipment and special gasoline storage tanks. Steel roof trusses and concrete floors. Exterior faced with cement plaster. Plans complete and figures taken.

NURSES' DORMITORY ADDITION—1 story, reinforced concrete. Cost not stated. Presidio of San Francisco. Engineer, Constructing Quartermaster's office, Fort Mason. Owners, United States Government. Bids will be opened on November 24th for constructing addition No. 3 to the nurses' dormitory at the Letterman General Hospital. Work includes plumbing, tile, and electric radiators. Exterior will be faced with cement plaster. Plans can be secured from the office of the Constructing Quartermaster. An official proposal appears in another column of this issue.

HOSPITAL CONSTRUCTION—Class A. Cost as follows. San Francisco. Architect, Lewis P. Hobart, Crocker Bldg., S. F. Owners, Regents of the University of California. Bids opened on October 25th for various parts of the Work at the University Hospital at the Affiliated Colleges show the following firms low: Kiernan & O'Brien plumbing, \$31,298; Vulcan Iron Works, refrigerating, \$12,600; Siebert Co., heating, \$28,987; Rex Electric Co., electric work, \$15,246; Otis Elevator Co., elevator work, \$10,985, and Siebert Co., power plant, \$30,955. A complete list of all bids received will be found under the heading of San Francisco in this issue.

STORES—2 story and base, brick and steel. Cost not stated. San Francisco. Architect, Alfred Henry Jacobs, 110 Sutter street, S. F. Owner's name withheld. Location, northwest corner of Sutter and Mason streets, covering an area of 45 by 137½ feet. Will contain one large store with mezzanine floor. Elevator service. Interior finish pine, hardwood and ornamental plaster. Patent store fronts. Exterior faced with cement plaster. Plans being prepared.

Contracts Awarded

BEACH ESPLANADE—\$18,500. San Francisco. Engineer, City Engineer. Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractor, C. E. Lamburth, 118 Capp street, S. F. Contract price, \$18,500.

FURNISHING CEMENT—\$10,613.25. San Francisco. Engineer, City Engineer. Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Santa Cruz Portland Cement Co. Contract price, \$10,613.25.

PIER CONSTRUCTION—\$283,000. San Francisco. Engineer, Assistant State Engineer, Ferry Bldg., S. F. Owners, State of California. Contractors, Clinton Preproofing Co., Mutual Bank Bldg., S. F. Contract price, \$283,000.

APARTMENT HOUSE—1 story and base. Class C construction, \$38,700. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Standard Securities Co. Contractor, William Martin, 110 Jessie St., S. F. Contract price, \$38,700.

Bids Opened For Work At the Presidio.

Constructing Quartermaster Receives Figures for Roads, Walks and Gutters at Letterman General Hospital.

Bids were opened on October 26th at the office of the Constructing Quartermaster's Office at Fort Mason for the improvement of roads and walks at the Letterman General Hospital in the Presidio of San Francisco. Following is a list of the bids received:

Improvement of Roads, Walks and Gutters.

Grace & Bernier	.....\$2,066.00
Frank M. Garden & Co.	.....2,096.00
Church & Clark	.....5,900.00
Fay Improvement Co.	.....2,697.50
City Street Improvement Co.	.....5,551.00
F. R. Ritchie	.....2,986.50
Adolph Wegner	.....4,928.00

A contract for the improvement of roads at Fort Miley has been awarded to Adolph Wegner for \$280.

Magnesia Asbestos Company Sold.

Plant Rubber and Supply Co. Purchase One of the Largest and Oldest Companies on the Coast.

An interesting bit of trade news is given by the Plant Rubber & Supply Co. in announcing their purchase of the entire stock, brands and trade marks of the Magnesia Asbestos Supply Co.

The Magnesia Asbestos Supply Co. was one of the oldest and largest firms engaged in the asbestos business and was probably better known on the Pacific Coast than any other one firm. Charles A. Wright and Sam Gillis, both formerly connected with the Magnesia Asbestos Supply Co., and known throughout the trade, are now connected with the Plant Rubber & Supply Co., handling the same qualities of asbestos materials as in the past.

OAKLAND AND ALAMEDA COUNTY.

STREET IMPROVEMENT—Cost not stated. San Leandro, Alameda Co., Cal. Engineer, City Engineer, San Leandro. Owners, City of San Leandro. Bids will be received until November 15th for improvement of Hyde street from south line of Chumalia street to north line of Calland avenue, be curbed with redwood and sidewalked with oil macadam sidewalks, 10 feet in width. Also that a cast iron and concrete culvert be constructed in the opposite termination of Hyde street in Calland avenue.

RESIDENCE—2 story and base, frame, \$6,000. Alameda, Alameda Co., Cal. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owners, Banning & Stewart. Location, Alameda avenue near Grand. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire place and automatic water heater. Tile bath room. Exterior covered with cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$6,500. Oakland, Cal. Architect, none. Owners, Moore & Thomas, 2495 42nd avenue, Oakland. Location, southeast corner Perkins and Jayne. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire place. Automatic water heater. Mantel tile or brick. Tile bath room. Exterior cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$6,000. Oakland, Cal. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owners, Banning & Stewart. Location, Lake Shore avenue near Walla Vista. Will contain eight rooms, bath and sleeping porch. Interior finish pine, white enamel and hardwood veneer. Hardwood floors. Furnace heat, open fire places and automatic water heater. Mantels tile or brick. Bath room finished in tile. Exterior covered with cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$3,000. Oakland, Cal. Architect, M. L. Diggs, 2441 Bowditch, Berkeley. Owner, J. C. O'Connor. Location, west Carleton south Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Bath room tile. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

RESIDENCES—3, 1 story and base, frame, \$2,500 each. Albany, Alameda Co., Cal. Architect, none. Owner, M. P. Brash, 5336 Ocean View, Oakland. Location, east Ventura north Marin. Each will contain five rooms and bath. Interior finish pine and white enamel. Some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$4,000. Oakland, Cal. Architect, none. Owners, Fuller & Robbins, Athens Hotel, Oakland. Location, east Thomas, south Prospect. Will contain

eight rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Furnace heat, open fire place and automatic water heater. Hardwood floors, tile bath and tile or brick mantel. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$6,000. Oakland, Cal. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owners, Banning & Stewart. Location, Rockridge Boulevard. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, automatic water heater and open fire place. Mantels tile or brick. Tile bath room. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,750. Oakland, Cal. Architect, none. Owner, George H. Hollridge, 5926 Taft avenue, Oakland. Location, east Broadway south Manila. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$3,000. Albany, Alameda Co., Cal. Architect, none. Owner, H. E. Pfirang, 3359 Shafter avenue, Oakland. Location, southeast Marin and Ventura. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile mantel. Imitation tile in bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, G. W. Baumann, 5360 Trask, Oakland. Location, north Trask west Davis. Will contain six rooms and bath. Interior finish pine. Hardwood floors. Open fire place and tile mantel. Tile bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—3 story and base, frame, \$14,000. Oakland, Cal. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Clyde Investment Co. Location, southeast corner of 3rd avenue and East 15th street. Will contain 12 rooms arranged in two and three room suites with private baths and wall beds. Interior finish pine and white enamel. Some hardwood floors. Central heating system and hot water supply. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—2 story and base, frame, \$10,000. Oakland, Cal. Architect, Alvin J. Stern, 306 14th street, Oakland. Owners, Coit Investment Co. Location, Grand avenue near Perkins. Will contain six suites of three rooms and bath. Wall beds. Interior finish pine with some hardwood floors. Exterior covered with cement plaster. Plans being prepared, work to be done by Day Labor.

APARTMENT HOUSE—2 story and base, frame. Cost not stated. Oakland, Cal. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name withheld. Location, Miles and College avenue. Will contain two, three and four room apartments with baths and sleeping porches. Interior finish pine and hardwood with some hardwood floors. Bath rooms finished in tile. Central heating system and hot water system. Exterior covered with cement plaster. Plans complete and figures to be taken next week.

APARTMENT HOUSE—3 story and base, frame, \$20,000. Oakland, Cal. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owner's name withheld. Location, Bellevue facing Lake Merritt. Will contain twelve suites of two and three rooms. Interior finish pine with some hardwood veneer and hardwood floors. Central heating system and hot water supply. Bath rooms finished in tile. Exterior faced with cement plaster. Plans being prepared.

APARTMENT HOUSE—3 story and base, frame and brick, \$18,000. Oakland, Cal. Architect, Alvin J. Stern, 306 14th street, Oakland. Owners, Sommarstrom Bros. Location, Jackson street. Will contain twelve suites of three rooms and bath. Interior finish pine and elm panels with some hardwood floors. Wall beds. Bath rooms tile. Central heating system and hot water supply. Exterior covered with rustic and brick veneer. Plans are complete and work to be done by Day Labor.

COLLEGE BUILDING EXTERIOR FACING—Cost as follows. Berkeley, Alameda Co., Cal. Architect John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. The Raymond Granite Company presented the low bid at \$235,000 for granite facing for the Benj. Ide Wheeler Hall, and H. Bosch the low bid for cement facing at \$18,750. Bids have been taken under advisement by the Regents. A complete list of the bids received will be found under the heading of Oakland and Alameda County in this issue.

SCHOOL ADDITION—2 story, frame, \$15,000. Oakland, Cal. Architect, J. J. Donovan, Balziel Bldg., Oakland. Owners, City of Oakland. Plans are being prepared for a two story frame addition to the Fremont School. Interior will be finished in pine with maple floors in the class rooms. The steam heating system will be extended into the new portion of the building. Exterior will be faced with cement plaster. Plans are being prepared.

Bids Received For Two U. of C. Jobs.

Many Bids Opened for Work at University Hospital and for Exterior Facing on Benj. Ide Wheeler Hall.

Bids were opened at Monday's meeting of the Regents of the University of California for work at the University Hospital, Affiliated Colleges, 4th avenue and Parnassus, San Francisco,

and for the exterior facing of the Benj. Ide Wheeler Hall on the University Campus at Berkeley. Plans for the former were prepared by Architect Lewis P. Hobart and for the latter by Architect John Galen Howard.

No awards have been made. Following is a complete list of bids as opened:

Exterior Facing, Benjamin Ide Wheeler Hall.

Proposition No. 1, Granite.	
Raymond Granite Co.....	\$225,000
California Granite Co. (no check or bond).....	234,875
McGillivray Stone Co.....	241,265
Proposition No. 2, Cement Plaster on Concrete.	
Wm. Makin.....	\$29,545
H. Bosch.....	18,750
A. Knowles.....	35,605
James F. Smith.....	33,340
C. C. Moorehouse.....	28,229
Floodberg & McCaffery.....	36,700

Plumbing.

F. W. Snook.....	\$34,000
Scott Company.....	35,470
J. E. O'Mara.....	35,300
Robert Dalziel.....	39,879
Alex. Coleman.....	34,287
Turner Company.....	34,700
Wittman-Lyman Co.....	37,673
F. J. Klumm.....	37,577
Kierman & O'Brien.....	31,298
J. H. Pinkerton.....	32,240
Herman Lawson.....	34,750
Burnham Plumbing Co.....	38,126
A. Lettich.....	36,701
J. M. Lettich.....	35,950

Refrigeration.

Turner Co.....	\$14,490
Vulcan Iron Works.....	12,600

Heating.

Scott Company.....	31,190
J. E. O'Mara.....	31,244
Atlas Heating Co.....	33,802
Turner Co.....	30,790
Robert Dalziel Co.....	36,996
Siebert Co.....	28,987
Mangrum & Otter.....	35,965
Wittman-Lyman Co.....	33,494
Pacific Fire Extinguisher Co.....	35,017
Kirnan & O'Brien.....	31,188

Electric.

Butte Eng. & Elec. Co.....	\$15,888
Ne Page-McKenny.....	15,975
Boynton Elec. Co.....	15,825
Newberry Elec. Co.....	18,240
Pacific Fire Extinguisher Co.....	17,445
H. S. Tittle.....	16,848
Turner Co.....	17,996
Central Electric Co.....	16,500
McFell Electric Co.....	17,278
Standard Electric Co.....	17,474
Rex Electric Co.....	15,246

Elevators.

Spencer Elevator Co.....	\$11,750
Otis Elevator Co.....	10,985
Pacific-Gurney, Elevator Co.....	13,995

Power Plant.

Hunt-Mirk Co.....	\$34,915
Turner Co.....	33,400
Chas. C. Moore.....	34,800
Scott Company.....	32,480
Siebert Co.....	30,955
Robert Dalziel.....	31,206
Atlas Heating Co.....	32,950
S. T. Johnson.....	24,798
Siebert Co. submitted the lowest combined bid for the heating, ventilating and power plant at \$59,552. Several other firms also submitted combined bids on these branches of the work, but none were near enough to warrant consideration.	

SAN JOSE AND THE SANTA CLARA VALLEY

CULVERT—Reinforced concrete. Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The Supervisors have ordered the County Surveyor to prepare plans and specifications, secure separate bids and award the contract for building a culvert on the county road near Beresford. Further information may be had from the County Engineer at Redwood City.

CULVERTS—Reinforced concrete. Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. At the last meeting of the County Supervisors, the Clerk was authorized to advertise for bids for building certain culverts along the Middlefield road in the Third Township. Further information may be had from the County Engineer.

STREET IMPROVEMENT—\$250,000. Easton, San Mateo Co., Cal. Engineer, City Engineer, Easton. Owners, City of Easton. Trustee Edward Chevalier of Burlingame states that preparation is under way for 10 miles of new paved streets in the Easton section of that city. The property owners are signing petitions to the Trustees to order the work on practically every street in the Easton additions, including Burlingame Grove.

STREET IMPROVEMENT—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, City Engineer, San Jose. Owners, City of San Jose. At a recent meeting of the Council resolutions of intention for the improvement of the roadway of a portion of William street near Third street, another near Sixth street, and also a portion of Eighth street near San Carlos were given a second reading and adopted. Bids on this work will soon be called for.

CRUSHED ROCK—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The County Supervisors have directed the Clerk of the Board to advertise for bids for Saratoga crushed rock to be delivered at the following places: Kennedy road, 1,630 cubic yards or more; Roberts road, 750 cubic yards; San Tomas Aquino, 1,440 cubic yards; Bryant street, 1,083 cubic yards; California avenue, 455 cubic yards; Ashby avenue, 359 cubic yards.

CITY HALL COMPLETION—Frame construction. Cost not stated. Santa

Clara, Santa Clara Co., Cal. Architect, William Binder, Rea Bldg., San Jose. Owners, Town of Santa Clara. The Town Trustees at their last meeting considered the plans and specifications of Architect Willia Binder for the completion of the uncompleted section of the town hall. Action was laid over until next meeting. H. R. Itoth is a member of the Board of Trustees.

STREET RAILROAD EXTENSION—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, Engineering Dept. San Jose Railroads, San Jose. Owners, San Jose Railroads Co. Application has been made to the County Supervisors by the San Jose Railroads for permission to construct and maintain for a period of 42 years a single or double track standard gauge electric railroad, together with the necessary poles, wires, appliances and appurtenances, upon, along and over the following route and streets in the County of Santa Clara, to wit: Upon Alum Rock avenue from a point where said Alum Rock avenue is intersected by the easterly or northeasterly boundary line or limits of the city of San Jose; thence along said Alum Rock avenue in an easterly or northeasterly direction to a point thereon where said Alum Rock avenue would be intersected by the westerly or southwesterly line of Kirk avenue prolonged southerly and southeasterly. F. E. Chapin is general manager of the San Jose Railroads.

Contracts Awarded.

BRIDGE—Reinforced concrete, \$2,295. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Contractor, P. F. Moore, Monterey. Contract price, \$2,295.

STREET IMPROVEMENT—\$14,340. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County Contractors, Raich Improvement Co., Crocker Bldg., S. F. Contract price, \$14,340 for Topeka top. Engineer's estimate, \$17,650.

STREET IMPROVEMENTS—\$10,994.54. Santa Cruz, Santa Cruz Co., Cal. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. Contractors, Howard Construction Co., Syndicate Bldg., Oakland. Contract price, \$10,994.54.

ROAD WORK—\$10,000. Hillsborough, San Mateo Co., Cal. Engineer, City Engineer, Hillsborough. Owners, City of Hillsborough. Contractors, Raich Improvement Co., Crocker Bldg., S. F. Contract price, \$10,000.

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LIGHT TOWER STEEL—\$6,087. San Jose, Santa Clara Co., Cal. Engineer's name not given. Owners, City of San Jose. Contractors, Golden Gate Iron Works, S. F., structural steel, \$6,087, and Lyden & Bickel, 269 Fell street, S. F., concrete work, \$42.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

CULVERT—Reinforced concrete. Cost not stated. Petaluma, Sonoma Co., Cal. Engineer, Engineering Dept. Northwestern Pacific Railroad, S. F. Owners, C. C. Winn and Mr. Neff. According to information obtained here Superintendent Neff and C. C. Winn of the Northwestern Pacific Railroad, accompanied by members of the City Council of Petaluma, visited their land in East Petaluma where the water how has caused considerable damage during the winter. After many suggestions it was decided to construct a culvert at the site. Plans for the culvert will be prepared in the offices of the railroad company.

IRRIGATION PROJECT—Cost not stated. Suisun, Solano Co., Cal. Engineer not selected. Owners, Glide Estate, William Denman, et al. According to word received a movement is under way to form an irrigation system, covering a large area of land situated between Suisun and Rio Vista, the project being fathered by some of the most extensive land owners within the bounds of the district, among whom are Dr. E. E. Brownell, William Denman and the Glide Estate, who own many hundreds of acres. Probably three-fourths of the land owners within the district have already signed a contract authorizing a survey to ascertain the probable cost of obtaining water from the Sacramento River at a point above Rio Vista, the course of a canal, as now figured on, being some distance north of the ditch made by the defunct Solano Irrigated Farms concern. The scheme as outlined for the new project is for the landowners to unite and form a co-operative organization, contributing toward the expense of building the system so much per acre. The preliminary proceedings of the proposed project have been worked up quietly, and nothing has yet been done except to make provisions for a preliminary survey, but those interested in promoting the scheme express confidence that something definite will be accomplished if a sufficient number of landowners will co-operate in the enterprise.

SEWER CONSTRUCTION—\$11,458.70. Sausalito, Marin Co., Cal. Engineer, City Engineer, Sausalito. Owners, City of Sausalito. At the last meeting of the City Trustees one bid was received for doing the sewer work in Sewer District F. T. J. Tobin, 733 Filbert street, Oakland, bid \$11,458.70. Action on the bid was laid over until the next meeting.

SEWER CONSTRUCTION—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. A resolution of intention providing for the construction of lateral sewers was passed at the last meeting of the City Council. The streets affected are the intersections of Felton avenue and

Wall street, Wadler, Ohio, Florida and Center streets.

OUTFALL SEWER—Cost not stated. Richmond, Contra Costa County, Cal. Engineer, City Engineer Chapman. Owners, City of Richmond. City Engineer Chapman presented plans and specifications for the construction of an outfall sewer for the Bay Shore Division at the last meeting of the City Council. The plans include that district from Crest avenue to Washington avenue and south to the bay. Action was laid over until next week.

IRRIGATION DITCH—Cost not stated. Byron, Contra Costa Co., Cal. Engineer's name not given. Owners, Byron-Bethany Irrigation Co. Excavating bids for digging a ditch or canal from Indian Slough to the Bruns Hill, a distance of 6,000 feet, were opened by the directors of the Byron-Bethany Irrigation Company last week. All of them were rejected as being too high. There were four bidders. The lowest bid was that of A. B. Munson & Son of Stockton, for 17½¢ per cubic yard. The directors believe the work can be done for considerably less, as they have thoroughly examined the nature of the earth to be removed. The work will be done by Day Labor according to the directors.

SPUR TRACK CONSTRUCTION—Cost not stated. Richmond, Contra Costa Co., Cal. Engineering Dept. Santa Fe Co., L. A. Owners, Santa Fe Railroad Co. The City Council granted permission to the Atchison, Topeka and Santa Fe Railway Company to construct a spur track from its main line south of the municipal tunnel to the plant of the Richmond Brick Company. Work will be started in about two weeks.

MUNICIPAL RAILROAD—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Preparations are being made by the City Council to operate a municipal car line through the tunnel at Ashland avenue.

Contracts Awarded.

SEWER CONSTRUCTION—\$1,132. Pittsburg, Contra Costa Co., Cal. Engineer, Town Engineer, Pittsburg. Owners, Town of Pittsburg. Contractor, L. N. Withers, Y. M. C. A. Bldg., Berkeley. Contract price, \$1,132.

FRESNO, MODESTO STANISLAUS AND CENTRAL CALIFORNIA

IRRIGATION OFFICES—1 story and base, reinforced concrete, \$10,000. Oakdale, Stanislaus Co., Cal. Architects, Stone & Wright, 24 South California street, Stockton. Owners, Oakdale Irrigation District. All bids received for this work have been rejected. The lowest figure submitted was from Johnson Bros., Tracy, at \$12,994. Plans will be revised.

PIPE LINE CONSTRUCTION—Cost not stated. McKittrick, Kern Co., Cal. Engineer's name not given. Owners, Kern Trading and Oil Co., Bakersfield. An immense pipe project will soon be started here by the Kern Trading and Oil Co., who will lay a six and five-eighths inch pipe line from the Maricopa camp to the McKittrick field, for the purpose of conveying gas from the local properties to the McKittrick

leases of the company, furnishing fuel for steam and gas power plants to run the several leases in that field. It will be constructed along different lines than any other in the field. Instead of regular screw joints and couplings, the pipe will be welded at the joints by oxy-acetylene process, making one solid line of the many joints of pipe. An extra heavy grade of pipe will be used, weighing 12.9 pounds to the foot. The total length of the line when it is constructed will be 18 miles.

PIPE LINE CONSTRUCTION—Cost not stated. McKittrick, Kern Co., Cal. Engineer, Engineering Dept. Shell Oil Co., 313 Sansome street, S. F. Owners, Shell Oil Co. The announcement that the Kern Trading and Oil Company and the General Petroleum Company, respectively, each will build a pipe line from the Midway and Sunset districts, traversing the vicinity of McKittrick en route, has revived the rumor circulated extensively some time ago that the Royal Dutch Shell or Shell Company of California intends to construct a pipe line from Coalinga to its tank farm, four miles in a southeasterly direction from McKittrick. Further information may be had from the company's engineer.

JAIL—1 story and base, reinforced concrete. Cost not stated. Patterson, Stanislaus Co., Cal. Architect, none. Owners, Town of Patterson. The proposed jail and court room building will be under construction shortly, the preliminary plans for the building have been completed by Supervisor A. E. Clary. The sketches provide for a building about 22x53 feet in size, the court room being 20x20 feet. Lavatories, steel cages, baths and heating system is included in the work.

MUNICIPAL AUDITORIUM—2 story and base, brick, \$35,000. Visalia, Tulare Co., Cal. Architects, Coates & Traver, Rowell Bldg., Fresno. Owners, City of Visalia. Will contain large auditorium, stage, maple floor. Central heating system. Exterior faced with pressed brick. Bids being taken.

SCHOOL—1-story, frame and plaster, \$2,000. Rosamond, Kern Co., Cal. Architect, J. M. Saffell, New Fish Bldg., Bakersfield. Owners, Rosamond School District. The building will contain one class room with south and west porches, office and library. Interior finish pine and redwood. Hylo blackboards. Exterior rustic and cement plaster. Plans complete and figures to be called for at once.

SCHOOL—1 and 2 story, brick, \$29,780. Woodlake, Tulare Co., Cal. Architect, O. L. Clark, Brower Bldg., Bakersfield. Owners, Woodlake School District. Philbrick & Colin of Modesto submitted the low figure for the construction of this building at \$29,780. D. B. Day of Woodlake was second at \$30,250. All bids were taken under advisement, the local School Board wishing to favor Day if possible.

IRRIGATION PROJECT—\$1,750,000. Visalia, Tulare Co., Cal. Engineer's name not given. Owners, Lindsay-Strathmore Irrigation District. Members of the County Supervisors have formally approved the engineering plans for the Lindsay-Strathmore Irrigation District and passed an official order for an election to vote bonds to finance the construction. Further in-

formation will be given of this work at a later date.

Contracts Awarded.

STONES AND THEATRE—1 story and base, brick, \$16,000. Fresno, Fresno Co., Cal. Architects, Swartz & Swartz, Itowell Bldg., Fresno. Owners, Kutner & Goldstein, Fresno. Contractor, Emitt Riggins, 1908 Fresno street, Fresno. Contract price, \$16,000.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA.

BRIDGE—Steel and concrete. Cost not stated. Bridgeport, Mono Co., Cal. Engineer, County Surveyor, Bridgeport. Owners, Mono County. Bids will be opened on January 3rd for the construction of a pony truss steel bridge with reinforced concrete abutments, to be built across the East Walker River, about six miles north of Bridgeport. Span, 50 feet, 3 panel, 16-foot roadbed.

BY-PASS—Steel and concrete. Cost not stated. Sacramento, Cal. Engineer, State Highway Commission Sacramento. Owners, State of California. At the last meeting of the State Reclamation Board the State Highway Commission advised the Board that it had not yet been able to close a favorable contract for the construction of a bascule bridge over the borrow-pit on the east side of Yolo by-pass adjoining the levee of West Sacramento. This bridge was to serve as a part of the 14,000-foot concrete highway crossing the by-pass, and was to permit the passage of dredges necessary for protective work in connection with the flood control project. A temporary structure around this crossing has been built, so that on completion of the balance of the highway traffic may be accommodated. It is hoped the bascule can be constructed within the next few months.

IRRIGATION PROJECT—Cost not stated. Oroville, Butte Co., Cal. Engineer not selected. Owners, Thermalito Irrigation District. The committee chosen by property owners of Thermalito to formulate plans for an irrigation district has practically abandoned the project of securing water from the Oro system. The committee favors the project of procuring a water supply from the west branch of the Feather River, the water to be diverted at Cape Horn. It is estimated that a thousand inches of water will be available at this point. Oscar Warner, chairman of the committee, has asked the Chamber of Commerce of Oroville to aid in financing the preliminary campaign in behalf of the new plan. It is planned to irrigate 5,000 acres.

IRRIGATION CANALS—Cost not stated. Oroville, Butte Co., Cal. Engineer's name not given. Owners, Dry and Butte Creek Irrigation Districts. The Great Western Canal Company has begun work on the second and third units of the Western Canal. Teams, scrapers and a steam shovel are at work west of Biggs, the second unit extending from Dry Creek to Butte Creek. Work is also under way on the third unit, which will bring water to the 7,000 acre tract of rice land west of Nelson. The contract specifies that work must be completed by April 1st.

LEVEE CONSTRUCTION AND REPAIRS

PAIRS—\$20,000. Meridian, Sutter Co., Cal. Engineer, State Engineer McClure, Sacramento. Owners, State of California and Levee District No. 70. The State Engineering Department will soon establish a repair gang at Meridian for the purpose of strengthening the west levee of District 70. The levee is declared to be weak in places and liable to damage, unless it is strengthened. The work will be started in the near future, and by the time the floods come the levee will be in good condition.

APARTMENT HOUSE—3 story and base, brick and frame, \$10,000. Sacramento, Cal. Architect, none. Owner, Frank Mead, Sutterville road and Mead avenue, Sacramento. Location, 624 M street. Will contain 12 suites of two and three rooms. Interior finish pine. Wall beds. Hot water system. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SEWER CONSTRUCTION—\$32,843.75. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Plans and specifications have been adopted by the Stockton City Council for the sewerage of the Homestead, Kidd's addition, Mark's addition, the Vischer tract, Lane's addition, Sunset addition, county survey No. 2847, county survey No. 3227, part of the Thomas E. Walsh addition and part of Jackson's addition, in accordance with resolution of intention No. 534, also certain lots fronting on the north side of South street, as described in the resolution.

STREET PAVING—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. A resolution of intention providing for street work to be done in the alley between Magnolia and Madrone avenue has been passed by the City Council. Bids on this work will soon be called for.

TUNNEL CONSTRUCTION—Cost not stated. Auburn, Placer Co., Cal. Engineer, Engineering Dept. Pacific Gas and Electric Co., S. F. Owners, Pacific Gas and Electric Co. The Pacific Gas and Electric Co. is making big preparations to resume construction work on its system in the vicinity of Auburn and Clipper Gap. The first work will be done on the partly completed tunnels, which are to be about 10,000 feet in length and of which 4,000 feet is already constructed.

RESIDENCE—1 story and base, frame, \$3,500. Chico, Butte Co., Cal. Architect, none. Owner, George H. Taber, Chico. Location, south Chestnut and Salem streets. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Furnace heat and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

IRRIGATION PROJECT—Cost not stated. Doyle, Lassen Co., Cal. Engineer, William L. Wales, Woodland. Owners, Southern Lassen Irrigation District. The Southern Lassen Irrigation District has obtained the services of Attorney L. L. Dennett of Modesto. William L. Wales of Woodland is the engineer. A majority of land owners have signed the petition and the Su-

perior court will hold on November 10th, at which time the Board will declare the district and call an election. The district comprises 21,500 acres in the southern end of Honey Valley. Bonds to finance the construction will be voted as soon as possible.

POST OFFICE—2 story and base, brick and steel, \$75,000. Willows, Glenn Co., Cal. Architects, Bliss & Faville, Balboa Bldg., S. F. Owners, United States Government. Official approval has been given preliminary plans for this building and the architects are now at work on the detail drawings. Bids will be called for shortly.

SCHOOL—2 story and base, reinforced concrete, \$90,000. Red Bluff, Tehama Co., Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, Red Bluff High School District. Bonds have recently been sold and working drawings are complete and construction of the building will be started at once. The building will contain twelve class rooms, auditorium, office and laboratories. Interior finish pine with maple floors. Steam heat, coal burning furnace, program clocks and vacuum cleaning. Exterior faced with pressed brick or cement plaster. Bids will be called for at once.

Contracts Awarded.

TRANSFORMER STATION—Concrete construction, \$3,325. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. The lowest bid received for this work was from J. W. Terrell, 1111 29th street, Sacramento, at \$3,325. He will probably be awarded the contract.

SCHOOL ADDITION—1 story frame, \$4,705. Weed, Siskiyou Co., Cal. Architect's name not given. Owners, Town of Weed. Contractor, O. B. Cooper, Weed. Contract price, \$4,705.

LOS ANGELES & SOUTHERN CALIFORNIA.

CULVERTS AND GRADING—Cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be opened on November 6th for culverts and grading of the Santa Ana road. The road is located along the west side of the Ventura River, beginning at a point 3,700 feet north of Foster Park and extending northerly a distance of one and one-half miles. The grading consists of side hill work in earth and shale. Approximate quantities are as follows: Item 1, 82,350 cubic yards excavation unclassified; 2, 300 linear feet 18-inch corrugated iron pipe; 3, 134 linear feet of 24-inch corrugated iron pipe; 4, 238 linear feet of 30-inch corrugated iron pipe; 5, 130 linear feet of 42-inch corrugated iron pipe; 6, 64 linear feet of 48-inch corrugated iron pipe; 7, 85 cubic yards Class B concrete; 8, 3,000 pounds reinforcing steel.

BRIDGE—Reinforced concrete and steel. Cost not stated. Riverside, Riverside Co., Cal. Engineer, County Surveyor, Riverside. Owners, Riverside County. Bids will be received on November 10th for the construction of a bridge across the Santa Ana River on Hammer avenue in the First Road District. Plans can be secured from the County Surveyor.

BRIDGES—Reinforced concrete. Cost as follows. Santa Barbara, Santa Bar-

bara Co., Cal. Engineer, Flaherty, Santa Barbara. Owners, Santa Barbara County. Contractors, Security Construction Co., 35th and Alameda streets, L. A., Dos Pueblos bridge, \$7,720. Boardman Construction Co., Story Bldg., L. A., Eagle Canyon Creek bridge, \$10,961.

RECLAMATION WORK—Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. The Board of Supervisors at a recent meeting in discussing the construction of the pile and barb wire jetty for reclamation work at Santa Maria River, allowed John Grace, the contractor who was awarded the contract, to withdraw his bid. What action will be taken has not been mentioned.

OPEN CUT—\$4,000,000. Los Angeles, Cal. Engineer, City Engineer, Los Angeles. Owners, City of Los Angeles. The major project for an open cut through Bunker Hill at First and Second streets has been decided upon by the Public Works Committee of the City Council as that which the committee will act upon, according to an announcement made by Councilman John Topham, chairman of the committee. That the scheme for a small cut at First street, embracing only that street and 140 feet on each side of it, had been discarded by the Public Works Committee, and the bigger project for an 880-foot cut, extending from a line 140 feet north of First street to a line 140 feet south of Second street, had been revived by the committee was Topham's statement. The City Engineer was instructed to prepare the ordinance of intention for the open cut upon the basis of this project, and to fix the westerly boundary of the assessment district at Lakeshore avenue, instead of Vermont avenue, as originally proposed.

WAREHOUSE—7 story, reinforced concrete, \$117,138.75. San Pedro, Los Angeles Co., Cal. Engineer, Los Angeles Harbor Commission, L. A. Owners, Port of Los Angeles. The Merchants' Realty and Investment Co., Van Nuys Bldg., L. A., was the lowest bidder at \$117,138.75 for the erection of the seven story and basement reinforced concrete warehouse to be erected at San Pedro by the Harbor Commission. The F. O. Engstrom Co., 5th and Seaton streets, L. A., was the next lowest bidder at \$118,465. The bids were referred to the harbor engineer with instruction to present a report containing an estimate of the cost of the work if done by force account.

LIBRARY—1 story and base, brick, \$20,000. Los Angeles, Cal. Architect, Lester Hibbard, Marsh-Strong Bldg., L. A. Owners, City of Los Angeles. Location, corner of Workman street and Avenue 26. Will contain two reading rooms, office and stack rooms. Interior finish pine and hardwood with maple floors. Metal book stacks. Steam heat, oil burning furnace. Exterior faced with cement plaster and pressed brick. Plans being revised and bids to be called for shortly.

ROAD CONSTRUCTION—Cost not stated. Riverside, Riverside Co., Cal. Engineer, County Surveyor, Riverside.

Owners, Riverside County. All bids received by the County Supervisors for the construction of 24 miles of desert highway from Palm Springs to Indio have been rejected and new bids will be received up to November 10th, 10 a. m. Further information may be had from the County Engineer at Riverside.

STORES AND OFFICES—2 story and 5 story and base, Class A, \$200,000. Los Angeles, Cal. Architect, W. J. Lodd, Marsh-Strong Bldg., L. A. Owners, Pacific Mutual Life Insurance Co. Location, northwest corner of 6th and Olive streets, covering an area of 62 by 80 feet. Complete steel frame, concrete foundations and brick exterior walls. Interior finish pine, hardwood and metal trim. Steam heat, elevator service and vacuum cleaning. Metal window sash and frames and hollow tile interior partitions. Exterior faced with pressed brick trimmed with terra cotta. Special vaults and marble wainscot. Plans being completed and figures to be called for shortly.

STORES AND OFFICES—p story and base, reinforced concrete, \$50,000. Calexico, Imperial Co., Cal. Architect, Ralph Swearington, Calexico. Owners, Imperial Valley Hardware Co. Location, corner of Rockwood and Second streets, covering an area of 112 by 152 feet. The entire first floor will be occupied by the owners and upper floor will be arranged for offices. Interior finish pine and hardwood. Patent store fronts. Exterior faced with cement plaster. Plans are complete and figures are being taken. Both brick and reinforced concrete are being figured.

Contracts Awarded.

RESIDENCE—2 story and base, frame, \$15,000. Beverly Hills, Los Angeles Co., Cal. Architect's name not given. Owner, W. C. Campbell, Rodeo Land and Water Co., L. A. Contractor, Frank E. Hartigan, Story Bldg., L. A. Contract price, \$15,000.

APARTMENT HOUSE—3 story and base, frame, \$28,000. Pasadena, Los Angeles Co., Cal. Architect, Albert Reed, Long Beach. Owner, Mrs. F. C. Pratt. Contractors, J. H. Woodworth & Son, Chamber of Commerce Bldg., Pasadena. Contract price, \$28,000.

FACTORY—1 and 2 story, steel and concrete. Cost not stated. San Pedro, Los Angeles Co., Cal. Engineer, Charles P. Grimwood. Owners, American Tuna Co., Pacific Electric Bldg., L. A. Contractors, F. O. Engstrom Co., 5th and Seaton streets, L. A. Contract awarded on the percentage basis. First unit only included, complete plant to cost \$550,000.

PACKING PLANT—1 story and base, reinforced concrete, \$25,000. North Pomona, Los Angeles Co., Cal. Architect, none. Owners, Indian Citrus Association. Contractor, D. C. Crookshank, Pomona. Contract price, \$25,000.

PACKING PLANT—1 story and base, Class A construction, \$56,434. Whittier, Los Angeles Co., Cal. Architects, A. W. Rea and C. E. Garstang, Black Bldg., L. A. Owners, Murphy Oil Co. Contractor, E. M. Wheatland, Whittier. Contract price, \$56,434.

ROAD CONSTRUCTION—\$61,825. Riverside, Riverside Co., Cal. Engineer, County Surveyor, Riverside. Owners, Riverside County. Contractors, Conner Construction Co., Higgins Bldg., L. A. Contract price, \$61,825 for 5.9 miles.

PORTLAND AND OREGON

GARAGE—2 story and base, reinforced concrete, \$25,000. Portland, Ore. Architects, Sutton & Whitney, Lewis Bldg., Portland. Owners, Kissel Kar Automobile Salesroom Co. Location, Broadway and Davis streets, covering an area of 100 feet square. Construction fireproof. Interior finish pine, hardwood and ornamental plaster in salesrooms. Elevator service. Exterior faced with cement plaster. Plans complete and figures being taken.

SCHOOL—2 story and base, hollow tile, \$30,000. Woodburn, Ore. Architect, Aaron H. Gould, Henry Bldg., Portland. Owners, City of Woodburn. Will contain twelve class rooms, auditorium and offices. Interior finish pine with maple floors. Central heating system, program clocks and vacuum cleaning. Exterior faced with cement plaster. Plans being prepared.

SCHOOL ADDITION—2 story, brick, \$11,000. Salem, Ore. Architect, Dept. of Indian Affairs, Washington, D. C. Owners, United States Government. Location, Salem Indian School. Plans are complete and figures are being taken for an addition to the Salem Indian School. The work was figured sometime ago and included additions to the steam heating system. All bids were rejected. Bids will be opened on November 15th. Plans can be secured from the superintendent or from the Department of Indian Affairs at Washington, D. C. An official proposal appears in another column of this issue.

Contracts Awarded.

WAREHOUSE—2 story and base, hollow tile, \$25,000. Eugene, Ore. Architect, J. R. Ford, Eugene. Owners, Allen & Lewis, Portland. Contractors, Applewhite & Ford, Eugene. Contract price, \$25,000.

SEATTLE AND WASHINGTON

BRIDGE—Steel and reinforced concrete, \$500,000. Seattle, Wash. Engineer, City Engineer Rapp, Seattle. Owners, City of Seattle. City Bridge Engineer Rapp has the plans for a proposed city bridge over the Lake Washington Canal at 10th avenue N. E. practically complete. Specifications, etc., will probably be in shape to permit the calling of bids the early part of this month. The bridge will have a central span of 216 feet, will be 80 feet wide of the double leaf bascule type, similar to the Fremont bridge. Temporary wooden approaches 3,000 feet long are called for. The sub-structure will cost \$125,000 and superstructure about \$365,000.

APARTMENT HOUSE—5 story and base, brick and steel, \$75,000. Seattle, Wash. Architects, Blackwell & Baker, Northern Bank Bldg., Seattle. Owners, Gardner & Lessey. Location, 4th near Virginia street, covering an area of 60 by 108 feet. Will contain a total

of 126 suites of two and three rooms. Interior finish pine and hardwood. Wall beds and tile baths. Steam heat, elevator service, hot water system and oil burning equipment. Exterior faced with pressed brick and terra cotta. Plans complete and figures to be called for at once.

STAND PIPE—Brick and steel, \$50,000. Seattle, Wash. Engineer, City Engineer, City Engineer Daniel Huntington, Seattle. Owners, City of Seattle. The City Engineer has been instructed to prepare plans and specifications for the construction of a stand pipe on Beacon avenue near Fountain street. The structure will be about five stories high, 30 feet in diameter, of brick construction, enclosing a steel tank with a capacity of 300,000 gallons. L. E. Youngs is superintendent of the water department.

Contracts Awarded.

ROAD CONSTRUCTION — \$48,000. Stevenson, Wash. Engineer, County Surveyor, Stevenson. Owners, Skamania County. Contractor, H. M. Ambrose, Bates Dock Bldg., Portland. Contract price, \$48,000.

NAMUR STADIUM.

A fine specimen of concrete construction is the new stadium at Namur, in Belgium, which was laid out on the summit of the citadel, where it enjoyed a wide view. The grounds laid out for the games are about 1,000 feet long and 500 feet wide, and the stadium lies at one end of the grounds and consists of a series of reinforced concrete steps for seats, of 350 feet length. In the rear is a loggia construction with columns, which have tribunes on one side, while the other side serves for the scene of an open air theatre. In the middle of the loggia is the royal box. A good part of the structure is built on the Hennebique reinforced concrete system, and other parts in concrete or in stone.

BRIDGE BIDS WANTED.

BRIDGEPORT, Mono Co., Cal.—Sealed bids will be received by the Clerk of the Board of Supervisors of Mono County, until 12 noon, January 3, 1916, for the construction of a pony truss steel bridge with reinforced concrete abutments, to be built across the East Walker River, about six miles north of Bridgeport. The bridge will have a 50 foot span, 2 panels with a 16 foot roadbed. A certified check of ten per cent must accompany each bid. Further information and plans may be had from the Clerk of the Supervisors at Bridgeport.

Catalogues sent by American exporters to the consulate at Karachi, India, are reported to have been received with circular letters folded and placed between the leaves. Consul James Oliver Laing states that the letters often stick between the leaves in the hot, moist climate of the Arabian Sea district, and are sometimes not found when the catalogues are filed.

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San Francisco California

Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

SAN FRANCISCO COUNTY.

No.	Owner	Contractor	Amt.
2079	Heyman	Heyman	800
2080	Warnock	Warnock	1900
2081	Urban Realty	Owner	4000
2082	Same	Same	4000
2083	Buck	McClure	1450
2084	De Martini	DeMartini	7425
2085	McBarnes	McBarnes	3000
2086	United Milk	Owner	1000
2087	Petzold	Stanley	400
2088	Un Trust	Sass	560
2089	Stoff	Stoff	25000
2090	Nelson	Nelson	1500
2091	Godfrey	Wilson	500
2092	Peoples Bread	Owner	2800
2093	Salon	Ostorero	1390
2094	Kingwell	Leigh	2600
2095	Duncan	Roberts	400
2096	Stoff	Stoff	750
2097	Corona	Mullen	400
2098	Larik	Brundage	1375
2099	Tsanamoto	Nehaleck	400
2100	Peck	Hansbrough	500
2101	Nopper	Korlann	800
2102	Nelson	Nelson	2750
2103	Nelson	Nelson	2750
2104	Fraser	Fraser	14000
2105	de Urioste	Soule	8623
2106	Duisenberg	Harcom	6220
2107	Cogswell	Conc Eng	5300
2108	Sweet	Coburn	400
2109	Masket	Masket	1500
2110	Levinson	Hoin	500
2111	Mendoza	Mendoza	400
2112	Hotel Turpin	Novelty	400
2113	Malloch	Malloch	4000
2114	Sullivan	Peterson	6400
2115	Legnitto	Liebert	7730

ALTERATIONS

(2079) W TWENTY-SIXTH AVE 300 N Geary. Raise, add and alter dwelling. Owner.....Oscar Heyman & Bro., 742 Market, San Francisco. Architect...None. Day's work. COST, \$800

FRAME DWELLING

(3080) S TWENTY-NINTH AVE 290 E Naples One-story and basement frame dwelling. Owner.....Matthew C. Warnock, 3330 Mission, San Francisco. Architect...None. Day's work. COST, \$1900

FRAME RESIDENCE

(3081) U URBANO DRIVE 140 E Victoria, Lot 6 Blk 12, Ingleside Terrace. One-story and basement frame residence.

Owner.....Urban Realty Improvement Co., 85 Cerritos Ave., S. F. Architect...Jos. A. Leonard, 85 Cerritos Ave., San Francisco. Day's work. COST, \$4000

FRAME RESIDENCE

(3082) W URBANO DRIVE 350 E Victoria, Lot 16 Blk 21, Ingleside Terrace. One-story and basement frame residence.

Owner.....Urban Realty Improvement Co., 85 Cerritos Ave., S. F. Architect...Jos. A. Leonard, 85 Cerritos Ave., San Francisco. Day's work. COST, \$4000

RESIDENCE

(3083) SW WASHINGTON AND Locust. Excavating and grading for

residence.

Owner.....John A. Buck Jr., 503 Market, San Francisco.

Architect...G. A. Applegarth, Claus Spreckels Bldg., S. F.

Contractor...H. N. McClure, 180 Jessie, San Francisco.

Filed Oct. 25, '15. Dated Oct. 22, '15.

On list of each month.....75%

Usual 35 days.....25%

TOTAL COST, \$1450

Bond, none. Limit, as fast as practical

Forfeit, none. Plans and specifications filed.

FRAME FLATS

(3084) E MASON 83-6 S Broadway S 27 E 137-6 N 35-6 W 68-9 S 8-6 W

68-9. All work except lighting fixtures, shades, finish hardware and electric radiators for three-story and basement frame flats.

Owner.....Giacomo De Martini, 862-A Vallejo, San Francisco.

Architect...Paul F. De Martini, 2123 Powell, San Francisco.

Contractor...Paul De Martini, 2869 Octavia, San Francisco.

Filed Oct. 25, '15. Dated Oct. 23, '15.

Frame up\$1780

Brown coated1780

Completed and accepted.....1780

Usual 35 days.....1785

TOTAL COST, \$7125

Bond, none. Limit, 120 days. Forfeit, \$5. Plans and specifications filed.

FRAME DWELLING

(3085) E FORTY-SEVENTH AVE 215 N Cabrillo. Two-story and basement frame dwelling.

Owner.....A. McBarnes, 1536 Haight, San Francisco.

Architect...C. E. Gottschalk, Phelan Bldg., San Francisco.

Day's work. COST, \$2000

WAGON SHED

(3086) N SIXTEENTH 100 E Dolores. One-story frame wagon shed.

Owner.....United Milk Co., Premises

Architect...None. Day's work. COST, \$1000

ALTERATIONS

(3087) NO. 1443 FORTY-EIGHTH AVE Alter store.

Owner.....E. Petzold, 4602 18th, S. F. Architect...None.

Contractor...Geo. W. Stanley, 2060 Market, San Francisco.

COST, \$400

ALTERATIONS

(3088) NO. 256 SUTTER. Alter front.

Owner.....Union Trust Co., Market & Grant Ave., S. F.

Architect...F. H. Meyer, Bankers' Investment Bldg., S. F.

Contractor...Sass & Son, 134 St. Ann, San Francisco.

COST, \$560

APARTMENTS

(3089) S SUTTER 87-6 E Hyde. Four

story and basement reinforced concrete (8) apartments.

Owner.....I. D. Stoff, 321 Bush, S. F. Architect...Albert Schroeffer, Foxcroft Bldg., S. F.

Day's work. COST, \$25,000

FRAME DWELLING

(3090) E TWENTY-NINTH AVE 68 N Irving. One and one-half-story and basement frame dwelling.

Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.

Architect...None. Day's work. COST, \$1500

ALTERATIONS

(3091) NO. 2538 TWENTY-EIGHTH Ave. Raise and alter dwelling.

Owner.....F. Godfrey, Premlea. Architect...None.

Contractor...E. B. Wilson, 2530 28th Ave San Francisco.

COST, \$500

AUTO SHED

(3092) SW BRYANT & SEVENTEENTH Auto shelter shed.

Owner.....Peoples Bread Co., Prem. Architect...None.

Day's work. COST, \$2800

FRAME COTTAGE

(3093) ON NEWCOMB AVE bet Philip and Newhall (See note). All work except excavation, sewer connection, lighting fixtures and shades for one-story frame cottage.

Owner.....Peter Salon, 1900 Quesada, San Francisco.

Architect...None.

Contractor...M. Ostorero, 1887 Palou, San Francisco.

Filed Oct. 27, '15. Dated Oct. —, '15.

Roof on building.....\$347.50

Rough coat plaster on.....347.50

Building completed.....347.50

Usual 35 days.....347.50

TOTAL COST, \$1390.00

Bond, limit, forfeit, none. Plans and specifications filed.

NOTE:—Location should read Newcomb Ave bet Phelps (instead of Philip) and Newhall Sts.

FRAME RESIDENCE

(3094) W EIGHTEENTH AVE 150 S Balboa S 25xW 120. All work for two-story and basement frame residence.

Owner.....John J. Kingwell, Butler Bldg., San Francisco.

Architect...None.

Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.

Filed Oct. 27, '15. Dated 19, '15.

Frame up\$650

Brown coated650

Completed and accepted.....650

Usual 35 days.....650

TOTAL COST, \$2600

Bond, none. Limit, 90 days from Oct. 19. Forfeit, none. Plans and specifications filed.

(Correction in Location)

ALTERATIONS

(3095) NO. 415 BARTLETT. Alter and add to dwelling.
Owner.....Mrs. M. Duncan Premises.
Architect...None.
Contractor...Roberts & Son, 112 Scott, San Francisco.
COST, \$400

CONCRETE FOUNDATION

(3096) S SUTTER 87-6 E Hyde. Concrete foundation.
Owner.....Louis D. Stoff, 321 Bush, San Francisco.
Architect...None.
Day's work. COST, \$750

ALTERATIONS

(3097) NO. 26 POWELL. Alter store.
Owner.....Corona Typewriter Co., Premises.
Architect...None.
Contractor...Mullen Mfg. Co., 64 Rausch San Francisco.
COST, \$400

MARQUISE

(3098) E FILLMORE 250 S Eddy.
Erect marquise.
Owner.....Lyric Theatre, Premises.
Architect...None.
Contractor...Brumfield Elec. Sign Co., 18 1/2th, San Francisco.
COST, \$1375

FRAME SHED

(3099) NO. 3500 TWENTY-THIRD AV One-story frame shed.
Owner.....M. Tsamamoto, Premises.
Architect...R. K. Albertson, 1523 Fair view, San Francisco.
Contractor...Mehaleck & Co., 2316 Folsom, San Francisco.
COST, \$400

(3100) SW PINE AND BATTERY. BALCANY ETC.

Erect balcony and partitions.
Owner.....Peck-James Co., Premises.
Architect...None.
Contractor...Hansbrough-Johnston Co., 244 Monadnock Bldg., S. F.
COST, \$500

FRAME DWELLING

(3101) S MIGUEL 75 W Chenery. One-story frame dwelling.
Owner.....Mrs. C. Nopper, 112 Miguel, San Francisco.
Architect...None.
Contractor...G. Korlann, 112 Miguel, San Francisco.
COST, \$800

FRAME DWELLING

(3102) W FIFTEENTH AVE 50 N Balboa. Two-story and basement frame dwelling.
Owner.....Emil Nelson, 244 Rivoli, San Francisco.
Architect...None.
Day's work. COST, \$2750

FRAME DWELLING

(3103) W FIFTEENTH AVE 75 N Balboa. Two-story and basement frame dwelling.
Owner.....Emil Nelson, 244 Rivoli, San Francisco.
Architect...None.
Day's work. COST, \$2750

FRAME APARTMENTS

(3104) NW FOURTH AVE & HUNGO

Three-story and basement frame (6) apartments.

Owner.....J. K. Fraser, 1945 Turk, San Francisco.
Architect...Chas. J. Rousseau, 16 Kearny, San Francisco.
Contractor...W. S. Fraser.
COST, \$14,000
NOTE:—Foundation started.

(3105) NE VAN NESS AVE AND McAllister 120x109. Reinforcing steel for building.

Owner.....Mrs. Hannah de Urloste.
Architect...J. C. Hladik, Monadnock Bldg., San Francisco.
Contractor...Edward L. Soule Co., Rialto Bldg., S. F.
Filed Oct. 28, '15. Dated Oct. 27, '15.
On 1st and 15th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$3829
Bond, none. Limit, 60 days. Forfeit, \$20. Plans and specifications filed.
FRAME RESIDENCE

(3106) N JACKSON 162-6 W Lyon W 25xN 127-8. All work for two-story and basement frame residence.

Owner.....Wilhelmine D. J. Dulsenberg.
Architect...Herman Barth, 12 Geary, San Francisco.
Contractor...J. J. Harcon, 3640 Geary, San Francisco.
Filed Oct. 28, '15. Dated Oct. 25, '15.

Excavation completed and foundations built\$ 933
Roof boards on 933
Brown coated 933
Interior finish on & doors hung 933
Completed and accepted..... 933
Usual 35 days..... 1555
TOTAL COST, \$6220

Bond, \$3110. Sureties, E. L. Flscher and John Cassaretto. Limit, 90 days from filing. Forfeit, \$5. Plans and specifications filed.

CLASS "A" BUILDING

(3107) SW POLSOM AND TWENTY-sixth W 170 S 150-9 1/4 m or 1 S 86 deg 35 min E 175 m or 1 N 173. Bar steel and wire fabric reinforcing for concrete and fireproofing; to furnish, install and remove all metal forms for slab and joist concrete floor construction and to furnish and place all wires hung for ceilings for three-story and basement Class "A" building.

Owner.....Jas. W. Kerr et al as Board of Trustees of Cogswell Polytechnical College by Lange & Bergstrom, Sharon Bldg., San Francisco.
Architect...Frederick H. Meyer, Bankers' Invst. Bldg., S. F.
Contractor...Concrete Engineering Co.

Filed Oct. 28, '15. Dated Oct. 25, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$5300

Bond, limit, forfeit, none. Plans and specifications, none.

FRAME RESIDENCE

(3108) E COMMONWEALTH AVE 168.67 N Geary N 40 E 167.40 m or 1 S 40 m or 1 W 171.40 m or 1. All work for two-story and basement frame residence.
Owner.....Annie E. Sweet.

Architect...Alfred H. Jacobs, 110 Sutter, San Francisco.
Contractor...Ara W. Coburn, 180 Jessie, San Francisco.

Filed Oct. 28, '15. Dated Oct. 25, '15.
Roof boarding on and stud partitions set\$1856.25
Brown coated and 1st coat of cement on exterior..... 1856.25
Completed 1856.25
Usual 35 days..... 1856.25
TOTAL COST, \$7425.00

Bond, \$3700. Sureties, Walter S. Jamieson and Jno. W. Hatch. Limit, March 1, 1916. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

(3109) W TWENTY-THIRD AVE 274 S Irving. Two-story and basement frame dwelling.
Owner.....E. Masket, 1422 21st Ave., San Francisco.
Architect...None.
Day's work. COST, \$1500

ALTER DWELLING

(3110) NOS. 1638-40-44 GOLDEN GATE Ave. Alter dwelling.
Owner.....Mrs. E. Levinson, 1540 California, San Francisco.
Architect...None.
Contractor...Theo. Hoin, 1449 Hyde, San Francisco.
COST, \$500

ALTERATIONS

(3111) NO. 1222 EGBERT. Alter and repair dwelling.
Owner.....E. Mendoza, Premises.
Architect...None.
Day's work. COST, \$100

ELECTRIC SIGN

(3112) NO. 17 POWELL. Electric sign
Owner.....Hotel Turpin, Premises.
Architect...None.
Contractor...Novelty Elec. Sign Co., 165 Eddy, San Francisco.
COST, \$100

FRAME DWELLING

(3113) FOREST HILL TRACT BLK 12 Lot No. 7. One-story and basement frame dwelling.
Owner.....J. S. Malloch, 110 Jessie, San Francisco.
Architect...M. T. Schwartz, Nevada Bank Bldg., S. F.
Day's work. COST, \$1000

FRAME FLATS

(3114) SE DOLORES & THIRTIETH 30x88. All work except side walk, cement floors, finish hardware, light fixtures and shades for three-story frame flats.

Owner.....Edw. P. and Mary Sullivan, 23rd and Sanchez, S. F.
Architect...Ernest U. Esmann, 21th and Church, S. F.
Contractor...Elmar Peterson, 3520 23rd, San Francisco.

Filed Oct. 29, '15. Dated Oct. 21, '15.
Frame up\$1600
Brown coated 1600
Completed 1600
Usual 35 days..... 1600
TOTAL COST, \$6400

Bond, \$3200. Sureties, Herman J. Axt and H. Martin. Limit, 100 days. Forfeit, \$2000. Plans and specifications filed.

nice Works to E Curtaz and John Doe Curtaz
Oct. 27, 1915—S LOMBARD 110-6 W Baker W 27-6xS 137-6. Leonard Lumber Co to Guillo Fassio and M Cox
Oct. 27, 1915—NO. 111 KEARNY. Braas & Kuhn Co to Mike Eliberger and Hauscholdt Music Co
Oct. 27, 1915—E TWENTY-FIRST Ave 54 S Lake S 25x6 82-6. J H Kruse to Jeanette Yates and W F Yates
Oct. 29, 1915—W FORTY-FOURTH Ave 230 S Anza S 42-6 W 170 NE 42-6 E 161.26. Macdonald Lumber Co to Mrs M A Webster and The Pacific Plastering Co

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Amt.
2252	O'Connor	O'Connor	3000
2253	Czapkay	Bunett	500
2254	Brasch	Brasch	2500
2255	Brasch	Salinger	2500
2256	Brasch	Brasch	2500
2257	Pfrang	Pfrang	3000
2258	Moore	Thomas	6500
2259	Elliott	Davis	2265
2260	Polyschl	Sampson	400
2261	Salinger	Baccus	500
2262	Jensen	Walker	2000
2263	Wheeland	Nickerson	3000
2264	Alexander	International	2410
2264	Palmtag	Engler	5898
2265	Crane	Palmer	46000
2267	Grove	Grove	450
2268	Braun	Harris	400
2269	Howard	Howard	11018
2270	Du Rose	Gavalla	1000
2271	Wieben	Taylor	1000
2272	Wieben	Wieben	1800
2273	Edwards	Eliel	4000
2275	Burgner	Burgner	3000
2277	Baumann	Baumann	2500
2278	Hollidge	Hollidge	2500
2279	Putzar	Putzar	400
2280	Blake	Blake	400
2281	Dallam	Reed	400
2282	Gallagher	Prince	400
2283	Van Britton	MacGregor	400
2284	Boardman	Graf	3520
2285	Fuller	Robline	4000
2286	Union High Schl.	Pearce	45900
2288	Crane	Palmer	2000
2290	Kibbe	Kibbe	500
2291	Batte	Smith	2000
2292	Jespersion	Ditto	2000
2300	Marrano	Brunetti	1200
2301	O'Connor	O'Connor	1500
2302	Bezo	Sinclair	2195
2304	Taylor	Taylor	1750
2305	Trottnow	Winkler	500
2306	Sheldon	Warwick	500
2307	Clyde	Clyde	14000

DWELLING
(2252) W CARLETON 320 S Prospect Ave., Oakland. Two-story 7-room dwelling.

Owner.....J. C. O'Connor, 5314 Bryant Ave., Oakland.
Architect...M. I. Diggs, 2444 Bowditch Berkeley.

Day's work. COST, \$3000

DWELLING
(2253) NO. 625 STANNAGE AVE. (rear) Albany. One-story 3-room dwelling.
Owner.....Mrs. Czapkay.
Architect...None.
Contractor...M. Bunett.

COST, \$500

DWELLING
(2254) E VENTURA 140 N Marin, Albany. One-story 5-room dwelling.
Owner.....M. P. Brasch, 5836 Ocean View Drive, Albany.
Architect...None.
Day's work. COST, \$2500

DWELLING
(2255) E VENTURA 60 N Marin, Albany. One-story 5-room dwelling.
Owner.....M. P. Brasch, 5836 Ocean View Drive, Albany.
Architect...None.
Day's work. COST, \$2500

DWELLING
(2256) E VENTURA 100 N Marin, Albany. One-story 5-room dwelling.
Owner.....M. P. Brasch, 5836 Ocean View Drive, Albany.
Architect...None.
Day's work. COST, \$2500

DWELLING
(2257) SE MARIN & VENTURA, Albany. One-story 6-room dwelling.
Owner.....H. C. Pfrang, 5359 Shafter Ave., Oakland.
Architect...None.
Day's work. COST, \$3000

DWELLING
(2258) SE PERKINS AND JAYNE, Oakland. Two-story 5-room dwlg.
Owner.....Moore & Thomas, 2495 62nd Ave., Oakland.
Architect...None.
Day's work. COST, \$6500

ALTERATIONS
(2259) NO. 671 ELEVENTH, Oakland. Raise cottage and build 6 new rooms below.
Owner.....Jennie Elliott, 640 E-14th, Oakland.
Architect...None.
Contractor...Wm. Davis & Son, 461 E-28th, Oakland.

COST, \$2266

ALTERATIONS
(2260) NO. 1310 MADISON, Oakland. Alterations.
Owner.....Polytechnic Eng. School, Premises
Architect...None.
Contractor...Sampson & Doane, 3502 Grove, Oakland.

COST, \$400

ALTERATIONS
(2261) W BROADWAY 75 S 12th, Oakland. Alterations.
Owner.....A. M. Salinger, 1119 Broadway, Oakland.
Architect...None.
Contractor...Baccus & Kennedy, 565 16th, Oakland.

COST, \$500

DWELLING
(2262) N AGUA VISTA 140 W 38th Ave Oakland. One and one-half-story 7-room dwelling.
Owner.....Lars Jensen, 2043 Rosedale Ave., Oakland.
Architect...None.
Contractor...S. C. Walker, 2226 E-27th, Oakland.

COST, \$2000

FRAME RESIDENCE
(2263) N JEROME ———, Piedmont. Two-story frame residence.
Owner.....C. E. Wheeland, Oakland.
Architect...None.
Contractor...G. Nickerson, 1909 Pacific Ave., Alameda.

COST, \$3000

CLASS. "C" DWELLING
(2264) LOTS 4 AND 5 Map Craig Ppty

and Lots 13 and 17 and W 1/2 Lot 19 Piedmont Tract, Piedmont. Metal windows and metal lattice panels and frame for one-story Class "C" dwelling.

Owner.....Juliette Alexander, 1006 16th, Oakland.
Architect...C. W. Dickey, Central Bk. Bldg., Oakland.

Contractor...International Casement Co. Jamestown, N. Y.

Filed Oct. 22, '15. Dated Oct. 20, '15.
Delivery at work.....\$1807.50
Usual 35 days.....Balance

TOTAL COST, \$2410

Bond, none. Limit, to be shipped in 8 weeks. Forfeit, none. Plans and specifications filed.

DWELLING AND GARAGE
(2264) N KEITH AVE 110 W Pryal Ave, heing Lot 15 McMillan Tract, Oakland. All work for two-story 9-room dwelling and garage.
Owner.....Elizabeth Palmtag, 340 Forest, Oakland.
Architect...W. L. Bradrick, 1201 Colusa Ave., Berkeley.
Contractor...Louis Engler, 2721 Haste, Berkeley.

Filed Oct. 25, '15. Dated Oct. 23, '15.
Frame up and chimney built..... 1/4
Brown coated..... 1/4
Completed and accepted..... 1/4
Usual 35 days..... 1/4

TOTAL COST, \$5898

Bond, \$2919. Surety, Southwestern Surety Ins. Co. Limit, 90 days. Forfeit, none. Plans and specifications filed.

CONCRETE WAREHOUSE
(2265) NE NINTH AND WEBSTER, Oakland. Two-story reinforced concrete warehouse
Owner.....Crane Co., 13th and Webster, Oakland.
Architect...Walter D. Reed, Oakland Bank of Savings Bldg., Oakland.
Contractor...P. A. Palmer, Monadnock Bldg., San Francisco.

COST, \$46,000

ALTERATIONS
(2267) NE FOURTEENTH AND CLAY Oakland. Alterations.
Owner.....O. S. Grove, 2911 Telegraph Ave., Oakland.
Architect...None.
Day's work. COST, \$450

RESHINGLE
(2268) NW SEVENTH & CHESTER, Oakland. Reshingle.
Owner.....F. A. Braun, 733 Wesley Ave., Oakland.
Architect...None.
Contractor...D. F. Harris, 1303 Carri-son, Berkeley.

COST, \$400

MOVE COAL BUNKERS
(2269) FIRST AND MARKET, Oak-land. Move coal bunkers.
Owner.....Howard Co., Premises.
Architect...None.
Day's work. COST, \$11,018

ALTERATIONS
(2270) NO. 574 TWENTY-NINTH, Oakland. Alterations.
Owner.....Chas. H. Du Rose, Prem.
Architect...None.

Contractor..James Gavalla, Oakland.
COST, \$1000

ALTERATIONS

(2271) NO. 1744 FIFTH AVE., Oakland
Alterations.
Owner.....Mrs. L. Rabe, Premises.
Architect...None.
Contractor...C. H. Taylor, 346 Athol
Ave., Oakland.
COST, \$1000

DWELLING

(2272) N GALINDO 300 W Fruitvale
Ave., Oakland. One-story 5-room
dwelling.
Owner.....C. A. Wiehen, 2832 E-22nd,
Oakland.
Architect...None.
Contractor...Alex C. Wiehen, 2832 E-
22rd, Oakland.
COST, \$1800

ALTERATIONS

(2273) NO. 319 BONITA AVE., Pied-
mont. Alterations and additions.
Owner.....D. S. Edwards.
Architect...None.
Contractor...A. F. Eliel, 1767 Broadway
Oakland.
COST, \$4000

DWELLING

(2275) N SAN ANTONIO AVE 100 E
Caroline, Oakland. One-story six-
room dwelling.
Owner.....A. J. Burgner, 1601 High,
Alameda.
Architect...None.
Day's work. COST, \$3000

DWELLING

(2277) N TRASK 40 W Mavis, Oakland
One-story 7-room dwelling.
Owner.....G. W. Baumann, 5360
Trask, Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING

(2278) E BROADWAY 250 S Manila
Ave., Oakland. One-story 7-room
dwelling.
Owner.....Geo. H. Hollidge, 5926 Taft
Ave., Oakland.
Architect...None.
Day's work. COST, \$2500

ALTERATIONS

(2279) NO. 512 PERRY, Oakland.
Alterations.
Owner.....B. Putzar, 525 Perry, Okd.
Architect...None.
Contractor.....J. A. Russell, 3614
Porter, Oakland.
COST, \$400

ALTERATIONS

(2280) NO. 3615 THIRTY-FIFTH AVE
Oakland. Alterations.
Owner.....A. E. Blake, Premises.
Architect...None.
Day's work. COST, \$400

GARAGE

(2281) S ADAMS 400 W Perry, Oak-
land, Garage.
Owner.....Mrs. F. B. Dallam, 430
Adams, Oakland.
Architect...None.
Contractor...C. W. Reed, 2534 Pleasant,
Oakland.
COST, \$400

REPAIRS

(2282) SE TWENTY-FIFTH & TELE-
graph Ave., Oakland. Repairs.
Owner.....N. Gallagher, Premises.
Architect...None.
Contractor...Prince & Barnes, 64 Gar-
land Ave., Oakland.
COST, \$400

ALTERATIONS

(2283) NO. 632 WALSWORTH AVE.,
Oakland. Alterations.
Owner.....Van Britton, Premises.
Architect...None.
Contractor...C. M. MacGregor, 470 13th,
Oakland.
COST, \$400

FRAME DWELLING

(2284) W WALKER AVE. opp Wick-
son, being Lot 27 Piedmont-by-the-
Lake Tract, Oakland. All work for
frame dwelling.
Owner.....W. W. Boardman, S. F.
Architect...None.
Contractor...Edwin C. Graff, Syndicate
Bldg., Oakland.
Filed Oct. 25, '15. Dated Oct. 22, '15.
Execution of contract.....\$ 300
Frame up 900
Brown coated 300
Completed 2020
TOTAL COST, \$3520

Bond, none. Limit, 90 days after Oct.
24. Forfeit, none. Plans and speci-
fications filed.

DWELLING

(2285) E THOMAS 245 S Prospect,
Oakland. Two-story 8-room dwlg.
Owner.....Fuller & Robbins, Athens
Hotel, Oakland.
Architect...None.
Day's work. COST, \$4000

TRAINING BUILDING

(2286) HAYWARD. All work for 1-
story gymnasium and manual train-
ing building.
Owner.....Union High School District
Architect...Henry C. Smith, Humboldt
Bank Bldg., S. F.
Contractor...R. H. Pearce.
Filed Oct. 27, '15. Dated Oct. 22, '15.
Payments not given.....
TOTAL COST, \$—
Bond, \$2005. Surety, Pacific Coast
Casualty Co. Limit, forfeit, none.
Plans and specifications filed.

BRICK WAREHOUSE

(2288) NE NINTH & WEBSTER E 110
XN 100, Oakland. All work for two-
story and basement reinforced con-
crete and brick warehouse.
Owner.....Crane Co., 13th and Web-
ster, Oakland.
Architect...Walter D. Reed, Oakland
Bank of Savings Bldg.,
Oakland.
Contractor...P. A. Palmer, Monadnock
Bldg., San Francisco.
Filed Oct. 27, '15. Dated Oct. 16, '15.
Payments once a month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$45,900

Bond, \$34,425. Surety, New England
Equitable Insurance Co. Limit, 100
days. Forfeit, \$15. Plans and speci-
fications filed.

ADDITION

(2290) NO. 3064 FLORIDA, Oakland.
Addition.

Owner.....Geo. R. Kibbe, Premises.
Architect...None.
Day's work. COST, \$500

DWELLING

(2291) N BROOKDALE AVE 50 E
Courtland Ave., Oakland. One-story
6-room dwelling.
Owner.....Thos. A. Batte, Walnut nr
Lilac, Oakland.
Architect...None.
Contractor...O. G. Smith, 1540 Broad-
way, Oakland.
COST, \$2000

DWELLING

(2292) N THIRTY-EIGHTH 675 W
Market, Oakland. One and one-half-
story six-room dwelling.
Owner.....Jespersion & Dippe, 878
54th, Oakland.
Architect...None.
Day's work. COST, \$2000

DWELLING

(2300) E DESMOND 50 N 49th, Oak-
land. One-story 4-room dwelling.
Owner.....E. Marrano, Oakland.
Architect...None.
Contractor...G. Brunetti, 443 43rd, Okd.
COST, \$1200

DWELLING

(2301) E CARLETON 160 S Prospect
Ave., Oakland. Two-story 8-room
dwelling.
Owner.....J. C. O'Connor, 5314 Bry-
ant Ave., Oakland.
Architect...M. I. Diggs, 2444 Bowditch
Berkeley.
Day's work. COST, \$4500

FRAME DWELLING

(2305) E LIZZIE, bet. 5th and 6th Sts.,
Livermore. All work for one-story
frame dwelling.
Owner.....Paul Bago, Livermore.
Architect...None.
Contractor...J. Bailey and R. Sinclair,
Livermore.
Filed Oct. 28, '15. Dated Oct. 25, '15.
Ready for sheathing.....\$545
Plastered 550
Completed and accepted..... 550
Usual 35 days..... 550
TOTAL COST, \$2195
Bond, none. Limit, 60 days. Forfeit,
none. Plans and specifications filed.

DWELLING

(2304) N SONOMA 88 W Ventura, Al-
bany. One-story 5-room dwelling.
Owner.....W. G. Taylor,
Architect...None.
Day's work. COST, \$1950

ADDITION

(2305) NO. 3729 MAGEE AVE., Oak-
land. Addition.
Owner.....L. D. Trotanow, 5636 E-
20th, Oakland.
Architect...None.
Contractor...J. J. Winkler, 710 18th,
Oakland.
CCST, \$500

DWELLING

(2306) NO. 4258 KANNING, Oakland.
One-story 4-room dwelling.
Owner.....Mrs. Sheldon, Premises.
Architect...None.
Contractor...J. M. Warwick, 1654 82nd
Ave., Oakland.
COST, \$500

APARTMENTS

(2307) SE THIRD AVE AND E-15TH,
Oakland. Three-story 12-room
apartments.

Owner.....Clyde Improvement Co., 110
Sutter, San Francisco.
Architect...Rousseau & Rousseau, 110
Sutter, San Francisco.
Day's work. COST, \$14,000

Building Contracts Awarded.

Berkeley.

No.	Owner	Contractor	Amt.
2296	Swenson	Swenson	1100
2297	Brown	Verne	3952
2299	Morch	Butterfield	8000
2293	Schmit	Pearson	850
2294	Jergensen	Nelson	2200
2295	Hussey	Cederborg	4406
2296	Peretti	Peretti	800
2297	Ironsides	Badger	1600
2298	Hillbrandt	Pinkerton	1400
2299	Whinnery	Mason	3000
2302	Welles	Tupper	5000
2305	Alcatraz Imp Co.	Patton	954

DWELLING

(2296) N DELAWARE 70 W McGee,
Berkeley. One-story 7-room dwlg.
Owner.....Frank A. Swenson, 1637
Delaware, Berkeley.
Architect...None.
Day's work. COST, \$1400

DWELLING AND GARAGE

(2287) LOT 3 Boyd Court, Berkeley.
All work for two-story 8-room dwell-
ing and garage.
Owner.....George A. and Gertrude L.
Brown, 651 3rd Ave., San
Francisco.

Architect...J. C. Kincade, 6604 Dana,
Oakland.
Contractor..Verne Dildine, 6243 Col-
lege Ave., Oakland.

Filed Oct. 27, '15. Dated Oct. 25, '15.
Frame up 1/4
Brown coated 1/4
Completed and accepted..... 1/4
Usual 35 days..... 1/4

TOTAL COST, \$3952

Bond, \$2000. Surety, National Surety
Co. Limit, 70 days. Forfeit, none.
Plans and specifications filed.

FRAME APARTMENTS

(2289) LOT 3 Map Santa Fe Tract No.
5 Blk 5, Berkeley. All work for three
story frame apartments.

Owner.....Eugenia Morch, Berkeley.
Architect...None.
Contractor..Butterfield & Barker, Bkly
Filed Oct. 27, '15. Dated Oct. 19, '15.

Frame up 1/4
Brown coated 1/4
Completed and accepted..... 1/4
Usual 35 days..... 1/4

TOTAL COST, \$8000

Bond, none. Limit, 90 days after Nov.
1. Forfeit, none. Plans and specifica-
tions filed.

ALTERATIONS

(2292) No. 2323 ROSE TERRACE, Ber-
keley. Alterations and additions.
Owner.....James J. Schmit, Premises.
Architect...None.
Contractor..Ben Pearson, 2403 Grant,
Berkeley.

COST, \$850

DWELLING

(2294) W GROVE 260 N Vine, Berkeley
One-story 5-room dwelling.

Owner.....A. Jergensen, 67th, E San
Pablo Ave., Berkeley.

Architect...None.

Contractor..H. P. Nelson, 2941 Grove,
Berkeley.

COST, \$2200

DWELLING

(2295) W COLLEGE AVE 53.59 N
Russell N 40xW 108, Berkeley. All
work for dwelling.

Owner.....Samuel William and Eliza-
beth Lillian Hussey.

Architect...C. M. Norgrove, 2220
Roosevelt Ave., Berkeley.

Contractor..Cederborg & Anderson,
1033 Poplar, Berkeley.

Filed Oct. 28, '15. Dated Oct. 25, '15.
Frame up 1/4
Brown coated 1/4
Completed and accepted..... 1/4
Usual 35 days..... 1/4

TOTAL COST, \$4406

Bond, none. Limit, 85 days. Forfeit,
none. Plans and specifications, none.

DWELLING

(2296) N DALTON 80 W 12th, Ber-
keley. One-story 4-room dwelling.
Owner.....E. Peretti, 1268 Dalton,
Berkeley.

Architect...None.
Day's work. COST, \$500

DWELLING

(2297) W VALLEY 350 N Channing,
Berkeley. One-story 5-room dwlg.
Owner.....William Ironside, 2320 Val-
ley, Berkeley.

Architect...None.
Contractor..Thos. N. Badger, 2946 Lin-
den Ave., Berkeley.

COST, \$1600

DWELLING

(2298) E SPAULDING 200 W Channing,
Berkeley. One-story 5-room dwlg.
Owner.....J. W. Hillbrandt, Univers-
sity Apartments, Berkeley.

Architect...None.
Contractor..J. A. Pinkerton, 1931
Berryman, Berkeley.

COST, \$1400

DWELLING

(2299) N EL DORADO 40 W Lassen,
Berkeley. One-story 6-room dwlg.
Owner.....Kate Whinnery, 1936 El
Dorado Ave., Bkly.

Architect...None.
Contractor..Mason-McDuffie Co., Shat-
tuck Ave and Addison,
Berkeley.

COST, \$2000

DWELLING

(2302) W CONTRA COSTA AVE 1200
N Los Angeles, Berkeley. Two-story
seven-room dwelling.

Owner.....Anne L. Welles.
Architect...L. F. Hyde, 2715 26th Ave.,
Oakland.

Contractor..Thad M. Tupper, 2310
Russell, Berkeley.

COST, \$5000

ALTERATIONS

(2308) SE ALCATRAZ AVE & ADE-
line, Berkeley. All work for altera-
tions to two-story apartments.

Owner.....Alcatraz Improvement Co.
Architect...None.

Contractor..George W. Patton, Bkly.
Filed Oct. 29, '15. Dated Oct. 25, '15.

Mosaic laid, marquis placed and
doors placed \$147.20
Usual 35 days..... 447.20

TOTAL COST, \$954.40

Lond, \$500. Surety, American Surety
Co. Limit, 20 days. Forfeit, \$10.
Plans and specifications filed.

Building Contracts Awarded

Alameda.

No.	Owner	Contractor	Amt.
2274	Connolly	Owner	500
2276	Dunn	Morrison	450

ALTERATIONS

(2274) NO. 1838 ALAMEDA AVE., Ala-
meda. Alterations.

Owner.....E. P. Connolly, Premises.
Architect...None.

Day's work. COST, \$500

ALTERATIONS

(2276) NO. 1610 CENTRAL AVE., Ala-
meda. Alterations.

Owner.....Jas. Dunn, Premises.
Architect...None.

Contractor..I. K. Morrison, 1528 Pacific
Ave., Alameda.

COST, \$450

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED

AMOUNT

Oct. 23, 1915—LOT 2 Except W 7 Map
Oak Vale Claremont, Bkly. S W
Waterhouse to L A Rose, Oct. 14, 1915

Oct. 23, 1915—LOT 2 except W 7 Map
Oak Vale Claremont, Bkly. S W
Waterhouse to L A Rose, Oct. 14, 1915

Oct. 23, 1915—LOT 9, Map Oak Vale,
Claremont, Bkly. S W Waterhouse
to L A Rose.....Oct. 14, 1915

Oct. 23, 1915—LOTS 25 BLK 14 Map
San Pablo Park, Bkly. Arvid E
Olson to whom it may concern.....Oct. 22, 1915

Oct. 25, 1915—LOTS 53 AND 54 of
Resbdvn Blks 10 and 11 Howe Trct
and ptn Lots 1 and 25 Blk "A" Map
No. 1, Highland Terrace, Oakland.

Daniel F O'Connell to whom it may
concern.....Oct. 23, 1915

Oct. 25, 1915—NO. 1433 ASHBY ST.
on Cor. Ashby Ave and Brown St.,
Land Oakland View Homestead
Bkly. B A and J M Dice to whom
it may concern.....Oct. 23, 1915

Oct. 27, 1915—LOT 5 BLK 16 Thous-
and Oaks, Oakland Tp. W H
Fenner by W L Brodrick to F R
Peak (as recorded).....Oct. 21, 1915

Oct. 27, 1915—PLOT 12 and ptn Plot
10 Boardman's Map Rancho Arroyo
de la Alameda. Masonic Homes of
California to Thos H Day's Sons.
.....Oct. 15, 1915

LIENS FILED

ALAMEDA COUNTY.

Oct. 23, 1915—LOTS 8 TO 24 INCL
and ptn Lots 4, 5, 6, 7 and 25 to 32,
Incl. Map R J McMullin's Sbdvn Blk
576, Okd. J E Brettwiser vs Pacific
Coast Shredded Wheat Co., \$93.30

Oct. 25, 1915—LOT 20 BLK 22 Map
Northbrae, Albany. J D McTeer vs
W N Taylor.....\$17.25

Oct. 27, 1915—PTN 273.24 SE Inter-
section E Oakland Ave and N and
W Line Bay Place or Lee St. NE
62.64 SE 2.50 NE 13.50 NW 2.50 NE
6.666 NW 20.50 NE 172.15 SE 204.21
SW 343.20 NE 19.17, Okd. Hogan

Lumber Co vs W A Boole and New
Piedmont Swimming Baths...\$677.65
Oct. 27, 1915—LOT 17 and E 20 Lot
18 Map No. 3 of Shdvn ptn Central
Oakland Tract E of Telegraph Ave,
Oakland, Oakland Bldg & Invest-
ment Co vs Henry A and Helen G
Ironsides\$510
Oct. 28, 1915—LOT 15 BLK 4 Map
Brookdale Terrace, Okd. John
Macneur vs H C Howland.....\$70
Oct. 29, 1915—PTN BLK "D" Map
Ass'n, Okd. John P Maxwell (Max-
well Hardware Co) vs New Pied-
mont Swimming Baths and W A
Boole\$983.46

BUILDING CONTRACTS.

SAN MATEO COUNTY.

RESIDENCE AND GARAGE
GLENWOOD AVE., Menlo Park. Ex-
cavation, foundation, fireplace, brick
work, flues, carpenter work, hard-
ware, window shades, tin and sheet
metal work, plumbing, glass, etc.,
garage, chicken enclosures, etc., for
one-story residence and garage.
Owner.....Henry Meyer, San Fran-
cisco.

Architect...Milton Lichtenstein, 111
Ellis, San Francisco.
Contractor..Weeden Bros., Menlo Park.
Filed Oct. 21, '15. Dated Oct. 19, '15.
When framed\$2000.
When plastered2500
When completed2620
Usual 35 days.....2330
TOTAL COST, \$9510

Bond, \$5000. Surety, The Aetna Acci-
dent & Liability Co. Limit, forfeit,
none. Plans and specifications filed.

ADDITIONS

ATHERTON. All work for additions
and alterations to residence.
Owner.....Dr. James G. Sharp, Prem.
Architect...W. Garden Mitchell and
Charles Ed Hodges, Bank-
ers' Invst. Bldg., S. F.
Contractor..Currie & Currie, 698 33rd
Ave., San Francisco.

Filed Oct. 23, '15. Dated Oct. 19, '15.
Frame up\$1377
Rough plastered1377
When completed1377
Usual 35 days.....1377
TOTAL COST, \$5508

Bond, \$2754. Surety, Globe Indemnity
Co. of New York. Limit, 90 days. For-
feit, \$5 per day. Plans and specifica-
tions filed.

FRAME RESIDENCE & GARAGE

LOTS 18 and 19 SUB NO. 1, San Mateo
Park, San Mateo. All work for two-
story and basement frame residence
and garage.
Owner.....F. M. Doak, San Mateo Pk.
Architect...Will H. Toepke, 46 Kearny
St., San Francisco.
Contractor..William S. Leadley, San
Mateo.

Filed Oct. 27, '15. Dated Oct. 23, '15.
When framed\$1265
1st coat plaster1365
When plastered1365
When completed1365
Usual 35 days.....1820
TOTAL COST, \$7280
Bond, \$2640. Sureties, B. L. Grow and
Chas. E. Hart. Limit, 70 days. Forfeit,
\$10. Plans and specifications filed.

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED ACCEPTED
Oct. 22, 1915—LOT 18 BLK 21, Red-
wood Highlands. Redwood High-
lands Co to whom it may concern
.....Oct. 19, 1915
Oct. 22, 1915—"CAROLANDS," Hills-
borough, Harriett Pullman Carolan
to Fordeir Cornice Works.....
.....Oct. 16, 1915
Oct. 27, 1915—PTN SECTIONS 22, 23,
26 and 27 Twp 3, South Range 5,
West M D M. South San Francisco
Land & Improvement Co to San
Francisco Bridge Co.....Oct. 20, 1915

RELEASE OF LIENS.

SAN MATEO COUNTY.

RECORDED AMOUNT
Oct. 25, 1915—SECOND AVE., San
Mateo. Rousseau & Rousseau, Inc.,
to A Haradat and Mrs A B Haradat.....\$136

BUILDING CONTRACTS.

CONTRA COSTA COUNTY.

FRAME AND STUCCO BUILDING
COR. MT. DIABLO AND FERNANDO,
adjacent to Fuller's garage, City of
Concord. Materials to complete
building as designated by plans and
specifications filed with contract,
owners to do foundation work and
furnish material for same for one-
story frame and stucco building with
crushed brick and asphalt roofing.
Owner.....Guy, Palmer & Ford, Grant
near Salvio St., Concord.
Architect...None.

Contractor..C. Randolph Hook, Walnut
Creek, Cal.
Filed Oct. 25, '15. Dated Oct. 22, '15.
Frame up\$368.75
Exterior plastering and interior
plastering done368.75
Completed and accepted.....368.75
Usual 35 days.....368.75
TOTAL COST, \$1475.00
Bond, \$750. Sureties, James S. Hook
and Louise Hook. Limit, 65 working
days. Forfeit, none. Plans and speci-
fications filed.

COMPLETION NOTICES.

MARIN COUNTY.

RECORDED ACCEPTED
Oct. 22, 1915—SAN RAFAEL. Clarence
W Gibson to J E Warner.....
.....Oct. 16, 1915

BUILDING CONTRACTS

FRESNO COUNTY.

DWELLING
NO. 2221 SAN JOAQUIN ST., Fresno.
Dwelling.
Owner.....Dr. Floyd Burkes.
Architect...None.
Contractor..J. M. Ackerman, 855 T St.,
Fresno.

COST, \$1100

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED ACCEPTED
Oct. 27, 1915—LOTS 17, 18, 19 BLK 2
Osburn Tract, Fresno. Wm A Otto
et al to Lindquist & Cooper.....
.....Oct. 23, '915
Fresno. F P Black to R L Felchin
.....Oct. 20, 1915
Oct. 22, 1915—LOTS 17 TO 20 BLK 97,
Fresno. J C Phelan to whom it
may concern.....Oct. 16, 1915

LIENS FILED.

FRESNO COUNTY.

RECORDED AMOUNT
Oct. 26, 1915—LOTS 28 AND 29 E ½
Lot 30 Blk 11, College Addition,
Fresno. J J Carruth, \$22; Valley
Hardware Co, \$16; Fred Malmburg,
\$28 vs Ernest and Sarah Pickford
Oct. 26, 1915—LOTS 28 AND 29 E ½
Lot 30 Blk —, College Addition,
Fresno. Fresno Hardware Co, \$41;
M E Summers, \$215 vs E A Pick-
ford et al and Norris & Wallace
Oct. 26, 1915—LOTS 33 TO 36 Sycam-
ore Ranch Tract, Fresno. S A
Greene vs Edd Haag, H J Gouge
and J E Blenkiron.....\$86
Oct. 27, 1915—LOTS 25, 29 E ½ Lot 30
Blk 11, College Add'n, Fresno. Ma-
darys Planing Mill, \$1691; Fresno
Hardware Co, \$41 vs A E Pickford
et al and Norris & Wallace.....
Oct. 27, 1915—N ¾ OF NW ¼ OF SE
¼ of Sec 14-13th and 18th, Fresno.
Barrett-Hicks Co vs Frank Cramer
and W A Green.....\$55
Oct. 27, 1915—LOTS 29 AND 39 BLK 1
Engelwood Add'n, Fresno. Valley
Lumber Co vs Lavenia F Nieman,
R A Schrugnal and Harry Home-
wood\$489
Oct. 22, 1915—LOTS 28 AND 29 and
E ½ Lot 30 Blk 11, College Add'n
Fresno. Valley Lumber Co, \$1246;
Madarys Planing Mill, \$1691 vs A
E and Sarah Pickford and Norris
& Wallace

BUILDING CONTRACTS.

SACRAMENTO COUNTY.

BRICK STORE, ETC.
NO. 400 M ST., on N 60 feet Lot 1 Blk
M, N, 4th and 5th Sts., Sacramento.
All work for two-story brick store
and lodging house (33 rooms).
Owner.....Mary T. Lykins, Stanford
Court Apts., San Francisco.
Architect...None.
Contractor..Wm. Murcell, Ochsner Bldg.
Sacramento.

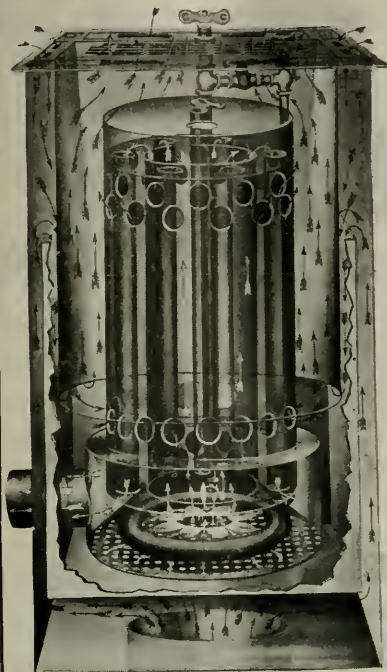
COST, \$11,076

BRICK AND FRAME TENEMENTS
NO. 624 M ST., on W 30 feet of N ½ Lot
4 Blk M, N, 6th and 7th Sts., Sacra-
mento. Three-story brick and
frame tenements (12 apartments).
Owner.....Frank Mead, Sutterville
Road, Cor. Mead, Sacra-
mento.
Architect...None.
Day's work.

COST, \$7000

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Has 3-in. Outlet Vent
Fits in space between floor joists
Hangs from Register which lays flush with floor.

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- NOTE—Style A and B are built alike except for position of fresh air intake.
- C. Wall Furnace with fresh air intake at bottom. For artificial gas only.
- D. Wall Furnace with fresh air intake at back. For artificial gas only.
- NOTE—Style C and D are built alike except for position of fresh air intake.

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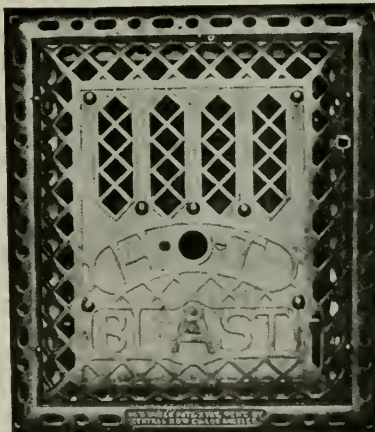
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- Instantaneous**—Furnishes an instantaneous and continuous supply of
- Sanitary**—fresh warm air free from gas fumes, odors, smoke or dust.
- Hygienic**—Maintains an even temperature necessary to health and comfort.
- Scientific**—Built like a real hot air furnace reduced in size.
- Convenient**—Operated from inside of room, saving many steps to cellar.
- Simple**—Any child 10 years of age can operate, turn the key and apply match.
- Economical**—Wall furnace burns 10 cubic feet and floor furnace 20 cubic feet of gas per hour.
- Efficient**—Each furnace will heat from 2 to 5 rooms or from 3,000 to 9,000 cubic feet of space.
- Fireproof**—Has four thicknesses of metal and three air spaces of one inch each between fire and wood; fire is 20 inches from floor.
- Up to Date**—Uses exclusively the Johnson Hot Blast Burner, recognized as the most efficient ever constructed.
- Durable**—Is made from best grade of metal to be obtained.
- Finish**—Register electro plated Flemish Brass. The finish that lasts.
- Installation**—Can be installed by any gas appliance dealer, plumber, tinsmith or hardware merchant at nominal cost.
- Retail Prices**—Wall Furnace, any style \$22.50
Floor Furnace, any style 30.00
Installations and fittings extra.



WALL FURNACE STYLE C
Size of Wall Furnace front is 15x19 inches, with a recessed portion of 11x17x1 inches between studding. Recessed portion has a 2-inch vent opening at top and a fresh air intake 3x12 inches at bottom operated with damper in front. Both vent and fresh air intake pipes go between studding.

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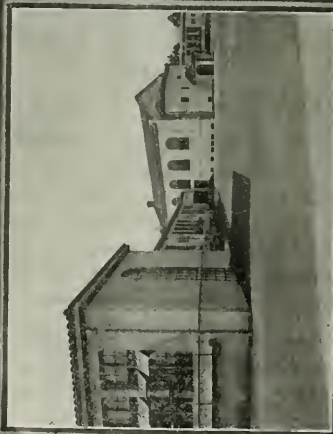
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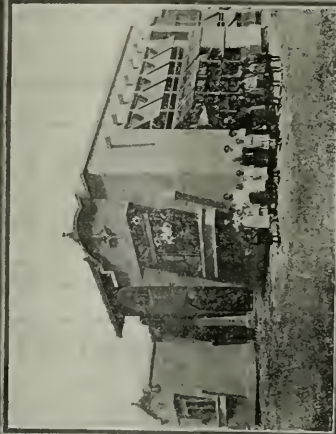
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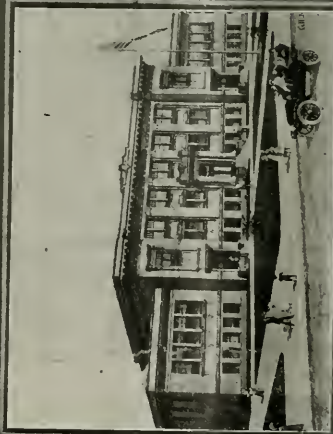
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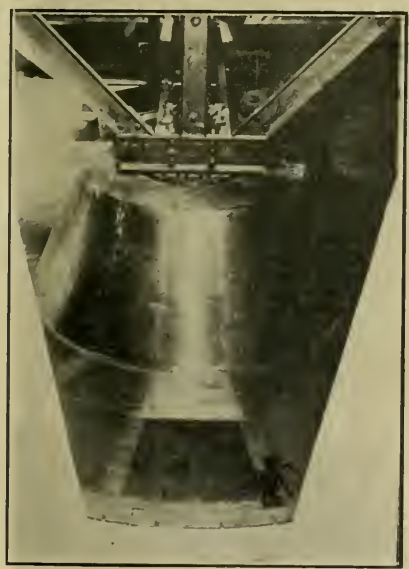
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By Homer Hamlin

Department of Street Improvements, Plans and Proceedings in Los Angeles

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By Fletcher Hamilton

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The Disposal Of Suspended Matters In Sewage.*

By Rudolph Hering, D. Sc., Mem. Am.
Soc. C. E., New York, N. Y. U. S. A.

Since the first World's Fair held in London, 1856, the centers of population of all civilized countries have grown to such proportions and so rapidly that many new problems concerning city works and their management have presented themselves for solution.

Among the more important of these problems are those which comprise the collection and proper disposal of the great variety and mass of refuse materials, the removal and treatment of which in large communities often presents a formidable task.

This task is not alone a financial one relating to the economical collection, removal and treatment. It is also a sanitary one, in order to prevent any injury to health and all nuisances incidentally liable to occur. Health may be injured by the spread of disease germs which get into the refuse from sick persons and animals; and various nuisances may be created by a delayed removal, causing chemical changes which create offensive products.

Since such undesirable results have arisen, efforts have been made to obviate them, sometimes successfully, when the conditions were simple and the bulk was small, and sometimes unsuccessfully, when the conditions were complex and involved.

It is less than a decade since we have been able to say that it is not only possible but economically practicable to collect all city refuse, solid and liquid, at the sources for delivery at suitable points, and to finally dispose of its parts so that nowhere along the line either a serious danger to health or a nuisance need exist.

The present paper is limited to a discussion of the treatment of the liquid refuse of a city, usually called sewage, the subject of removing solid refuse having been fully discussed at the International Congress on Hygiene and Demography, held in Washington in 1912. It is further limited to the brief assembly of the essential principles which govern the design and operation of sewerage works, with special reference to securing healthful results and preventing nuisances from the sus-

pended matter contained therein.

Sewage is the dirty waste water rejected by a community and serving as a carrier of light solid matter in suspension which is discharged from water-closets, bath tubs, wash bowls, sinks, etc. It contains, roughly, 1 part of organic matter and 1 part of mineral matter carried between 1,000 and 5,000 parts of water, this difference indicating the variation in different cities.

The organic matter, which alone concerns the question of health and nuisance, differs materially in quality. Some of it is unstable, breaks down quickly and may putrefy within a day, such as certain animal and vegetable liquids; and some is stable and decomposes very slowly, such as hair, wood fibre, epidermis, cartilage and the like.

The unstable matter causes all the nuisances arising from sewage, as it has but a slight resistance to decomposition. It first absorbs oxygen with avidity to form more stable compounds; these have no offensive odor of themselves nor do they produce gases with foul odors. When the conditions have become such that oxygen for absorption is no longer available in the medium holding the unstable matter, other chemical processes become active, producing chiefly hydrogen compounds. Among the latter we have those which produce foul smelling gases and others which do not.

The dangers to health lie in the transportation to other points of pathogenic bacteria contained in the fresh sewage from sick persons and in the subsequent possibility of their once more getting into the bodies of human beings and higher animals. Bacteria not only adhere to particles of solid matter, but unless disturbed, remain in any liquid carrying them. It is possible that solid particles of sewage may be stranded in sewers, be held back and finally be blown away by an air current, enter the atmosphere and thus, by contact, cause a new infection. It is also possible that liquids may splash and throw bacteria into the air. In both cases the danger of transmitting disease is extremely small if the sewers have smooth interior surfaces, no opportunities for eddies to form, and good grades to cause a rapid

velocity from the sewage receptacles to the outfall. These conditions have been advocated for many years and are the same which will also prevent nuisances.

Sanitary Collection and delivery of Sewages.

Our wash and bath rooms, toilets, kitchens, laundries, etc., are now supplied with fixtures in such a manner that offensiveness can be entirely excluded. This is done simply by giving them forms and surfaces upon which the dirty water can flow away quickly, no solid particles remain on the surfaces and a final flushing with clean water will restore the receptacles to their condition before use.

The pipes carrying into the sewers the sewage thus generated should, likewise, carry it away quickly and completely. The necessary means for accomplishing this are first, smooth and evenly curved and pointed pipes, and second, good currents of air circulation. The former prevents the catching, retention and consequent putrefaction of solid particles, the latter tends to clean up the exposed surfaces which are otherwise usually covered with slimy growths. This air circulation is automatically established by providing openings to the sewer from the street surfaces, and openings to the house pipes above the roofs of buildings. The air currents are produced by differences of temperature within the sewers, on the street surfaces and above the roofs of buildings, and also by sudden discharges of large quantities of water down the house pipes. It will readily be seen that the currents cannot always be in the same direction. When the outside air is colder, the current must be upwards and vice versa. The reversal of air flow through the house pipes is not objectionable if the sewage is not putrescent, no foul deposits are in the pipes and ventilation is free and ample.

It was formerly strongly opposed, particularly in England, to have street sewer air pass up through the house pipes to the roof. It was feared that street sewer air might enter rooms through imperfect pipes or through the fixtures if their traps were not in order. This opposition is still fre-

*Paper read at the International Engineering Congress, San Francisco, September, 1915.

quently maintained. On the European Continent and in many American cities, the ventilation of street sewers through house pipes has, however, been found advantageous and the practice is growing. The house pipes are kept much cleaner, the slimy coating is largely removed and the escaping air above the roofs is less odorous than when the house pipes are trapped at the bottom against the street sewer. A careful examination made in this country proved that the escaping air from house pipes contains practically no disease germs or other bacteria and has no offensive odor if the ventilation is good.

After the house sewage enters the street sewers it should be kept flowing without any interruption. This result is readily gotten if the sewers are properly designed and built. The surfaces should be smooth. Vitrified clay pipes, used for small sewers more than any other kind in this country, have the smoothest surfaces. Brick sewers furnish a rough surface even if the joints are carefully made and the bricks are of the best. With good flushing and brushing down at proper intervals they may, however, be kept in a good condition, so as to entirely prevent offensive odors from the suspended sewage matter therein and disease germs from being retained in a virile condition.

Flushing is another important requirement to prevent offensive odors from the suspended matters in sewage. Above ground, within our houses and on our hodies, we use ample amounts of water for cleansing purposes. Below ground in sewers, ample flushing is equally and even more necessary, due to the relatively greater concentration of unstable decomposing suspended matter. Unfortunately, in our country the flushing of sewers has not been given as much attention as is desirable. In almost all European countries, both small and large sewers are flushed frequently, varying from several times a week to once in one or two months. The results of this frequent flushing are very satisfactory and the money is willingly appropriated.

In our country, particularly in smaller cities, we have extensively introduced automatic flush tanks at the heads of all pipe sewers. While these tanks keep the upper ends of the sewers clean and free from deposited suspended matter in a very satisfactory manner, they do not keep the larger sewers lower down the line free from deposits and odors. In this respect our sewer systems could be greatly improved and the odors therefrom materially diminished by introducing flushing arrangements.

When collecting sewers are very long and the distance to the outfall is great, which fact is generally associated with flat grades and slow velocities, we have almost always some putrefaction and offensive odors arising near the lower end. During the long run the oxygen has become exhausted and hydrogen compounds, notably sulphureted hydrogen, are developed. This condition may be improved by emphasizing several remedies above mentioned. Still another expedient is practicable, by replenishing, through artificial

aeration, the dissolved air, from which the oxygen has been exhausted and putrefaction has been initiated. Experiments have been made recently, both in England and in America, to accomplish this purpose and have resulted in more or less success. Where it is possible to force air into a sewage pumping main, under a pressure of at least one atmosphere, good results have been obtained. The air is distributed throughout the water mass, evidenced by the fact that when the pressure is released, the excessive air causes a sewage of milk-like appearance from which the air bubbles soon disappear. If sewage bacteria are present in sufficient quantities, an accelerated oxidation of the dissolved organic matter takes place, and the distance of flow before putrefaction begins is lengthened.

Distributing air into the sewage within the flowing section under ordinary pressures seems as yet to have given only moderately good results.

There is still another method available by which sewage oxidation can be facilitated and putrefaction retarded, should the sewage have to flow a long distance to works for treatment. Incidentally, the expense of the final treatment would also be reduced thereby.

When we consider that but very little of the organic matter which is discharged into sewers at the house is dissolved, and that about one-half of it is dissolved when the sewage reaches the outfall of an average city, and also, that dissolved matter withdraws oxygen from the water more quickly than the suspended matter, we must conclude that a removal of the suspended matter by fine screening higher up the sewer, before much is dissolved, should be of benefit. Fine screens near the beginning of the main sewers might, for instance, not only prevent foul odors from the sewage near the lower districts, but prevent also the necessity and expense of works for oxidizing the amount of dissolved matter which is thus eliminated. Whether or not this expedient will be economical must be determined in each case.

The means for removing suspended matter from sewage are settling basins and fine screens. Settling basins require space in which the flowage can be brought to almost a standstill, and give sufficient time for the suspended matter to drop to the bottom of the basin. Unless this matter reaches a second basin for separate decomposition (see below under "Imhoff Tank") it must be frequently removed, which in the upper parts of a city's sewage system would generally be objectionable. The superiority of settling basins over screens lies chiefly in facilitating the deposit of the finer and water-saturated parts of the organic matter, which screens generally allow to pass on, and which is a condition in the lower parts of a city's system. The particles of suspended matter have their largest size near the sewage origin, and more particles may, therefore, be caught by a screen before a run in the sewer has begun to break them up. Most of this unbroken matter is lighter than water. It first floats and settles, if at all, after it is thor-

oughly water-logged. Therefore, it would appear that fine screens can be more effective in removing suspended matter near where main sewers begin than where they discharge, and that settling basins can be more effective near the latter points.

The above discussion has covered the general principles concerning suspended matter which should be considered when collecting sewage from an inhabited district, if a complete and rapid delivery to the outfall is to be secured under conditions which are both economical and non-odorous. We have now to mention the general principles which must be considered when finally disposing of the sewage.

Sanitary Disposal of Sewage.

Greater nuisances have been caused by improper sewage disposal than in the collecting system, and yet the ways of avoiding them do not differ much in expense or attention.

It was stated at the outset that we must place the sewage under such conditions that its decomposition will be facilitated by contact with oxygen, and in the absence of oxygen, by such combinations of hydrogen as will produce no offensive odors.

All processes of sewage treatment and disposal, if they are to be satisfactory, permanent and economical, should require, first, a separation from each other of the floating matter, of the settling matter and of the liquids.

As these three parts of the sewage are materially different, one being solid and light, one solid and heavy and one liquid, the methods of economical treatment, in order to make them inoffensive, will also be different in nearly all cases and, therefore, a separation is generally to be recommended. As yet it is not always made, and in some places it may not yet be of sufficient importance to justify the additional expenditure. The drift of opinion, however, is clearly in the direction of separation and we should endeavor to design our works accordingly.

The floating matter can be retained with little trouble and expense, either by screens or in settling tanks. Being often offensive, its best disposition is usually by fire or burial.

The settling matter, which forms the so-called sludge, is that part of the sewage which has always given the greatest amount of trouble. It has constituted the greatest nuisance, until within a few years ago, has successfully defied a treatment which would allow of its inoffensive disposal.

The bulk of the sludge does not naturally decompose by oxidation. Its exposure to the atmosphere allows but a thin film to oxidize at the surface, but the exposure permits it to take up many species of bacteria, some of which cause offensive putrefaction. Many ways and means have been tried for the last fifty years, both in England and Germany, to get inoffensive sludge decomposition. A solution was at last found in an expedient which allows the sludge to decompose under water with the exclusion, practically, of all fresh sewage and air.

The first step towards getting this result was taken by Dr. W. O. Travis of Hampton, England, who devised a two-story tank, the upper division serving as a settling tank with a slot at

the lower edge of an inclined bottom, through which the settling suspended matter passed into the lower division to accumulate and decompose. The in and out-flows of the two tanks were so proportioned that from three-fifths to four-fifths of the sewage passed through the upper division and one-fifth to two-fifths through the lower one. The largest Travis tank is in Norwich, England. So far as an in-offensive sludge decomposition is concerned, this Travis tank is not a success.

The same two-story tank was later built in the Emscher district of Germany, by Dr. Ing. K. Imhoff, with at least one important change. No sewage whatever was allowed to pass through the lower tank, thus preventing any part of the sludge from having a continuous contact with fresh sewage and air. Also other advantageous changes were made in this new tank.

The decomposition of the sludge takes place in the lower division and in the absence of dissolved oxygen, but the novel condition is that it continues in the absence, also, of sulphur bacteria producing sulphuretted hydrogen, and in the presence of bacteria producing substantially only methane and carbon dioxide gases, both of which have no offensive odor. The conditions in the tank gradually become adjusted to conditions favoring the life of substantially only those two classes of bacteria and causing practically all of the others to become inactive.

Quite a varied experience has already been gained with this Imhoff method of disposing of the settling suspended matter of sewage. It has been applied to dilute and strong sewage, to domestic and different trade sewage, and it has so far been found satisfactory in all cases where the conditions for the required special bacterial life were favorable.

We are now facing suggestions for some further variations and improvements of the method. Both in Germany and in the United States, thorough investigations of such suggestions have been and are still being made.

It is naturally found that the details of the process may differ with the character of the sewage. The same design and proportions of its parts may vary under different conditions. The topography of the site alone may determine quite different designs. For instance, we may find in one locality a deep double-deck Imhoff tank to be preferable, while in another two shallow single-deck tanks side by side may be more economical.

The first has the advantage of an automatic sludge separation. Its greater depth has the further advantage of placing the gases of decomposition under greater pressure which, when the sludge is finally withdrawn and discharged on the surface of the ground, causes the gases to expand and to make the sludge more porous and, therefore, more readily drained and dried than where gases form under shallower depths. The double-deck tank has, however, the disadvantage of greater depth of excavation, perhaps in rock or in wet soil, and also the necessity of getting the right propor-

tion of capacity between upper and lower tanks. If the proportion does not approximately correspond to that of the suspended and liquid matter, the efficiency and economical results may not be quite satisfactory. The shallower single-deck tanks have been studied in Berlin and in the United States, particularly by Mr. E. J. Fort, Chief Engineer, Bureau of Sewers, Borough of Brooklyn. It has been found that the suspended matter is decomposed in the same inoffensive manner as in the deep tanks. The gases of decomposition are also chiefly methane and carbon dioxide, and after final withdrawal, the sludge has also no offensive odor. There is, further, the advantage of complete independence of the two tanks, so that any irregularities in the sludge tank can never have a detrimental influence upon the sewage discharging in the settling tank, and the further advantage, that extensions can be more readily made and that an inspection of every part is easier than in the double-deck tank. On the other hand, the disadvantages are that the shallower depth causes the sludge to be less porous and less easily drainable, and that it must be pumped or otherwise specially conveyed from the gutter in the settling tank to the adjoining sludge tank. The separate sludge tanks can be built as single units and can be intermittently filled, or they can be built as a series of tanks continuously operated.

Where separate sludge tanks have been continuously exposed to the air, as in Baltimore and Worcester, inoffensive sludge, as coming from the Imhoff tanks, has not been obtained. The reason appears to be the long exposure of the sludge to the air. In the experiment station of the City of Brooklyn these tanks have been kept covered and the atmospheric air has been substantially excluded. The result has been a sludge as completely inoffensive as that obtained from the Imhoff tanks. It therefore seems desirable to cover such separate sludge tanks, to prevent the free access of bacteria from the air, and the space under the cover should be filled with the resulting gases of decomposition rising from the sludge. But, these gases, when excessive, must be allowed naturally to escape through proper sized openings, and the free inflow of atmospheric air can also be readily prevented.

The preference between the two methods, having the two tanks over or beside each other, may usually be decided on the relative economy of construction and operation, and on the desired quality of the sludge.

In the process of ripening, the sludge has a grayish color. When ripe it has become black and has a peculiar tarlike though not disagreeable odor. It has also lost its original slimy and sticky consistency and has become porous and friable, allowing its water, which is clear, odorless and quite inoffensive, at once to be discharged into streams. The sludge of the shallower tanks is less porous and less easily and quickly drained.

The sludge generally reacts alkaline. Berlin reports that when left in the tank too long it may again change to a grayish color, having a distinct acid

reaction, and offensive odor and it no longer drains easily. How this change is brought about is not reported, and it has not been noticed at some of the stations in the United States.

In order that the sludge may decompose satisfactorily and quickly, it must not be acid. The acidity can be generally produced, if not from manufacturing waste, from an excessive vegetable diet of a community. When it appears and interferes with the normal decomposition, the sludge should be brought into intimate contact with a moderate amount of fresh sewage, which is usually alkaline, although the amount of such sewage should not be enough to disturb the required bacterial flora already established in the sludge. It is generally better to add some clean hard water or some alkaline solutions.

Perhaps nowhere else than at the Berlin Experiment Station has the desirability of getting a good alkaline sludge been better demonstrated. It can commonly be obtained by a frequent stirring, so that fresh parts will be frequently exposed to bacterial action and the toxins removed. The stirring is best done by mechanical agitators. They should be used daily or more or less often as may be found best, according to the varying character of the newly deposited suspended matter. Comparative experiments with mechanical agitators and with compressed air bubbles forced in at the bottom of the sludge and rising through it have so far indicated a greater efficiency for the former.

As to the character of sludge withdrawals, experiments have indicated that the best results follow when the withdrawals are regular, frequent and in small amounts at a time.

Where sludge is spread upon beds for drying, the climate must be sufficiently temperate to prevent its long remaining frozen. Where the drying beds cannot be covered to moderate the winter temperature it is better to increase the size of the sludge tanks so that winter storage can be provided in them. This excessive storage does not so far seem to have been objectionable in this country. To keep the sludge in a good alkaline condition it is, however, well to agitate the older as well as the fresher sludge.

The usual variations in the composition and temperature of the sewage necessarily produce irregularities in the behavior of the suspended matter; much of it may not readily settle into the sludge tank, or the lighter materials when released may rise up from it. Occasionally, therefore, we see excessive frothings or scum formation. When these amounts become quite large they require radical means for treatment. Small amounts can be scooped up at the surface and burned or buried. Large amounts require other methods of removal.

As a permanent practice it is not economical nor very efficient to break up the scum by hand with poles or with a stream of water, which causes much of it again to settle into the sludge tank. Agitation by mechanical means has been found more useful to settle the frothing and the scum.

Experience has gradually indicated the extent of area which should be

provided in the chimneys through which the light particles of suspended matter rise from the sludge tank to the surface. If they are made too small, they tend to cause the scum to rise up high and to flow over. If they are too large, they may, by a large exposure to the air, invite development of putrefactive bacteria and, therefore, the formation of a nuisance.

When such frothing is found on the surface of the tank, experiments have indicated that this objectionable condition may be removed also by draining or pumping out the sewage as far down into the sludge tank as practicable, and by refilling the space with clean water from the municipal supply; especially, if this is hard water and contains carbonate of lime. The frothing may also be reduced by adding to the sewage slight quantities of lime or soda before it enters the tank, especially, if the alkalinity of the sewage is very low.

Cases are now multiplying where some injury may be done both to the process of sludge decomposition, as well as to the otherwise odorless sewage treatment, by the admission to the sewers of gasoline, due to its growing use for automobiles, etc. This admission not only gives an objectionable odor at the sewage treatment works, not distinguished by most people from the odor of sewage, but it also reduces, and this is more important, the rate of bacterial activity in the sewage and sludge and, therefore, the desired rapid decomposition. Legal means may keep the injury from becoming serious.

The automatic sludge decomposition in separate tanks, as just described, should not entirely rule out the old method of precipitating the suspended matter by an added coagulating material, such as lime and the sulphates of alumina and iron, which method has been used for over 50 years. The precipitating processes are not always excessively expensive, and, in some cases, may actually be most economical in the removal of suspended matter. This may be particularly the case when only a clarification of the sewage is required and where plain settling, such as takes place in the upper chamber of the Imhoff tanks, is insufficient and, also, where such clarified sewage can be turned, without objection, into a sufficiently large water course.

There has recently been brought into more or less prominence the method of hastening the digestion of sludge by an artificial aeration, or, as it has now been called, by "activating" the sludge. Air is forced into sludge from the bottom of the tank in which it is stored and thereby agitates or activates the sludge, so that both an inoffensive condition and an accelerated aerobic decomposition has been maintained. Experiments are being conducted in several of our cities, and final results as to economical results when compared with other methods are not yet available.

Mr. H. W. Clark, Chief Chemist, Massachusetts State Department of Health and Director of the Lawrence Experiment Station, who has been continuing the classical work of the Massachusetts State Department of Health, began about 1889, has recently again experimented on the treatment of

sewage sludge. He states, in a letter, that since 1912 he initiated and developed a process of purifying sewage by aeration for the accumulation of "growths" in tanks containing layers of slate or other material placed in a nearly horizontal position, one or two inches apart. Air currents aid also in circulating the sewage between the slates and, in contact with the "growths," purify it in 5 hours. The process is said to have collected for removal from the Lawrence sewage 80 per cent of the total suspended matter.

Mr. Clark further says that this aeration was viewed at Lawrence by Dr. Gilbert J. Fowler of Manchester, in 1912, and was further investigated by him and other English workers, and that from it the process of "activated" sludge, a name given by Dr. Fowler, was developed.

Mr. Clark has also investigated sludge treatment in deep tanks and reaches the conclusion that the successful production of compact, inoffensive sludge depends upon the character of the sewage which produces it, and varies with slight differences in the chemical reactions within the tanks as well as in the methods of operating them. A slight agitation of the currents of air, water or sewage, or an increased alkalinity by the addition of lime, etc., gives, for some sludges, satisfactory results that cannot otherwise be obtained.

Mr. E. J. Fort of Brooklyn says that the results of his investigations seem to indicate, so far, that it is possible to purify sewage by forced aeration to any degree desired, but also, that because of the excessive expense, it is generally impracticable. He has not yet completed his experiments with "activated" sludge.

Mr. T. Chalkley Hatton, Chief Engineer of the Sewerage Commission of Milwaukee, is also experimenting with "activated" sludge, but, as with other experimenters, has not yet arrived at final conclusions. He is using Mr. Clark's suggested slate layers with enforced aeration and finds that after six hours a well nitrified effluent is obtained, as may be done in any properly operated contact bed with forced aeration, and in much less time in ordinary sprinkling filters. The sludge settles out in from 10 to 20 minutes and leaves a non-putrescible liquid. The sludge is well granulated and drains within a few hours to 50 per cent of moisture content.

The U. S. Public Health Service in Washington and the Baltimore Sewerage Commission have also recently begun to make tests on "activated" sludge and sewage aeration. The Engineering Record of March 6, 1915, in an article by L. C. Frank, Sanitary Engineer, U. S. Public Health Service, gives a review of the English previous experiments on that subject, as a preliminary to the Baltimore tests. In 1912, Dr. Fowler and in 1913, Mr. Arden experimented on sewage aeration at Manchester, but, similar experiments had before been made in the United States and in Germany. These gentlemen found that well aerated, or "activated," sewage sludge was capable of causing a well nitrified sewage effluent by bringing such sludge in intimate contact and mixture with raw

sewage for from four to six hours, when the temperature was above 10 degrees C., and best at 20 degrees C. The process is essentially a biological one in both sludge and liquid, as has been known for many years. It is proposed at Baltimore to experiment in a tank through which sewage flows continually, and to use an Imhoff tank for the purpose.

It will be interesting, in due time, to learn of the results obtained at these several experiment stations. There does not seem to be a question any longer that inoffensive decomposition of sewage can be secured by sufficient aeration—a fact that has also been known for a long time. Agreement, however, does not yet exist on the most effective and economical way of applying and diffusing the air. Whether or not the process of "activating" sewage sludge for an inoffensive disposal will be preferable, by substituting an aerobic for an inoffensive anaerobic decomposition, depends upon the element of comparative cost of both in securing and maintaining the desired unobjectionable conditions.

◆ OAKDALE COMPANY TO BID ON NEW RAILWAY.

The Utah Construction Company, which built the Oakdale irrigation system, is securing data to bid on the construction of the electric line into the Hetch-Hetchy Valley for the city of San Francisco. It is stated that if necessary, the Salt Lake Company will accept bonds for its work in the same manner that it built the \$2,000,000 system of the irrigation district. A large amount of stock which would be required on the construction work is on hand in this city. This is the same company which financed the completion of the Western Pacific Railway.

According to local men, the city of San Francisco will be unable to haul into the valley this season the supplies required for the construction of the temporary reservoir. There have been several recent snow storms and it is declared to be impractical to haul the 800 tons of cement and 400 tons of iron required for reinforcing, into the valley at this season of the year and in the time specified. Local contractors have all refused to bid on the contract, which would amount to \$50,000 for the hauling of the supplies alone.

◆ S. P. PREPARES TO RUN INTO HETCH-HETCHY.

Surveys have been made by the Southern Pacific Railroad for an extension of their Oakdale line from Waterford into the Hetch-Hetchy Valley. This, it is said, explains the recent offer made by the railroad to the city of San Francisco to haul freight required for the Hetch-Hetchy water system into the valley.

It has been supposed the Southern Pacific intended to make use of the Sierra tracks as far as Losasco and build from that point into the valley. However, it has been learned that the company has had a corps of surveyors in the field and has complete data for an extension of the Oakdale line from Waterford.

Los Angeles Engineering Department.

By HOMER HAMLIN, City Engineer.

To the Honorable, The City Council:

Gentlemen: In accordance with the provisions of the Charter of the City of Los Angeles, Section 58, I beg in the following to present my annual report on the operation and activities of the Engineering Department:

The work during the year has been carried on under favorable conditions, and as in the past, the amount is continually increasing.

The improvements voluntarily petitioned for and the large expenditures for such improvements, made by the Los Angeles property owners, surely speak strongly for the progressive tendencies of the city and the unlimited confidence which its citizens have in its future. Every branch of the department has been fully occupied, and the work performed is fully commensurate with the force employed.

The occupation of the new offices has added much to our efficiency and comfort, although the room allotted to each man is no greater than formerly.

The personnel of the principal heads of the organization is as follows:

Homer Hamlin, City Engineer.
A. C. Hansen, Chief Deputy.
J. C. Clausen, Engineer, Asst. to City Engineer.

H. Z. Osborne, Jr., Engineer of Street Improvement, Design and Procedure.

C. S. Pope, Engineer of Street and Storm Drain Construction.

W. T. Knowlton, Engineer of Sewer Design.

E. A. Tuttle, Engineer of Storm Drain Design.

J. R. Prince, Chief Draftsman.

C. P. Cooke, Field Engineer.

R. W. Stewart, Engineer of Bridges.

F. A. Batty, Assistant Engineer in charge of Sewer Construction.

J. W. Cooke, Assistant Engineer of Substructures.

W. M. Moselle, Chief Clerk.

W. H. Laws Chief Field Deputy on Street Maintenance.

L. G. Mather, Superintendent of Garbage and Rubbish Collection.

T. W. Moore, Miscellaneous Inspections.

P. E. Davis, Chief Foreman, Resurfacing Excavations.

As predicted in my last annual report large areas have been annexed to the city during the past year, making the present territory within the city's boundary 288.21 square miles. This immense area presents problems and conditions in the proper administration of this office widely different from those necessary for smaller and more congested sections.

It will be necessary in the near future to permanently establish, preferably by a system of triangulation using the United States Coast and Geodetic survey System as a base, all the land and street lines within the city. This work should soon be inaugurated.

The construction and maintenance problems, and how to meet the needs of the various sections are being

worked out. This office is now in receipt of requests for various improvements in the recently annexed areas and to properly perform such work, authentic records pertaining to street and land lines, are essential. These are now being compiled as fast as possible but the task is a large one.

The vault housing the records of this office now contains about 36,000 separate plans, profiles, maps, field books, etc., which are of inestimable value. Their destruction would be an irreparable loss. Although the new vault is a great improvement over what was used in the old city hall, it is not what it should be from a fire protection standpoint for the housing of such valuable records. The index system of these records is being enlarged to conform with present and future conditions.

Large projects which have been given study during the year are: The Bunker Hill Cut and the various proposed viaducts over the Los Angeles River. The lowering of the Broadway Tunnel, a contract let a year ago, is now under way.

The improvements on the public streets of the City of Los Angeles, such as pavements, sewers, bridges, tunnels, etc., reach an estimated value at this date of over \$30,000,000.

Additional statistics which are of interest concerning the work done last year are as follows:

Approximate value of improve made during year.....	\$1,700,000
Miles of streets paved.....	60.51
Miles of streets graded and oiled	13.74
Miles of storm drains constructed	30.25
Miles of main sanitary sewers constructed	87.55
Total number of employees in the department about.....	1,130
New orders received from the Council, Board of Public Works, etc.	9,463
Official reports to Council, Board of Public Works, etc.	1,160
Sections in reports aforesaid.	6,530
Total number of ordinances passed by Council during year	2,254
Ordinances presented by this office	1,504
Ordinances to establish or change and establish grades	491
Final decrees entered for opening and widening Sts.	22
Condemnation maps furnished City Attorney during year.	700
Vacations of streets and alleys completed during year	10
Rights-of-way secured during year	117

The Department of Street Maintenance and Inspection at the present writing maintains about 373 miles of paved streets and 718 miles of streets otherwise improved. The city at present embraces about 2,150 miles of dedicated public thoroughfares. The de-

partment is following strictly the policy of applying maintenance only to those streets which have in some way been improved.

It has been realized more as the duties of street maintenance increase that provision should be made, providing the city with adequate road material sites such as quarries, pits, etc., of such extent and at such locations as would supply the municipal demand for years to come.

The Bureau of Resurfacing, namely: the force resurfacing all trenches in the public streets, except those included in Vrooman Act contracts, is now permanently and well organized. The innovation has proved to be satisfactory, resulting especially in more uniform and prompter service. Over 29,000 work orders were attended to by this department during the year. A force is now well started on the second year of forcing the lot cleaning ordinance. From last year's experience many details of handling the work are being improved upon. It is, however, a fact that the efforts of last year are largely the cause of a more general response to the notices being served on property owners to clean their property this year. To date this season 9,500 notices have been served and instead of doing the work by force account, the cleaning is let to the lowest bidder on competitive bids.

The situation as to the disposal of garbage and rubbish is satisfactory. The department is now collecting all garbage and non-combustible rubbish, and the service is prompt and efficient.

The plant of the Pacific Reduction Company is at this writing taking two-thirds of the total garbage output of that part of the city north of Manchester avenue, and all from this territory will be delivered to the plant by September first of this year. The method of disposal and the working of the reduction plant give every evidence of being successful. In another section of this report attention is called to the plans under way for a cooling system in connection with the water supply for the plant.

Non-combustible rubbish is collected and disposed of at convenient dumps. During last year about 100,000,000 pounds of garbage were collected.

The construction work in the different departments has been carried on about as usual. The amount of work performed is somewhat greater than last year amounting to approximately \$1,700,000. It is gratifying to note that the percentage of high class pavements of the total streets improved is constantly on the increase, being this year about 82 per cent, only 13.74 miles of grade and oil having been installed. All of our main thoroughfares are now paved and much work has been done in the industrial district.

The sanitary sewer situation is well in hand, about 80 per cent of the city's population being now served. During

the year a little over 57 miles of main sewer were added to the system which now comprises about 787 miles. The present outfall sewer is inadequate for the city's requirements and plans are being made and rights-of-way are being obtained for an additional outfall. This sewer will be in the near future an absolute necessity.

During the year studies have been made of sewage disposal at Hyperion. The plan contemplates the elimination of all solids and an appropriation has been asked for the installation of one unit of such a treatment system.

The first step in sewage disposal other than discharging the raw sewage into the ocean, has been taken in the installation of a disposal plant at Wilmington. An Imhoff tank has been installed and is nearly ready for operation. After much study and research the conclusion has been reached that this method of disposal will be successful.

The department has nearly completed the design for an adequate storm drain system for the entire city, and substantial progress in actual construction can be reported. Several districts such as the Arroyo de la Brea, Madison Virgil, Sunset Hollywood and Upper Alameda Street have been provided with drains; but to proposed systems in the resident districts much opposition develops.

Our long dry periods tend to mitigate the inconveniences resultant from periodically heavy storms during the winter and it is difficult for the property owners to see the necessity of storm sewers. However, the position is still maintained that storm sewers are essential to the proper design and maintenance of pavements, and will in every case prove a benefit commensurate with the expenditures.

The Bridge Department has completed one bridge during the year, located at Avenue Forty-three across the Arroyo Seco. The force of this department has been further occupied with miscellaneous structural work, such as the repair of bridges, river correction work and the lowering of the Broadway Tunnel. Much study has also been devoted to the Bunker Hill Cut.

The work in the Drafting Department, due to the additions to the city, will be greatly increased during the ensuing year. District maps and records must be prepared and compiled to meet the demand for improvements in the new territories.

The Right-of-Way Department, although obtaining during the year 117 easements and deeds, requiring 650 signatures, has met with a great many obstacles. The granting of a right-of-way is naturally followed by an improvement which in turn imposes an assessment on adjacent property and invariably the grantor of the right-of-way is one of those assessed. If the prospective grantor is not in favor of the improvement the right-of-way can not be obtained without a cash consideration. All our easements to date have been obtained practically without cost to the city, but large necessary improvements are being delayed for lack of rights-of-way. Condemnation takes time and the award is often not less than it could have been obtained for in the first instance. An adequately

provided appropriation for this purpose would be desirable.

I again urge the adoption of motor transportation wherever practical, both from an economic and necessity standpoint. The extent of the boundaries of the city are so large that every department operating in the field is handicapped for lack of rapid transportation.

The Department of Substructures is fulfilling the object for which it was initiated. The data now being procured will become more and more valuable as the city develops. Public utility corporations are realizing the value of the work and co-operating in many ways. It is the aim that this department shall be competent to plan for the most efficient future use of the underground portion of our streets, taking into consideration all of the city's future requirements.

The above report is a general review of the work during the year. For further details reference is made to the reports of the various heads of departments to whom, together with their respective assistants, I am largely indebted for the successes and achievements of last year.

Respectfully submitted,
HOMER HAMLIN,
City Engineer.

Petroleum In 1914.*

By Fletcher Hamilton, State Mineralogist.

Chief of the fuels of California is petroleum. A complete description of the industry is to be found in Bulletin 69, recently issued by the State Mining Bureau.

In preparing the statistics for the year 1914, several sources of information were available for comparison and use. Several marketing concerns issue carefully prepared monthly statements of gross production in each field, and this department gathers figures on price and other matters, directly from oil producers. The figures here given on gross production and monthly operations, are largely those published by the Independent Oil Producers Agency, and the figures showing well operation by fields are from the Standard Oil Company. Segregation of figures by counties can be made directly from field reports in all cases except for Los Angeles and Orange Counties, where the fields cross county lines. Figures on price are open to some question, as it must be remembered that a large portion of the oil does not enter the open market, but is consumed or refined directly by the producers. The prices given are averages for the oil which is actually sold.

The business of producing oil is not so profitable as it should be. Many operators continue to drill wells when there is not a great demand, and the over-production, of course, depresses the price. Just profits and stable conditions are more nearly assured to the producer who is able to refine and retail his product. Realization of this

fact is apt to lead to the formation of larger and stronger business units in the future. Doubtless, undue obstacles will not be placed in the way of such changes, if they are carried out with reasonable regard to public welfare. The fact cannot be too strongly emphasized that our oil resources are far from inexhaustible, and that needless production hastens the day when we shall stand stripped of one of our most valuable assets. Raising oil from the ground and selling it at a price too low to return the invested capital with interest, is about the same as drawing gold from a savings account and disposing of it at a discount. As in most lines of human endeavor, some operators have entered the oil business with more thought and preparation for the future than have some others.

The proportion of heavy and light oil produced in the various fields is shown by the following figures, for which we are indebted to the Standard Oil Company. Oil below 18 degrees Baume may be generally considered as unrefinable, or fuel oil; while the lighter oils yield varying amounts of refined products and a very large proportion of residuum or fuel oil. A very few years ago, the total amount of heavy oil was in excess of the light oil.

Financial results of the oil business during 1914 are shown by the following tables to be not greatly different from those of 1913, as published in Bulletin No. 69. It is particularly worthy of notice that the profitable, or dividend-paying, companies received a slightly higher price for their product than the average market price, probably due to the higher grade of oil produced by them. It is also noticeable that their production cost per barrel is slightly lower than the average, due to the fact that their wells are more productive. Operating cost per well is not always lower for the dividend companies than others. Profitable operations seem to depend generally upon large wells, high-grade oil, and proximity to market. There is nothing to indicate that unnatural causes or manipulations have affected the profits of one producer against another. It should be particularly noted that both price and profits are greater in the Los Angeles and Orange County fields than in others. Doubtless this is largely due to the proximity to market.

There is a large supply of oil now in storage, which, in many cases, might better be left in the ground and not subjected to losses by fire, leakage and evaporation as well as cost of storage. According to the Standard Oil Company, the stocks on hand on December 31st, amounted to 58,526,274 barrels, which is an increase of 10,656,097 barrels during the year. The figures are practically the same as those of the Independent Oil Producers Agency. The oft-repeated statement that this is less than a year's supply is of little moment in the face of a steady production which can supply the regular demand. It would be extremely interesting to know what proportion of the stock on hand is low-grade oil. In view of the difference in value and marketableness of various grades of oil, the concerns publishing monthly statistics would

*From "Mineral Production for 1914" by Fletcher Hamilton, State Mineralogist, Bulletin No. 70 of California State Mining Bureau.

render to the public and themselves a distinct service by showing something of the amounts of high and low gravity oil produced and stored.

Production and Value of Oil by Counties.

County	1913		1914	
	Bbls.	Value	Bbls.	Value
Fresno	18,956,965	\$ 7,927,736	15,952,190	\$ 7,210,389
Kern	58,698,432	27,038,474	65,332,633	26,721,046
Los Angeles	4,143,690	2,672,680	3,558,630	1,957,279
Orange	9,485,362	6,867,402	12,758,673	8,612,108
Santa Barbara	6,291,076	3,151,725	4,325,787	1,989,862
Santa Clara	20,000	12,000	10,000	5,300
Ventura	899,007	907,997	913,929	891,125
Totals	98,494,532	\$48,578,014	102,881,907	\$47,187,109

Average Price of Oil by Counties.

County	1913		1914	
				Inc. X Dec.
Fresno	41.8c		45.2c	X3.4
Kern	46.0c		40.9c	-5.1
Los Angeles	64.5c		55.0c	-9.5
Orange	72.4c		67.5c	-4.9
Santa Barbara	6,291,076		46.0c	-4.0
Santa Clara	60.0c		53.0c	-7.0
Ventura	101.0c		105.0c	X4.0
State average		49.6c	46.1c	-3.2

Production by Fields.

Field	1913		1914	
	(Barrels 42 gallons.)			Inc. X Dec.
Kern River	10,499,509		7,227,422	3,222,087
McKittrick	4,520,549		3,871,352	649,197
Midway-Sunset	39,277,370		49,408,493	10,131,123X
Lost Hills-Belridge	5,272,620		4,825,366	447,264
Coalinga	18,696,110		15,952,190	2,743,920
Santa Maria-Lompoc	4,842,653		4,266,337	577,296
Ventura County-Newhall	1,009,632		943,929	65,704
Los Angeles-Salt Lake	2,942,654		2,456,937	485,747
Whittier-Fullerton	10,685,146		13,860,431	3,175,285X
Summerland	59,400		59,400	
Watsonville	20,000		10,000	10,000
Totals	*97,776,714		102,881,907	5,105,193X
*Totals used by Bureau last year, 98,494,532 barrels.				

Production of Light and Heavy Oil by Fields.

Field	Per cent	Under 15 deg. bbls.		Per cent above 15 deg. bbls.	Total bbls.
Kern River	100	7,030,545	0		7,030,545
McKittrick	100	3,820,857	0		3,820,857
Midway-Sunset	21	10,554,589	79	39,572,904	50,027,493
Lost Hills-Belridge	45	7,112,471	55	8,812,416	15,925,887
Coalinga	12	499,635	88	3,803,445	4,303,080
Lompoc and Santa Maria	11	111,208	89	857,213	968,421
Ventura County and Newhall	96	2,407,855	4	96,820	2,504,675
Los Angeles and Salt Lake	2	232,271	98	13,898,277	14,130,548
Whittier-Fullerton	0		100		55,743
Summerland	0				27,375
Watsonville	0				
Totals	31	31,923,051	69	71,700,644	103,623,695

Financial and Operating Condition of California Oil Fields, 1914.

Field	No. of Companies	Percent of total Production Considered	Capital	
			Cash	Property
Coalinga	55	55	\$ 9,013,130	\$ 9,187,120
Kern River	60	38	6,433,818	5,738,614
Midway	50	41	1,313,634	19,318,812
Sunset	29	29	2,260,571	7,298,671
McKittrick, Belridge-Lost Hills	19	50	894,970	9,812,371
Coalinga, Lompoc, Summerland	14	73	3,593,286	19,534,385
Ventura	22	57	1,060,053	2,631,666
Los Angeles, Orange	26	25	3,195,260	4,567,767
Sub-totals	307		\$20,710,716	\$76,089,416
Miscellaneous and marketing	20		\$5,868,180	\$7,268,180
Totals	337		\$26,578,896	\$83,357,596

PETROLEUM IN SEPTEMBER.

The oil statistics as prepared by the Independent Oil Producers' Agency for the month of September show a marked falling off in all departments from August figures.

District	Gross Barrels
Kern River	725,410
McKittrick	295,544
Midway - Sunset	3,221,549
Lost Hills - Belridge	354,625
Coalinga	1,033,275
Santa Maria	384,685
Ventura - Newhall	87,202
Los Angeles-Salt Lake	168,442
Whittier - Fullerton	1,054,805
Summerland	4,500

Total	7,330,038
August	7,680,047
Difference	350,009

Shipments and Stocks.

Stocks Sept. 1, 1915	59,252,680
September production	5,230,038
Total	66,582,718
Sept. shipments to trade	7,778,807
Stocks October 1, 1915	58,803,911
Stocks decreased Sept.	448,769
Stocks January 1, 1915	58,250,119

Daily Average.

	Sept.	Aug.	1914
Production	243,334	245,713	281,841
Shipments	238,293	260,567	258,825
Shortage	14,959	12,824	*23,016
Oil Shut In	18,000	18,000	18,000
Potential surplus	3,041	5,176	41,516

Summary of Field Operations.

District	Rigs Up	Drilling	Complete	Producing	Abandoned
Kern River	4	1	1,467		
McKittrick	7	39	19	1,272	
Midway - Sunset					
Lost Hills - Belridge			4	1	251
Coalinga				1	804
Santa Maria			7		299
Ventura-Newhall			22	3	435
Los Angeles-Salt Lake					697
Whittier - Fullerton			1	56	6
Summerland					102
Total	8	140	31	6,109	3
August	11	150	23	6,153	13
Difference	3	10	8	44	10

EXPERTS TESTIFY IN BIG KERN OIL SUITS.

W. W. Oleott, a government geologist, and F. J. Burns, a director of the Obispo Oil Company, were the principal witnesses in the withdrawal suits on trial before Judge R. F. Bledsoe in the United States District Court.

Gas figured largely in the testimony, as the defense is trying to prove that gas was discovered on the property at stake, 160 acres in Kern County, stated in the government's complaint to be worth more than \$10,000,000, before President Taft's withdrawal order of September 27, 1909.

Mr. Burns was chairman of an investigation committee appointed by the Obispo Oil Company to make personal observations of the quality of the land in dispute. He reported that he found gas in substantial quantities.

Department of Street Improvements, Plans and Proceedings In Los Angeles

By H. Z. Osborne, Jr.

The following branches of the Engineering Department come under my general supervision:

Profiles: Platting profiles, all except sewers (not including those in the territory acquired by the consolidation of Wilmington and San Pedro with the City of Los Angeles).

During the year 511 profiles were platted in this department and ten in the branch office at San Pedro.

Grade Department: (a) Preparing petitions to change and establish grades where an expression of opinion is required from the property owners. Twenty-five petitions of this character were prepared.

(b) Indicating grades for streets together with the necessary ordinances establishing such grades. 491 of such ordinances were compiled during the 12 months.

(c) Grade sheets for all improvement work and special construction work during this period.

(d) Indication of established grades on profiles and grades board for permanent record.

Improvement Plans: All plans required for street improvement work together with culverts and storm drains planned in connection with the Storm Drain Department.

Detail plans for approximately 75 miles of such work was thus prepared.

All official notices of street work were prepared for this work together with the outline of the bids for the contractors.

Preparation or check of all ordinances for street improvements, except sanitary sewers, including special improvement ordinances under the Vrooman Act for tunnels, bridges, storm drains, the Bunker Hill Cut, etc.

Preliminary assessment maps and copies of assessment maps for the City Clerk, the poster of street notices and the public office, for vault records and the branch office at San Pedro and Wilmington.

Bidding forms for street work have been prepared by this department during the year. This practically insures the regularity of all bids submitted.

Proofreading of practically all ordinances from the Engineering Department except those relating to sanitary sewers.

Dedication: Careful search of the records for dedication of streets to be improved under the Vrooman Act.

Permits: Curb and sidewalk and gutter investigations to insure construction to the proper width line and grade, as nearly as possible.

Street Names: The correcting and naming of streets requiring the preparation of ordinances.

Curb Lines: Investigations of conditions, present and future to meet the requirements of all parties concerned, as well as local geographic conditions.

Trees: Making necessary investigations to save shade trees along the line of the improvement where possible.

Public Utility Poles and Constructed Work: Investigations are made to damage constructed work as little as possible by contemplated street improvements.

Railroad Franchises, Spur Tracks: Careful check of same with recommendations to protect public interests.

Correspondence: Miscellaneous correspondence relating to all branches of public improvements.

Authority for Street Improvements: Systematic endeavor to secure proper authority and to clear up conflicting orders at the proper time.

Reports: Making of thousands of miscellaneous reports during the year, together with a monthly report showing the exact status of all streets ordered improved by the City Council.

Rights-of-Way and Deeds: Preparation and check of most of those required for street improvements.

New Orders received from Council, Board of Public Works, Board of Harbor Commissioners, etc.,	9463
Official Reports to Council, Board of Public Works, Board of Harbor Commissioners, etc.,	1160
Sections in reports aforesaid,	6530
Sections aforesaid from this department,	2522
Search made for permits issued for curb, walk and gutter,	501
Total number searches made for street dedication (including intersecting streets),	3501
Total number of ordinances passed by Council during the year,	3501
Ordinances presented by office of City Engineer,	1504
Ordinances presented during the year by this department,	1317
Ordinances and permits checked or prepared and checked by this department, called for an expenditure of,	\$3,971,826.57
Ordinances to establish or change and establish grades,	491
Diagrams, Official Assessment Diagrams and copies of same made by this department during the year,	1476
Change and establish grade petitions prepared,	25
Profiles platted (in main office),	511
Streets graded, oiled and accepted during the year, miles,	13.74
No. of miles of streets paved over last year's record,	60.51
No. of ordinances abandoning proceedings, during the year,	10.51
Miles of paving included in said ordinances,	6.12

Your attention is respectfully called to the expenditure of \$3,971,826.57, called for by the ordinances and permits checked or prepared and checked by this department.

This amount exceeds that of any previous year in the history of Los Angeles.

Reference is made to the order system designed by the undersigned through which 42,512 orders from the Council and Board have passed since its installation. Its usefulness and flexibility has been further demonstrated as the city increases in area and the Engineer's office increases in varied departments.

Respectfully submitted,
H. Z. OSBORNE, JR.,
Engineer of Street Improvements,
Plans and Proceedings.

DETAILS OF PEOPLES WATER PLAN.

Every single disputable point in the Peoples Water reorganization has been agreed to by the conferees, representing all the various sorts of securities.

One more meeting only will be held, at which the completed reorganization plan will be submitted by the lawyers having the matter in hand, of drafting the various clauses, already agreed to seriatim. According to one of the committeemen, there is no longer any possibility of a failure to agree.

The plan is precisely as set forth in this column a couple of weeks ago, with the following not very important modifications:

1. The name of the new company, which is to take over the Peoples Water Company through foreclosure sale, is to be the East Bay Water Company.

2. Instead of 2,000 shares of common stock, as at first suggested, 6,000 shares of new common are to be issued in exchange for the present common stock. Frank C. Havens is to receive a fair proportion of these, and in the event of a sale to the transbay water company to be organized by Rudolph Spreckels, Havens is to receive a sum in cash, which is understood to be in the neighborhood of \$250,000.

The most important point in the new reorganization is, that the Peoples Water bondholders, from the very beginning will receive about 7 per cent annually on about 50 per cent of the par value of their present holdings. Later, should the business flourish, the Series "B" preferred stock may be counted upon to yield a further return.

San Francisco Street Work.

SAN FRANCISCO—During the past week the following street improvements were ordered by the Board of Supervisors:

Cyrus place, from Broadway to its southerly termination, by the construction of an asphalt pavement.

Crossing of Twenty-eighth avenue and Judah street, by the construction of curbs, sidewalks, broken rock pavement and sewers.

Richland avenue, from Andover street to Murray street, by the construction of curbs, a 2½-foot strip of basalt blocks contiguous to railroad tracks and asphalt on remainder of the roadway.

Congo street, from 75 feet south of Flood avenue to Mangels street, by the construction of curbs, catchbasins, culverts and a combination of brick and asphalt pavement.

Santa Rosa avenue, from San Jose avenue to Southern Pacific Railroad, by the construction of curbs, sidewalks and asphalt pavement.

Andover street, between Courtland avenue and Park street, by the construction of curbs, sidewalks, catchbasins, culverts and combination of basalt and asphalt pavement.

De Wolf street, from Lawrence avenue to the bridge over the Ocean Shore Railway, by the construction of curbs, sidewalks, catchbasins, culverts and asphalt pavement.

State Water Problems Conference.

Staff Article

The Water Problems Conference, which is an official State body, opened its second meeting at the State Railroad Commission headquarters in San Francisco on the 26th of October. The meeting was in the nature of a hearing, at which experts on various angles of water matters are presenting information so that the conference may be able to recommend to the Legislature measures which will co-ordinate all water problems.

C. E. Grunsky, consulting engineer of San Francisco, said the big difficulty at the present time in the development of water projects is the lack of stability of bonds, which frequently make it necessary for a district to pay much more for required work than it would cost at a cash price.

Grunsky suggested that the State Board of Public Works, which would succeed the Reclamation Board, also could handle all other engineering matters under the State, as well as other work now done under the State Water Commission, the State Conservation Commission and the State Engineering Department.

In order to stabilize bonds issued for irrigation, reclamation or drainage work, Grunsky would have the paper issued with the security of the State behind it irrespective of the success or failure of the project upon which the bonds were based. However, the property in the district upon which the bonds were issued would be called upon to pay the interest and sinking fund. At the present time only the district, with State approval, has been behind the bonds, with the result, he said, that through subterfuge, they are sold at much below par, frequently causing work to cost 20 and 30 per cent more than it should.

The engineer declared that the State took a step in the right direction when it created the Reclamation Board, and now to guarantee the success of future water projects it must go further and create a Board of Public Works. He believed that a constitutional amendment would be best to give this Board a sound foundation and also would be required to permit the State to stand behind all district irrigation, drainage or flood control projects.

A comparatively simple method of lending stability to old water district—irrigation, reclamation and drainage—bonds was suggested to the State Water Conference by Charles P. Eells, a bond attorney of San Francisco, one of the experts of the State in this branch of the law.

Eells said he did not believe it would be necessary for the State to lend its credit to water districts to stabilize their bonds; a few changes in the law simply would be required.

Three reasons were given by him for the poor market which greets this class of paper. They were:

First, the legal procedure for the issuance of such bonds is so elaborate that it is difficult to tell whether they conform to all requirements of the law.

Second, there is no limit on the amount of bonds to be issued, with the result that the prospective buyer is always afraid of an over-issuance of bonds which would bankrupt the district.

Third, the taxes to pay for the bonds are levied and disbursed by officers elected by the district, and these facts Eells regarded as destroying the confidence of the bond public.

The attorney suggested that all present laws relating to issuance of water district bonds be repealed and statutes similar to the present school district bond laws be submitted for them.

There is no difficulty in selling school bonds, because there is a limit on the amount that can be issued and the taxes are levied by the Board of Supervisors and not by the district trustees.

Thus while school bonds bearing 5 per cent interest find a ready market at a premium, Eells said that water district bonds bearing six and seven per cent interest have difficulty in finding a market at a discount.

Eells thought a limit of 25 per cent of the assessed value of the property in the district would be suitable for water district bonds.

A flood control idea old in the Alps of Switzerland, Germany, Austria and France was offered by M. V. Hartranft of Los Angeles.

This plan consists of building small check dams across ravines and canyons to catch the debris and retard the flow of the water. This plan is being tried out in some of the ravines of Los Angeles, Hartranft said, with much success. Hartranft added that although area back of the dams fills up with debris, this material had a water holding capacity of from 30 to 45 per cent and acts as a reservoir anyway.

Summer flow has been maintained in streams heretofore dry during the arid seasons by these "saturation" reservoirs and barren sides of the ravines have begun to grow willows which also retards the run-off.

The State Water Problems Conference learned finally that Sacramento Valley floods cannot be controlled by storage reservoirs. The by-pass plan is the only feasible plan.

E. G. Hopson, supervising engineer for the United States Reclamation Service for the Pacific Coast, told the members of the conference that the use of all storage reservoir sites available would affect the floods "only to an insignificant extent."

As a result of Hopson's statement it was established definitely that the by-pass system of flood control is the only one possible for the Sacramento Valley.

The conference adjourned until Monday, November 29th, when hearings will be continued.

It was decided at the November meeting to hear experts of power companies, irrigation companies, reclamation districts and irrigation districts. These papers probably will be more special in nature than those delivered at the conference which just closed.

Railroad Commission.

Mt. Tamalpais and Muir Woods Railroad—Mill Valley residents have complained against the abandonment during the winter of the operation of its main line and also complaining of alleged irregularity at times in the train schedule.

Union Home Telegraph and Telephone Company—To borrow \$21,900 on notes to pay interest to accrue on \$182,500 of its six-year, 6 per cent, debenture bonds, which have been sold.

Western States Gas and Electric Company—Has applied for leave to draw down \$86,947.64 from the trustee of the bond issue, to pay for a hydraulic power plant and gas mains.

Appellate Court.

By a decision of the Appellate Court the property owners along the old petroliothic street in Antioch, Contra Costa County, must pay the Raichs Improvement Company for the work done by it. This decision sustains the contention of City Attorney Greene.

Several years ago the city trustees entered into a contract with Contractor Swain for the petroliothic streets throughout the main section of town. The work was paid for by the property owners but in about a year the streets fell to pieces.

Later the city trustees decided to put down a better pavement and gave a contract to the Raichs Improvement Company for the work. The property owners, or rather some of them, alleged that so long as they had paid for one street improvement they were not liable for another. In order to settle the dispute the action was brought in the Superior Court. Judge R. H. Latimer sustained the contention of the property owners, merely to allow the matter to go to the high court. The decision means that the streets must be paid for a second time.

DETHY-HETCHY WAR OPENED.

Irrigationists in the San Joaquin Valley have been quick to protest against the proposed hastened development of the Hetch-Hetchy water project. Declaring that any attempt on the part of the city to use the mountain sources until the nearby supply has been exhausted, is against the provision of the Raker bill, a formal protest has been made to Mayor Rolph.

Sawtelle Paving.

At the special meeting of the Sawtelle trustees it was decided to drop the proposition of paving Santa Monica boulevard for the present at least, owing to a point of law which would prevent the city disposing of the bonds to pay for the work. A communication was received from the Clark & Henery Construction Company pointing out the error. The opinion of City Attorney C. D. Ballard, in which he advised the city to drop the proposition, was presented.

ITEMS OF INTEREST.

Collected by GEORGE NELSON, C. E.

The Southern Counties Gas Company is making a strong bid for the use of natural gas in the lighting of Santa Ana streets. At a meeting of the street lighting committee, composed of citizens having in charge a project to get ornamental street lights for this city, an offer was made that is being investigated.

The gas company stated that it would agree to furnish the gas and maintain the lights for \$9.95 per year per light.

Whittier is to be supplied with natural gas, to be piped from the Standard Oil fields. The announcement was made by President Bain of the Southern Counties Gas Company, who stated that work will be rushed to complete the four-inch main to the Standard wells before the rains set in.

An official communication, announcing the award of contracts to build for the Government three submarines, was received from Secretary of the Navy Josephus Daniels by officials of the California Shipbuilding Company. The communication stated that the contracts were now being prepared for signature.

P. E. Hatch, treasurer of the new shipbuilding company, stated that plans were being evolved whereby the Government will be given a free site at the Long Beach harbor for submarine repair shops, subsidiary to the naval base that the entire Southland is anxious to see established in the Los Angeles harbor.

Bids for the construction of the six-story warehouse on Municipal dock No. 1, at the outer harbor, Los Angeles, were opened by the harbor commission. The lowest bid was for approximately \$117,000. The city is to furnish the materials, and the contract is for labor and supervision only.

The harbor engineers were instructed by the commission to check up the bids, and also to prepare an estimate of what it would cost the city to do the work itself.

Regular sinking fund requirements aggregating \$500,000, which fell due November 1, will be met promptly by the Union Oil Company, according to a statement given out at the company's offices in the Union Oil building.

The payment will be divided into two parts, \$450,000 applying on the collateral trust 6 per cent serial gold notes and \$50,000 on the sinking fund of the Mission Transportation and Refining Company. These sums with others disbursed for similar purposes make a total of \$2,147,000 paid out by the Union so far this year.

The committee named by the Martinez Development Board to confer with the City Council relative to a bond issue to provide a municipally owned

water supply is gathering all facts needed and will present complete data showing the advantage of such ownership by the city. The committee is composed of A. Bacellierie, T. B. Swift, J. E. Miller, A. E. Dunkel and Henry J. Curry, all energetic workers in the city's interest.

There is a general sentiment here that Martinez as it proceeds on its new growth should establish municipal ownership of all public utilities. The scope of the committee's work will probably be widened to include other propositions.

The massive construction work of the new Shell oil refinery at Martinez is spreading out day by day over the extensive site and nearly every part of the area now has some portion of the plant going up on it. Slides in the Panama Canal have delayed probably for three weeks, until shipment can be made by railroad, large quantities of steel, piping and other material shipped from the East, but the big force of men is kept busy on other features of the work.

Building is going ahead so fast here that the Shell Company has lost the fear that its employees will not have enough residences to accommodate them and has given up the idea of constructing homes. Quite a number of buildings have been put up for offices and draughting quarters and for the foremen and superintendents in charge of the construction work now under way. About every foot of the acreage bought by the Shell Company will be utilized for the purposes of the refinery.

Finding that its business has more than doubled in the last four months, the Western Union Telegraph Company is fitting up a main office up-town. Its location up to this time has been at the Southern Pacific stations only. Increase in the telegraph business indicates progress in the city.

The City Council has ordered the laying of concrete walks on several streets that are receiving a new traffic through the advance of the city. Much street improvement is in progress in subdivisions, and bungalows are going up on all these new tracts.

Arkansas mills have just signed a contract with the Imperial Russian Government to furnish 300,000,000 feet of red oak for military purposes within the next few weeks. One order of 6,000,000 railroad ties is being rushed to complete the double track railway between Riga and Moscow.

Estimates of the value of the harbor holdings of the city by the City Auditor do not comport with what they are estimated to be worth by the Harbor Commission.

The City Auditor has prepared his statement of the value of municipal property owned by the city of Los An-

geles, and places the total at \$66,250,681.

The lowest estimate of the value of the city's harbor holdings by the harbor authorities is \$100,000,000, without including the development work done by the city.

Similarly low is the value of the water department and aqueduct, placed by the auditor at \$41,500,000. The aqueduct is valued alone at \$75,000,000 by William Mulholland, and the water works at not less than \$12,000,000.

The wonders of Los Angeles harbor and its facilities for handling the commerce of the Southwest were shown Hon. J. C. Clements, of the Interstate Commerce Commission, by a delegation from the Chamber of Commerce and representatives of the Harbor Commission. The party went by automobile, and after inspecting the harbor facilities they were entertained at luncheon at the Virginia by the Long Beach Chamber of Commerce.

The Madera Canal and Irrigation Company has under consideration a project to build an irrigation dam across the San Joaquin river at Polasky, or a short distance from Friant, near the mouth of Hildreth creek. The dam would store part of the flood waters of the river and would supply water to irrigate, it is estimated 120,000 acres of land, chiefly in Madera County. The dam would be 230 feet high from bedrock and would back the water for eleven miles, covering about 4,000 acres. The level of the canal would be 400 feet above the sea, making it possible to irrigate much of the high plain land of Madera County.

It is said that this site was chosen by the government engineers some time ago as the most feasible for a dam across the San Joaquin. The water would be diverted into Cottonwood Creek, and the land near Borden, Berenda and Madera would be served.

While Edison was building his first electric lighting plant in New York City another and smaller plant was being completed at Appleton, Wis. This was a small plant, the generator being driven by water power from a turbine wheel. The plant furnished current for but a few incandescent lamps but it has the honor of being the first commercial incandescent lighting installation in the world.

Two thousand feet of moving picture film was taken at Modesto, showing the dairy and alfalfa industries. The films are for the use of the University of California, for whom they were taken. They will be used in demonstrations and lectures.

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PERSONAL.

Engineer Davenport Bromfield with a force of surveyors has commenced the work of subdividing the old Selby ranch at Atherton, valued at about \$500,000.

F. C. Paulin died at his home in Brentwood Park. He was 67 years of age.

Mr. Paulin was born in Woodstock, Ontario, Can., and came to California in 1900. Here he became interested almost immediately in Imperial lands, and promoted, organized and incorporated the cities of Imperial, Brawley, Calexico, Heber and Silsbee.

He was president of the Imperial Valley Improvement Company, the San Joaquin Valley Home Land and Realty Company and the Imperial Compress Company.

Amos Towne, formerly engaged in the electrical business in Long Beach, has just received patents on an electric water purifier. Towne claims his device will purify water taken from the Colorado River in half a minute, and that water treated by his invention is made sufficiently pure for use in storage batteries.

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$25,000. Architect, Charles J. I. Devlin, Pacific Bldg., S. F. Owner, Daniel Moran. Location, southeast corner Octavia and Hayes. Will contain five stores on the first floor and a total of 10 rooms on the upper floors. Interior finish pine

and elm with hardwood floors. Wall beds. Steam heat and hot water supply. Bath rooms finished in tile. Patent store fronts. Exterior covered with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house, 4 story and base, brick and steel. Cost not stated. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, Lange & Bergstrom, Sharon Bldg., S. F. Location, Post between Jones and Leavenworth. Will contain a number of two and three room suites with wall beds and private bath rooms. Interior finish pine and hardwood. Hardwood floors. Steam heat, elevator service and hot water supply. Oil burning furnace. Tile in bath rooms. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared and work to be done by Day Labor under the direction of the owners.

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$5,500. Architect, W. S. Rhodes, 3572 16th street, S. F. Owner, Henry Sipple. Location, 19th near Lexington. Will contain four suites of three rooms and bath. Interior finish pine and elm panels. Some hardwood floors. Tile bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house, 3 story and base, brick. Cost not stated. Architect, Edward G. Bolles, 660 Market street, S. F. Owner's name withheld. Location 18th and Valencia streets. Will contain stores on the first floor and a number of two and three room suites on the upper floors. Interior finish pine throughout with some hardwood floors. Patent store fronts. Steam heat and hot water supply. Wall beds and tile baths. Exterior faced with cement plaster. Plans being prepared.

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$10,000. Architect, Edward E. Young, 251 Kearny street S. F. Owner, Thomas Scobie, 363 14th avenue, S. F. Location, west Palm avenue north Euclid. Will contain four suites of four and five rooms and bath. Interior finish pine and elm panels. Hardwood floors. Open fire places. Hot water system. Wall beds. Tile bath rooms. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Apartment house, 2 story and base, brick and frame, \$22,000. Architect, James W. Plache, Acheson Bldg., Berkeley. Owner W. Heywood. Location, University avenue and Grove. Will contain four stores and ten suites of three rooms and bath. Interior finish pine and hardwood with some hard-

wood floors. Steam heat and hot water supply. Wall beds. Tile bath rooms. Patent store fronts. Exterior faced with pressed brick veneer and cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house, 5 story and base, brick and steel, \$200,000. Architects, Smith & Stewart, 241 Kearny street S. F. Owner's name withheld. Location, Mission near 5th. Will contain 300 rooms arranged in suites of two and three rooms on the upper floors and a number of modern stores on the ground floor. Interior finish pine and elm. Steam heat, elevator service, hot water system, oil burning plant and vacuum cleaning. Tile bath rooms and wall beds. Patent store fronts. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

BERKELEY, ALAMEDA CO., CAL.—Apartment house, 3 story and base, frame, \$23,000. Architect, Eugene K. Martin, 2192 Shattuck avenue, Berkeley. Owner, G. W. Higgins. Location, Virginia and Euclid avenue. Will contain 16 suites of three rooms and bath. Interior finish pine. Some hardwood floors. Rector system of heating, hot water supply and vacuum cleaning. Bath rooms tile. Wall beds. Exterior covered with cement plaster. Plans complete and architect taking sub-figures.

STOCKTON, SAN JOAQUIN CO., CAL.—Apartment house, 3 story and base, frame, \$15,000. Architect, W. B. Thomas, Yosemite Theatre Bldg., Stockton. Owner, A. J. McPhee. Location, northeast corner San Joaquin and Poplar streets. Will contain a number of two and three room suites. Interior finish pine and elm with some hardwood floors. Central heating system, hot water supply and wall beds. Bath rooms tile. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

Contracts Awarded

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$30,000. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner, Isabella Daisley. Contractors, Higginson Co., Humboldt Bank Bldg., S. F. Contract price, \$30,000.

BANKS

RAVENDALE, LASSEN CO., CAL.—Bank, 2 story, brick. Cost not stated. Architect's name not given. Owners, California Land and Power Co., W. B. Edwards, Pres., Ravendale. Will contain banking rooms on first floor and hotel rooms above. Interior finish pine. Central heating system and hot water supply. Exterior faced with pressed brick. Plans complete and work to be done by Day Labor.

BATH HOUSES.

SAN RAFAEL, MARIN CO., CAL.—Bath house filters. Cost not stated. Engineer, Town Engineer, San Rafael. Owners, Town of San Rafael. In the matter of filters for the Municipal Baths, the Council at its last meeting ordered the Clerk to readvertise for bids for the same. The bids will be received at the December session.

BONDS

CALEXICO, IMPERIAL CO., CAL.—November 29th is the date set to decide the question of issuing and selling bonds of \$30,000, the proceeds to be used in the laying out of a civic center for this city.

Preparations are being made to call an election for voting bonds of \$100,000 to finance the construction of a water and sewer system for Calexico. Further information may be had from City Clerk Edward Browne.

FORTUNA, HUMBOLDT CO., CAL.—The Fortuna High School District voted bonds of \$24,000 last week to provide for the construction of a new high school building. The site of A. G. Campbell has been selected and plans will be ordered shortly for the building.

LOS ANGELES, CAL.—A million dollar bond election is being sought here to solve the water question in Colegrove, Hollywood and East Hollywood.

PORTLAND, ORE.—A call for bids has been issued for the purchase of \$600,000 worth of bonds, the proceeds of the sale to be used in the construction of the Suttles Lake Irrigation project in Jefferson County. Bids will be opened on November 22nd.

The cost of the project is given at \$53,330; the project consists of 35,000 acres, the cost per acre being \$4.45 for metal flume, which could be reduced to \$42.65 per acre by using wood flume.

MARTINEZ, CONTRA COSTA CO., CAL.—An election will be held in December to vote bonds for the construction of a new boulevard to Mt. Diablo from the tunnel road at Martinez. Plans for this work have already been completed by County Surveyor R. R. Arnold.

FAIRVIEW, IDAHO—An election will be held November 22nd to vote bonds of \$22,000, for the construction of water works. Charles Gilbert is the City Clerk.

An election will be held in Council, Idaho, in the near future to vote \$15,000 to provide funds for the erection of a court house.

REDWOOD CITY, SAN MATEO CO., CAL.—An election providing \$18,000 for additional school facilities carried here last week. Two propositions were voted upon. The first for additional school sites and the second for building new schools.

MERCED, MERCED CO., CAL.—An election will be held next April to vote bonds for the purchase of additional fire apparatus. Other propositions may be included but as yet they are unknown.

SACRAMENTO, CAL.—Owing to the fact that Sacramento County will be reformed so that not more than 200 votes will be included in a precinct, the road bond election probably will not be held until after May 1, 1916.

LOS ANGELES, CAL.—The City Council has closed negotiations for the sale of \$5,474,000 of the 1914 power bond issue. An ordinance and a resolution has been passed providing for the acceptance of an offer of the Torrence-Marshall Company of Los Angeles to buy \$1,020,000 worth immediately.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—Protest has been filed with the Board of Supervisors by E. H. Rollins & Sons of San Francisco, bond buyers, regarding the disposition at private sale of \$625,000 in county highway bonds, the last block of the \$1,750,000 issue, to the Anglo and London Paris National Bank when notices had been sent out inviting bids from other houses.

The San Francisco firm declares that the action of the Board was unfair and against the interests of the county. The Rollins firm demands that the sale be rescinded and the bonds advertised and sold in competition.

DENAIR, STANISLAUS CO., CAL.—A petition has been filed with the County Supervisors asking that a lighting district be formed to be known as the Denair Lighting District of Stanislaus County. Further information may be had from County Clerk H. Benson at Modesto.

MARICOPA, KERN CO., CAL.—Bonds in the sum of \$25,000 for the erection of a new school building failed to carry by two votes. Another election will probably be called by the board of trustees.

LA CANADA, LOS ANGELES CO., CAL.—The proposed bond issue in the sum of \$25,000 for the erection of a new school building failed to carry by two votes. Another election will probably be called by the board of trustees.

BAKER, ORE.—Indications are that the election to be held here November 13th for the purpose of voting on the question of issuing \$125,000 bonds with which to construct a high school building, will carry.

Plans for the proposed building have already been submitted by several architects, although none has been selected.

POMONA, LOS ANGELES CO., CAL.—An election to vote bonds of \$50,000 for improvements will be held on January 11th, 1916. The following is a list of the improvements:

For grading, oiling and covering shoulders of streets paved by Magill Construction Company this year, \$15,000.

For storm drain construction on Garey avenue and Fulton road, \$15,000.

For road extension and bath house in Ganesha Park, together with underground sprinkling system in Lincoln Park, \$10,000.

For paving intersection of Fifth street and installing culverts on East side of intersecting streets from Resaca to Thomas street, \$5,000.

For construction of a building suitable for use by Chamber of Commerce, \$5,000.

BAKERSFIELD, KERN CO., CAL.—At a recent meeting of the school board the proposition of calling an election to vote bonds for the erection of a school building for the Kruse Terrace residents was taken under consideration. Tentative plans for the proposed structure were submitted by three Bakersfield architects, J. M. Saffell, O. L. Clark and T. B. Wiseman, and from these estimates for the amount of the bond will be made.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Five bids were opened for the purchase of the \$10,000 school bond issue by the County Supervisors last week. When the bonds have been awarded bids for the proposed building will be called.

BRIDGES, DAMS AND HARBOR WORK

YOLO-BY-PASS, YOLO CO., CAL.—Bridge, steel and reinforced concrete. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be opened on November 29th for constructing a plate girder 80-foot clear span bridge with reinforced concrete approaches. Total length 141 feet. All former bids for this work were rejected. An official proposal appears in another column of this issue.

SACRAMENTO, CAL.—Bridge construction, reinforced concrete, \$2,850. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. No action of awarding the contract to J. W. Terrill, 1111 29th street, Sacramento, for the construction of the bridge in Del Paso Park was taken at the last meeting of the Park Board. The bid of Terrill was the lowest bid submitted, but was above the engineer's estimate. Terrill bid \$3,100, while the estimate was placed at \$2,850.

MADERA, MADERA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Madera. Owners, Madera County. The County Supervisors have authorized the construction of a new bridge over the creek near the Munich school house. Further information relative to this work may be had from the County Engineer at Madera.

MYERS CREEK, IMPERIAL CO., CAL.—Bridge construction, steel and concrete, \$25,320. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Holland Construction Co., San Diego, submitted the lowest figure for constructing the reinforced concrete and steel bridge over Myers Creek in Imperial County. Bids were opened by the State Highway Commission. Holland's bid was \$15,600 and the engineer's estimate is \$25,320.53. No contract has been awarded.

BAKERSFIELD, KERN CO., CAL.—BRIDGES and grading. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. At a recent meeting of the County Supervisors the Clerk was instructed to advertise for bids until December 9th for bridges and grading of section 3 of the Caliente-Kernville highway, and for culverts, grading and paving of section 1-A of the Bakersfield-McKittrick highway.

Contracts Awarded.

SANGER, FRESNO CO., CAL. — Bridge, timber, \$1,092. Engineer, County Surveyor, Fresno. Owners, Fresno County. Contractors, Benson & Johnson, Kingsburg. Contract price, \$1,092.

HANFORD, KINGS CO., CAL. — Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractors, Adell-Cortwright Concrete Pipe Co., Hanford. Contract price not stated.

NEWVILLE, GLENN CO., CAL. — Bridge, reinforced concrete, \$6,000. Engineer, County Surveyor, Willows. Owners, Glenn County. Contractors, Cotton Bros., 540 32nd street, Oakland. Contract price, \$6,000.

CHURCHES

MENLO PARK, SAN MATEO CO., CAL. — Chapel, 1 story, reinforced concrete. Cost not stated. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, St. Patrick's Theological Seminary. Construction will be fireproof. Interior finish pine, hardwood, art glass and ornamental plaster. Heat from central plant. Exterior faced with cement plaster. Preliminary plans complete.

MANTECA, SAN JOAQUIN CO., CAL. — Church, 1 story and base, frame. Cost not stated. Architect, Peter L. Sala. Commercial and Savings Bank Bldg., Stockton. Owners, Roman Catholic Church, Rev. Father W. McGough, pastor. Will contain main auditorium and Sunday school rooms. Interior finish pine. Some art glass windows. Exterior covered with rustic. Plans being prepared.

FACTORIES AND WAREHOUSES

SAN FRANCISCO — Factory, 4 story and base, reinforced concrete, \$200,000. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, John B. Bollman Co. Location, 4th and Brannan streets. Will be fireproof throughout with concrete walls, floors and roof slabs. Interior finish pine. Hollow tile partitions, metal window sash and frames. Elevator service, steam heat, oil burning equipment and hot water system. Exterior faced with cement plaster. Plans complete and figures being taken.

PALO ALTO, SANTA CLARA CO., CAL. — Factory, 1 story, concrete and frame, \$5,000. Architect's name not given. Owners, Boden Automatic Hammer Co., 162 Second street, S. F. Will contain main factory room and offices. Cement floor. No interior finish. Exterior cement and corrugated iron. Plans being prepared.

LOS ANGELES, CAL. — Factory, 10 story and base, reinforced concrete. Cost not stated. Architect, A. C. Martin, Higgins Bldg., L. A. Owner's name withheld. Location near Alameda street, covering an area of 100 by 100 feet. Fireproof construction, reinforced walls, floors and roof slabs. Hollow tile partitions, metal window sash and frames. Elevator service and steam heat. Oil burning equipment. Exterior cement plaster. Plans being prepared. Bids being taken for reinforcing steel.

SEATTLE, WASH. — Warehouse addition, 4 story, reinforced concrete. Cost not stated. Engineer, Port of Seattle Commission. Owners, City of Seattle. All bids for the construction of the proposed 4 story reinforced concrete addition to the Port of Seattle, Whatcom avenue warehouse have been rejected and the project postponed indefinitely. Bids which were opened showed H. Brandt low bidder at \$60,500, and ranging from that to \$84,000 by Hoy & Co, railroad contractors of Spokane.

FIRE HOUSES AND JAILS**Contracts Awarded.**

SAN QUENTIN, MARIN CO., CAL. — Motors for prison, \$5,700.90. Engineer, State Engineer, Sacramento. Owners, State of California. Contractors, General Electric Co., S. F. Contract price for 56 motors \$5,700.90.

FIRE REPORT

SEATTLE, WASH. — Pier 14 at the foot of Broad street, recently destroyed by fire, and owned by Ainsworth and Dunn Bldg., Seattle, will be rebuilt at a cost of \$90,000. The owners will prepare their own plans for the work.

LOS ANGELES, CAL. — Fire destroyed half of the five-story Douglas building in this city, causing a loss of \$200,000. Preparations are being made to have the structure repaired.

The United States Electrical Manufacturing Company's building on East Third street was destroyed by fire at a loss of \$60,000.

MODESTO, STANISLAUS CO., CAL. — Fire in the basement of the Modesto News caused damage to the amount of \$3,000 last week.

FLATS

SAN FRANCISCO — Flats, 3 story and base, frame. Cost not stated. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner, Mrs. Buckmeister. Location, Webster near Herman. Will contain three modern flats of five and six rooms. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Tile bath rooms. Automatic water heaters. Exterior covered with cement plaster and rustic. Plans being prepared.

SAN FRANCISCO — Flats, 3 story and base, frame, \$11,000. Architect, August Noidin, Mills Bldg., S. F. Owner, M. C. Mahoney. Location, north Green west of Octavia. Will contain six modern flats. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Tile baths. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans being prepared and figures to be called for at once.

SAN FRANCISCO — Flats, 2 story and base, frame, \$5,000. Architect, none. Owners, W. J. Hemminga Co., 1660 Fell street, S. F. Location, east 15th avenue south of California, covering an area of 25 by 64 feet. Will contain two flats of five and six rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile mantels. Automatic

water heaters. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL. — Flats, 2 story and base, frame, \$4,000. Architect, Eugene K. Martin, 2192 Shattuck avenue, Berkeley. Owner, L. Berckovich. Location, corner of Cedar and Arch streets. Will contain two flats of five and six rooms: Interior finish pine and elm panels with some white enamel and hardwood floors. Open fire places and tile mantels. Bath rooms tile. Automatic water heaters. Exterior covered with cement plaster. Plans being prepared.

PITTSBURG, CONTRA COSTA CO., CAL. — Flat and store, 2 story and base, frame. Cost not stated. Architect, A. W. Cornelius, Merchants' National Bank Bldg., S. F. Owners, Grossben Bros. Will contain a store on the first floor and modern flats above. Interior finish pine. Exterior cement plaster and rustic. Plans complete and work to be done by Day Labor.

GARAGES

SAN FRANCISCO — Garage, 2 story and base, Class A construction. Cost not stated. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner's name withheld. Location, California east of Leavenworth. Will cover a large ground area and has been designed for a commercial garage. Construction fireproof. Concrete floors. Machine shop. Exterior faced with cement plaster. Plans being prepared.

LOS ANGELES, CAL. — Garage, 2 story and base, Class C construction. Cost not stated. Architect, Albert C. Martin, Higgins Bldg., L. A. Owners, Tony Milcovitch and Miss T. Garibaldi. Location, Los Angeles street between 5th and 6th streets. Designed for a commercial garage. Concrete floors, metal window sash and frames. Exterior faced with pressed brick. Plans being prepared.

GOVERNMENT WORK & SUPPLIES**Denver, Colo., Painting.**

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for painting plastering in the U. S. post office at Denver, Colo.:

D. J. Inman, Danville, Ill., \$4,923.
Alfred Olson & Co., 6451 N. Clark street, Chicago, Ill., \$5,300.

Fairfax Bros. Co., Geneva, N. Y., \$5,650.

A. E. Brockmueller, Milwaukee, Wis., \$6,840.

J. P. Sullivan, 415 Indiana avenue, Chicago, Ill., \$6,931.

W. C. Redlich, 4 Sylvan Court, New York City, \$6,985.

The Denver Dry Goods Co., Denver, Colo., \$7,183.

The Abel-Pedersen Co., Sioux City, Iowa, \$7,497.

W. P. Nelson Co., 202 W. 33rd street, New York City, \$8,659.

Isidor Kissel, San Francisco, Cal., \$9,153.

Thomas H. Muller, Denver, Colo., \$9,323.

Theodore Laurence Painting Co., Kansas City, Mo., \$9,395.

Neptune B. Smyth, Inc., 473 E. 34th street, New York City, \$9,700.

Charles A. W. Rinschede, New York City, \$12,000.

Earthwork and Structures.

The following contracts have been awarded for earthwork and structures of the Bowdoin Canal, first unit, Milk River irrigation project, Mont.: To James O'Connor, Saco, Mont., schedules 1 and 2, involving 133,410 cubic yards of excavation and 9,000 cubic yards of overhaul, contract price \$18,618.50; to Jurgens, Booth & Co., Glasgow, Mont., schedules 3 and 4, involving 81,000 cubic yards of excavation, 450 cubic yards of reinforced concrete, 429 square yards dry paving, the placing of 30,000 pounds of steel reinforcement, and the placing in wooden structures of about 12,000 feet, B. M., of lumber. The work is located 17 miles east of Malta, on the Great Northern Railway.

Ironstone Canal.

The following is an abstract of the bids received by the U. S. Reclamation service, Montrose, Colo., for excavation, Ironstone Canal:

Mendenhall, Bird & Co., Springvale, Utah, items 1 to 4, \$12,455; 7 to 10, \$17,551.50; 13 to 16, \$9,165; 19 to 22, \$7,957; 25 to 28, \$6,878.

C. B. Sherwood, Rocky Ford, Colo., items 17 and 18, \$5,775; 23 and 24, \$5,742; 29 and 30, \$5,164.50; bid is for all three schedules bid for or none; separate proposition for items 23 and 24 only, \$6,090.

Earthwork and Structures.

The following bids were received at the office of the U. S. Reclamation Service at Powell, Wyo., for earthwork and structures, first unit, Franconia Division:

Schedule No. 1.

J. E. Hilton, Billings, Mont., \$48,315.
Tibbs & Taggart, \$45,090.
Threest Bros. & Jolley, Lovell, Wyo., \$16,190.

Schedule No. 2.

J. E. Hilton, \$33,330.
Tibbs & Taggart, \$29,600.
R. M. Lynn, Lovell, Wyo., \$27,076.
Threest Bros. & Jolley, \$21,440.

Schedule No. 3.

J. E. Hilton, \$32,295.
Tibbs & Taggart, \$38,270.
Threest Bros. & Jolley, \$32,270.

Schedule No. 4.

Threest Bros. & Jolley, \$11,179.80.
Security Bridge Co., Minneapolis, Minn., \$10,458.

Billings Engineering and Contracting Co., Billings, Mont., \$10,520.

Schedule No. 5.

Threest Bros. & Jolley, \$58,365.50.
Security Bridge Co., \$51,628.30.

Idaho Falls, Idaho, Furniture.

The contract for installing furniture in the U. S. Post office at Idaho Falls, Idaho, has been awarded to McGuire Cabinet Co., Los Angeles, Cal., at \$1,280.

Everett, Wash., Post Office.

In the construction of the U. S. post office at Everett, Wash., for which Hendrickson & Co., Seattle, Wash., are the contractors, conduit manufactured by the National Metal Molding Co., and cabinet and tablet manufactured by the Frank Adam Electric Co. will be used in lieu of those previously named.

South Canal, Excavation.

Contract has been awarded to Jurgens, Booth & Co., of Glasgow, Mont., for building structures on the Nelson Reservoir, South Canal, Milk River irrigation project, Mont. The work involves about 25,000 cubic yards of excavation, 1,700 cubic yards of concrete, the placing of 115,000 pounds of steel reinforcement, the erection of 150 linear feet of metal flume, and placing in wooden structures of about 85,000 feet, B. M., of lumber. The estimated price is \$34,081.50.

Idaho Falls, Idaho, Post Office.

In the construction of the U. S. post office at Idaho Falls, Idaho, for which the Sound Construction & Engineering Co., Portland, Ore., has the contract, lighting fixtures manufactured by the Reading Chandelier Works will be used in lieu of those previously named.

Wood Stave Pipe.

Contract has been awarded to the Pacific Tank & Pipe Co., of San Francisco, Cal., for constructing 3,285 linear feet of 60-inch and 450 linear feet of 24-inch continuous wood stave pipe in connection with the Belle Fourche irrigation project, S. Dak. The pipe is to be of unpainted redwood. The contract price is \$12,454.

HALLS AND SOCIETY BUILDINGS

RICHMOND, CONTRA COSTA CO., CAL.—City hall, 2 story and base, reinforced concrete, \$50,000. Architects, James T. Narbett, associated with J. G. Ogborn, Richmond. Owners, City of Richmond. Location, Macdonald avenue and 23rd street. Fireproof construction. Will contain all city offices. Interior finish pine and hardwood with tile and marble wainscot. Steam heat, hot water supply and oil burning system. Exterior faced with cement plaster. Plans nearly complete.

SACRAMENTO, CAL.—City hall and jail, 4 story and base. Class A construction, \$175,000. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, City of Sacramento. Plans have been completed and approved for the construction of this building and bids will be called for at once. Construction will be fireproof. Will contain all city offices and the jail. Interior finish pine and hardwood with marble and tile wainscot and bases. Steam heat, oil burning equipment and vacuum cleaning. Exterior faced with cement plaster.

VISALIA, TULARE CO., CAL.—Municipal auditorium, 2 story and base, brick, \$35,000. Architects, Coates & Traver, Rowell Bldg., Fresno. Owners, City of Visalia. An official announcement has been sent out stating that bids will close November 17th for the construction of the Visalia Municipal Auditorium.

HOTELS

MARTINEZ, CONTRA COSTA CO., CAL.—Hotel and stores, 3 story and base. Class C construction, \$35,000. Architect, none. Owner, William F. Ohm, 1615 Fell street, S. F. Will contain a number of stores on the first floor and modern hotel rooms and baths above. Interior finish pine, Steam

heat, oil burning equipment and hot water system. Patent store fronts. Exterior faced with cement plaster and pressed brick. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL.—Hotel and stores, 4 story and base. Class C construction, \$30,000. Architect, Charles H. Kysor, Wright and Callender Bldg., 11. A. Owner, A. L. Phillips. Location, 6th near Ruth, covering an area of 55 by 100 feet. Will contain several stores and 60 rooms. Interior finish pine. Patent store fronts, steam heat and hot water service. Exterior faced with pressed brick. Plans complete and figures being taken.

IRRIGATION PROJECTS

MODESTO, STANISLAUS CO., CAL.—Concrete facing and curtain wall. Cost not stated. Engineer, Chief Engineer Hermann, Modesto. Owners, Modesto Irrigation District. As the result of re-advertisement for the work of constructing a concrete facing and curtain wall for dam No. 1 of the Modesto Irrigation District, due to the refusal of John Monk, lowest bidder on former advertisement at a figure of \$57,971, to proceed with the work, the district will have to pay at least \$15,000 more than his figure for the work. This was shown at the opening of bids by the board of directors the lowest of five bidders being Peart Bros. of Oakdale at a figure of \$72,800. The other bids were: Tibbits-Pacific Co., S. F., \$77,770; Contra Costa Construction Co., S. F., cost plus 15 per cent, with guarantee not to exceed \$75,000; Teichert & Ambrose of Sacramento, \$80,540; Ross Construction Co., S. F., \$78,050. Action will be taken on the bids in a few days.

MODESTO, STANISLAUS CO., CAL.—Culvert, concrete, \$1,520. Engineer, Chief Engineer Hermann, Modesto. Owners, Modesto Irrigation District. Secretary C. S. Abbott of the Modesto Irrigation District has been instructed to communicate with the Southern Pacific Co. stating that the district will accept the proposal of the company to build a large culvert under the track for the main drainage canal between Modesto and Salida. The present culvert is too small to carry the drainage water.

MODESTO, STANISLAUS CO., CAL.—Deepening canal. Cost not stated. Engineer, Chief Engineer F. C. Hermann, Modesto. Owners, Modesto Irrigation District. At the last meeting of the board of directors of the Modesto Irrigation District plans and specifications were adopted for deepening, cleaning and extending the main drainage canal of the district from the Southern Pacific's right-of-way to Pinegan cut of the San Joaquin River. The bids are to be opened at 10 o'clock November 15th. Further information may be had from the district's Chief Engineer, F. C. Hermann, at Modesto.

OAKDALE, STANISLAUS CO., CAL.—Irrigation dam. Cost not stated. Engineers, William Mulholland and J. M. Howels, Oakdale. Owners, Oakdale Irrigation District. Work on the proposed Woodward reservoir near Oakdale will be started shortly, according to word received from this city. Farmers want immediate action on the project. William Mulholland, builder

of the Los Angeles aqueduct, and J. M. Howells, chief engineer of the Great Western Power Company, recommended an earth dam without the concrete core that originally was planned. Twelve test pits have been sunk to the site of the proposed dam, two of them 40 feet deep, and the rest ranging from 30 to 35 feet. The dam itself will be of earth, and sufficient material suitable for that purpose is close at hand. The first work on the dam itself will be the building of a large take-out, which will be a cement structure in culvert form. This structure alone will cost \$20,000, it is estimated. Should work start at once, it is thought that from 3,000 to 5,000 acre feet of water will be available late next season for irrigation purposes.

LIVE OAK SUTTER CO., CAL.—Deepening ditches, \$50,000. Engineer's name not given. Owners, Reclamation District No. 777, Live Oak. Land owners of District 777 have called a meeting to consider the matter of providing adequate drainage for the district. It is estimated it will cost \$50,000 to deepen present ditches sufficiently to insure the safety of orchard trees and other crops. Ways and means to provide drainage will be taken up.

WOODLAND, YOLO CO., CAL.—Irrigation project. Cost not stated. Engineer's name withheld. Owners, Prairie Ditch Co., Woodland. Articles of incorporation have been filed in Woodland by the Prairie Ditch Co., which plans to build an irrigation ditch, bulkheads, etc., to connect with a tributary of the main canal of the Yolo Water and Power Co. The stockholders are: Lou Ulrich, Dan McGregor, G. Benedict, H. T. Griffin, Andrew Strum, J. O. Davis, Samuel Frank, George Redden and B. B. Harr.

RAILROAD CONSTRUCTION AND EQUIPMENT

PORTLAND, ORE.—Railroad construction, \$800,000. Engineer, Engineering Department, Oregon-Washington Railroad and Navigation Co., Portland. Owners, O.-W. R. & N. Co. The directors of the O.-W. R. & N. have announced that \$800,000 will be spent in rail renewals on various parts of the main line between Portland and Harrington. The units to be improved with the approximate cost are: Troutdale to Bonneville, 25 miles, with 90-pound steel, replacing 75-pound steel; cost \$190,000. Blalocks to Coyote, 37 miles, with 90-pound steel, replacing 75-pound steel; cost, \$290,000. Echo to Yakum, 10 miles, with 90-pound steel, replacing 80-pound steel; cost, \$80,000. Pendleton to Gibbon, 25 miles, with 90-pound steel, replacing 80-pound steel; cost \$190,000. Gibbon to Duncan, 9 miles, with 90-pound steel, replacing 80-pound steel; cost, \$50,000. The aggregate distance to be covered by these renewals is 166 miles.

RESIDENCES

SAN FRANCISCO—Residence, 2 story and base, frame, \$8,000. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner, Mrs. Allen. Location, Forest Hill. Will contain eight rooms, two baths, sleeping porch and separate garage. Interior finish pine, hard-

wood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

SAN FRANCISCO—Residences, 1, 3 story and base, frame, \$7,500 each. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Norman B. Livermore, Merchants' National Bank Bldg., S. F. Location, Valley and Jones streets. Each will contain eight rooms, two baths and sleeping porch with basement garage. Interior finish pine and hardwood with some white enamel. Hardwood floors. Furnace heat, open fire places and hot water heaters. Mantels tile and brick. Bath rooms finished in tile. Exterior covered with cement plaster and brick veneer. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,200. Architect, none. Owner, Fred A. Steinmann, 4581 Mission street, S. F. Location, east Mission north Brazil. Will contain five rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 3, 2 story and base, frame \$10,000 to \$12,000 each. Architects, Falch & Knoll, Hearst Bldg., S. F. Owners, Newell-Murdoch Co. Location, Forest Hill. Each dwelling will contain nine rooms, three baths, sleeping porches and separate garages. Interiors will be finished in hardwood, pine and white enamel. Hardwood floors will be used throughout. Furnace heat, open fire places, hot water circulating system and tile or brick mantels. Bath rooms finished in tile. Exteriors covered with pressed brick veneer and cement plaster. Plans being prepared.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, none. Owners, Lindberg Bros., 257 Surrey street, S. F. Location, north Army east Bryant. Will contain six rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,760. Architect, J. A. Porporato, 719 Washington street, S. F. Owner, George V. Olivia, 2142 Larkin street. Location north Filbert west of Hyde. Will contain eight rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire places and tile mantels. Furnace heat and automatic water heater. Tile wainscot in bath room. Exterior covered with cement plaster on metal lath. Plans prepared and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, A. T. Anderson, 7323 Lockwood, Oakland. Location, north East 37th street west of Randolph.

Will contain five rooms, bath and sleeping porch. Interior finish pine with some white enamel. Hardwood floors and open fire place. Tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, M. H. Tremble, 2475 Rawson, Oakland. Location, west 51st avenue south of Fortune. Will contain five rooms and bath. Interior finish pine and elm panels. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residences, 4, 1 story and base, frame, \$1,500 each. Architect, none. Owner, J. B. Peppin, San Leandro. Location, 162nd avenue and Orange street. Will contain four rooms and bath. Interiors finished in pine throughout. Some hardwood floors. Open fire place and tile mantels. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residences, 2, 1½ story and base, frame, \$2,500 each. Architects, Hutchinson & McLean, 470 13th street, Oakland. Owner, W. A. Anderson, 1774 Aussen avenue, Oakland. Location, East 14th street. Will contain six rooms, bath and sleeping porch. Interior finish pine with some elm panels and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architect, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, C. Texdahl. Will contain six rooms, bath and sleeping porch. Interior finish pine and redwood with some white enamel. Hardwood floors, open fire place and tile mantel. Automatic water heater. Bath room finished in tile. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, E. L. Higgins, 5250 Miles avenue, Oakland. Location, west Thomas, south of Prospect. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile or brick mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,000. Architect, none. Owners, El Nido Building Co., 584 10th street Oakland. Location, east Valle Vista south Sunnyside. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors, open fire place and tile or brick mantel. The wainscot and floor in bath. Automatic water heater. Exterior covered with cement plaster.

Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owners, Boyd, Carlos & Co., Hudson and Claremont streets, Oakland. Location, east Arbor avenue north Hudson. Will contain five rooms bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$4,700. Architect, M. L. Diggs, 2444 Bowditch, Berkeley. Owner, J. C. O'Connor, 5314 Bryant avenue, Oakland. Location, east Carlsonton south of Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and tile or brick mantels. Furnace heat. Bath rooms finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$6,000. Architect, H. H. Gutterston, 68 Post street, S. F. Owner, Mr. Brook. Location, Thousand Oaks. Will contain eight rooms, two baths and sleeping porches. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places, tile and brick mantels and furnace heat. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

DAVIS, YOLO CO., CAL.—Residence, 1 story and base, frame, \$6,500. Architect, none. Owner, A. R. Pedder, Davis. Location Bowers Addition. Will contain seven rooms, baths and sleeping porch. Interior finish pine and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster and rustic. Wall beds. Plans being prepared.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$3,000. Architect's name not given. Owner, A. E. Cockran, Fresno. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Automatic water heater. Tile floor in bath. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, K. C. Buyalida, 816 Mona avenue, Fresno. Location, 3211 Mona avenue. Will contain six rooms and bath. Interior finish pine throughout. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 4, 2 story and base, frame, \$1,000 each. Architect, Eugene Mathewson, Forsythe Bldg., Fresno. Owners,

Shepard Cochran Co. Location, Ventura Vista Tract. Each will contain eight rooms, bath and sleeping porch. Interiors finished in pine, white enamel and hardwood veneer. Hardwood floors, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heaters. Exteriors covered with cement plaster. Plans being prepared.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,750. Architect, none. Owner, A. R. Lapham, 511 12th avenue, S. F. Location, east 12th avenue south of Cabrillo. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Tile bath. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

Contracts Awarded.

VISALIA, TULARE CO., CAL.—Residence, 2 story and base, frame, \$7,890. Architects, Swartz & Swartz, Rowell Bldg., Fresno. Owner, Miss Mary F. Chatten. Contractor, D. L. Barnhart, Visalia. Contract price, \$7,890.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$3,000. Architect, Eugene Mathewson, Forsythe Bldg., Fresno. Owner, A. E. Cochran. Contractors, F. J. Stone & Son, 2007 Mariposa street, Fresno. Contract price, \$3,000.

SCHOOLS

CRYSTAL SPRINGS, SOLANO CO., CAL.—School, 1 story, frame. Cost not stated. Architect's name not given. Owners Crystal Springs School District, John A. Wilson, clerk, Suisun. Will contain two class rooms. Interior finish pine. Exterior cement plaster or rustic. Plans complete and figures being taken. Bids open on November 15th.

THORNEY, CONTRA COSTA CO., CAL.—School, 1 story, hollow tile or frame. Cost as follows. Architect, Norman R. Coulter, 16 Kearny street, S. F. Owners, Selby School District. Kellar & Crane submitted the lowest bid for the work on propositions 1 and 2 while Calavell & Son were low on proposition 3, which calls for hollow tile. A complete list of the bids will be found under the heading of Marin and Contra Costa in this issue. No contract has been awarded.

VALLEJO, SOLANO CO., CAL.—School, 1 story, portable. Cost not stated. Architect, none. Owners, Town of Vallejo. Bids will be opened on November 17th at 5 p. m. for furnishing a portable school. Complete information can be secured from G. V. Whaley, secretary of the Board of Education.

BELLINGHAM, WASH.—School, 3 story and base, reinforced concrete and steel, \$115,000. Architects, Heath & Gove, National Realty Bldg., Tacoma. Owners, City of Bellingham. Plans have been completed for the new high school building and bids are now being taken. Construction will be fireproof. Interior finish pine with maple floors. Steam heat, oil burning furnace and vacuum cleaning. Exterior faced with pressed brick. Separate figures for general construction, heating and ventilating, plumbing and electric work.

SEATTLE, WASH.—Home economics building, 2 story, reinforced concrete, 399,936. Architects, Benh & Gould, Benny Bldg., Seattle. Owners, State of Washington. Bids opened by the Board of Regents of the University of Washington for the construction of the home economics building show Finne & Gjard, Northern Bank Bldg., Seattle, low on their bid of \$99,936. Further mention will be made when the contract is awarded.

Contracts Awarded.

MILNES SCHOOL DISTRICT, STANISLAUS CO., CAL.—School, 1 story, frame, \$5,965. Architect's name not given. Owners, Milnes School District. Contractor, R. E. De Vick, Oakdale. Contract price, \$5,965.

SEWERS, STREET WORK & WATER SYSTEMS

OAKDALE, STANISLAUS CO., CAL.—Street paving, \$50,000. Engineer, City Engineer, Oakdale. Owners, City of Oakdale. The City Trustees will take up for consideration at their next meeting the question of improving F street in order to connect with the State highway. To pave the street for its full length will cost about \$50,000. Further information will be given when a decision is reached.

BAKERSFIELD, KERN CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. At the last meeting of the City Council resolutions of intention in sewer district 31, covering a district between Palm and Dracona on S street were adopted. Bids on this work will be called shortly.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Bids will be opened on November 18th at 12 noon for constructing an 8-inch vitrified pipe sanitary sewer in Sola street from an existing manhole at the center of San Andreas and Sola streets to a manhole to be constructed in the center of Sola and Gillespie streets. To construct an 8-inch vitrified pipe sanitary sewer in Gillespie street from manhole to be constructed in Sola street to a manhole to be constructed in Michitoren street.

LOS ANGELES, CAL.—Road construction. Cost not stated. Engineer, County Surveyor, Los Angeles. Owners, County of Los Angeles. The Board of Supervisors directed the road commissioner to prepare plans and specifications for the construction of a road in Mint Canyon. The road is to be built of concrete, beginning at a point about five miles north of Saugus and extending to Palmdale in the Antelope Valley. Further information will be given of this work when the plans are complete.

YREKA, SISKIYOU CO., CAL.—State highway construction. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. T. A. Bedford, Division Engineer of the State Highway, accompanied by H. S. Conley, assistant engineer, and A. Lowden, resident engineer of the Siskiyou division, have returned from a tour of

inspection down the Klamath River as far as Happy Camp. This trip is preliminary to a survey to be made down the Klamath River for a road to connect with Humboldt County's automobile road to Orleans Bar and on to Eureka. This survey is to gather data on the feasibility of such a road to connect with the California-Oregon highway at the junction of the Shasta and Klamath Rivers between Yreka and Hornbrook. Such a road following the Klamath River to the coast would run on an easy grade and in a country where snow does not obstruct traffic in the winter time and could be used the year round. It is part of the Highway Engineer's plan to make a connecting loop between the coast and central highways of the State.

WOODLAND, YOLO CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Woodland. Owners, City of Woodland. Although they have not been awarded the contract, the Clark & Henery Construction Co., Ochsner Bldg., Sacramento, is assembling material on the ground for the paving to be done in this city. When the bids were opened on the work the Clark & Henery Co. submitted the lowest figure.

OAKLAND, CAL.—Street work. Cost not stated. Engineer, City Engineer, Oakland. Owners, City of Oakland. At a recent meeting of the City Council the following action was taken relative to street improvements. Adopting plans and specifications for the construction of a sewer in Tompkins avenue from Yale avenue northwesterly, and recommending passage of resolution of same. Adopting plans and specifications for the improvement of Farnum street between Fruitvale avenue and 34th avenue, and recommending passage of resolution of same. Awarding contract to Ransome-Crummey Company forth improvement of 19th avenue, from East Twelfth street, southwesterly. Granting permission to Joseph Carroll to construct a sewer in Adeline street from the manhole in 56th street to a point 120 feet northwesterly therefrom.

NAPA, NAPA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Napa. Owners, City of Napa. At the last meeting of the City Council bids for the improvement of Nursery, Ash, Vallejo and Jackson streets were ordered re-advertised as the bids were opened too soon and in violation of law. Further information with plans for this work may be had from the City Engineer or City Clerk at Napa.

SAUSALITO, MARIN CO., CAL.—Street improvement. Cost as follows. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. At the last meeting of the Town Trustees the following bids were received for the improvement of West and Valley streets: Carnahan & Mulford, 45 Kearny street, S. F., \$2,177; Construction and Engineering Co., 1047 Folsom street, S. F., \$1,859.79. No action was taken in awarding a contract. Further information will be given of this work when an award of contract is made.

DAILY CITY, SAN MATEO CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Daily City. Owners, Daily City. A resolution of

intention providing for the construction and installation of an 8-inch salt glazed vitrified sewer pipe along Bellevue avenue, commencing at Henrietta street running east 633 feet; an 8-inch salt glazed vitrified sewer pipe along Bellevue avenue from Olive street 633 feet to Whittier street; 8-inch salt glazed vitrified sewer pipe in the center line of Lowell street, 633 feet, 8-inch diameter salt glazed vitrified sewer pipe in the center line of Lowell street and running 422 feet; 8-inch diameter salt glazed vitrified sewer pipe, Bellevue avenue, 225 feet along said Lowell street; 15-inch salt glazed vitrified sewer pipe along said Lowell street, north 116 feet; 12 feet of 12-inch diameter salt glazed vitrified sewer pipe at the intersection of Bellevue avenue with Henrietta street; 12 feet of 15-inch diameter salt glazed vitrified sewer pipe at the intersection of Bellevue avenue with Oliver street; the construction of 4 manholes; 4 lamp-holes; 99 8 inch by 4 inch Y branches; 8 15 inch by 4 inch Y branches; 91 six feet rises pipes of salt glazed vitrified sewer pipe. Further information may be had from the City Clerk.

SALINAS, MONTEREY CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor Cozzins. Salinas. Owners, Monterey County. At the next meeting of the County Supervisors, County Surveyor Cozzins will submit plans for two road improvements to be made in Monterey County. One is the half mile cut on the hill near the Oliver ranch house, just beyond the Carmel River on the Coast road, in the Sur Road District. The other piece of road work is for the grading, macadamizing and surfacing of the 15-mile stretch from Del Monte to the Castroville city limits. Further information will be given on this work when the plans have been accepted.

SAN FRANCISCO—Beach esplanade. Cost not stated. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. The Board of Public Works has released C. E. Lamburth from his contract to construct the first section of the Ocean Beach esplanade, and will advertise for new bids to be opened November 12th. Lamburth's bid for this work was \$18,500, which amount he now claims was too low. Plans can be secured from the City Engineer's office, Temporary City Hall.

FRESNO, FRESNO CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Fresno. Owners, City of Fresno. The City Council has accepted the offer of the Stewart Fruit Company to exchange a triangular piece of land at R and Ventura streets for another piece on Ventura and Angus, in order to arrange for the paving of Ventura avenue from R street to the city limits, a distance of about 8 blocks. The agreement will make it possible to straighten to a large extent the curve at the intersection of R and Ventura streets. A petition for paving is expected to be presented soon. Resolutions of intention providing for the improvement of Coast and Franklin avenues have been passed by the Council.

FRESNO, FRESNO CO., CAL.—Electrolier system. Cost not stated. Engineer, City Engineer, Fresno. Own-

ers, City of Fresno. Plans for an electrolier system in the unlighted district of the city on J and Tuolumne streets were adopted at the last meeting of the City Council, and a resolution of intention providing for the installation of them has passed.

STOCKTON, SAN JOAQUIN CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Stockton. Owners, San Joaquin County. At a recent meeting of the Supervisors plans and specifications were adopted for grading a little less than three miles of the French Camp road, from a point a mile east of Escalon to the Stanislaus County line. Bids for the work will be opened November 22nd at 11 o'clock a. m. Further information may be had from the County Engineer.

SAN JOSE, SANTA CLARA CO., CAL.—Electroliters. Cost not stated. Engineer, City Engineer, San Jose. Owners, City of San Jose. The design of the Pacific States Electric Company for electroliers to be installed on North First street has been accepted by the North First Street Improvement Association.

Contracts Awarded.

SAN ANSELMO, MARIN CO., CAL.—Sewer construction. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Contractors, Marin Rock Co., San Anselmo. Contract covers construction of sewers in Forest avenue and Willow avenue.

SAUSALITO, MARIN CO., CAL.—Sewer construction. \$11,026.20. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Contractor, W. J. Tobin, 735 Filbert street, Oakland. Contract for sewers in District F. Contract price, \$11,026.20.

SACRAMENTO, CAL.—Transformer station for sewer plant. \$3,325. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractor, J. W. Terfill, 1111 29th street, Sacramento. Contract price, \$3,325.

SAN JOSE, SANTA CLARA CO., CAL.—Street improvement. Cost as follows. Engineer, City Engineer, San Jose. Owners, City of San Jose. Contractors, Bell & Rice, San Jose, new avenue from Rucker to Leavesly, \$1,287; John Boyle, 660 North 10th street, San Jose, concrete curtain walls on Campbell Creek, \$1,462.

REDWOOD CITY, SAN MATEO CO., CAL.—Furnishing pipe. \$1,760.09. Engineer, Town Engineer, Redwood City. Owners, Town of Redwood City. Contractors, United States Pipe Co., S. F. Contract price, 15-inch pipe of 6-inch and 1,900 feet of 4-inch pipe, \$1,760.09.

MODESTO, STANISLAUS CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Modesto. Owners, City of Modesto. Contractor, W. H. Worswick, Jr., Fresno. Contract price not stated. Contract covers paving intersection of I and 8th streets.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Street improvement. \$15,175. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractors, F. R. Ritchie & Co., Chronicle Bldg., S. F. Contract for repaving East Boulevard, including Booth Point. Contract price, \$15,175.

EL CENTRO, IMPERIAL CO., CAL.—Outfall sewer. \$206,199.10. Engineer,

City Engineer, El Centro. Owners, Towns of El Centro and Imperial. Contractor, James Kennedy, Washington Bldg., L. A. Contract price, \$206,199.10.

STORES AND OFFICES

SAN FRANCISCO — Market alterations, frame construction. Cost not stated. Architect, August G. Headman, New Call Bldg., S. F. Owner, Hermann's Market. Location, northeast corner of Bush and Franklin streets. Work will consist of installation of new stalls, marble and tile work, painting, plastering, plumbing and electric work. Plans are complete and figures are being taken.

FRESNO, FRESNO CO., CAL. — Stores, 1 story and base, brick. Cost not stated. Architect, Eugene Mathewson, Forsythe Bldg., Fresno. Owner, James Porteous. Location, P and Tulare streets, covering an area of 75 by 65 feet. Will contain five stores. Interior finish pine. Patent store fronts. Exterior faced with pressed brick or cement plaster. Plans complete and figures being taken.

SEATTLE, WASH. — Offices and club rooms, 12 story and base, reinforced concrete, \$400,000. Architect, A. Warren Gould, American Bank Bldg., associated with George W. Lawton. Owner, James Moses, leased to The Artie Club. Location, northeast corner of 3rd and Cherry, covering an area of 120 by 112 feet. Will contain 180 offices on the Third avenue frontage, while the entire Cherry street frontage will be occupied by the Artie Club. Concrete walls, floors and roof. Interior finish pine and hardwood with special trim in the club rooms. Steam heat, oil burning plant, vacuum cleaning, hot water supply and three elevators. Metal window sash and frames, hollow tile partitions. Exterior faced with pressed brick and terra cotta. Plans ready for figures within a month.

THEATRES

SAN FRANCISCO — Theatre, 1 story and base, brick and steel, \$27,500. Architect, Mathew O'Brien, Foxcroft Bldg., S. F. Owner, N. L. Losey. Location, south Geary west of Powell, covering an area of 137½ by 37½ feet. Construction fireproof. Interior finish pine and hardwood with ornamental plaster. Plans complete, figures in and under advisement.

Contracts Awarded.

OAKLAND, CAL. — Theatre, 1 story and base, brick, \$14,000. Architect, Merrill Newsom, 1718 Broadway, Oakland. Owner, Mr. Werum. Contractor, W. C. Brown, 1624 6th street, Oakland. Contract price, \$11,000. Note: Contractor is now taking sub-figures.

CALIFORNIA RIVER VOLUMES MEASURED.

Report of United States Geological Survey Contains Data on Principal Streams of State.

The development of the water supply of California has in large part contributed to the material development of the State. In the days of '49 its first great boom was the result of finding gold in a creek bottom, and throughout the early gold days the rapid growth

George Nelson, C. E.

Engineering	560 Mission St.
Financing	San Francisco, Cal.
Developments	503 Grant Bldg.
Construction	Los Angeles, Cal.

of California was made possible by the development of water supplies for use in placer mining. In later years came the great irrigation activities, and especially in southern California have the agricultural products become so valuable that in that part of the State water is probably worth more than it is anywhere else in the country. Throughout the Sacramento and San Joaquin valleys also water has relatively large value for irrigation. Still later came the recognition of the enormous importance of California water powers. In a few years the development of water power has grown until California ranks second only to New York in this respect.

Importance of the Study of Stream Flow.

It is apparent that in a State so thoroughly dependent upon its water supplies investigations which will reveal the amount of water available in the streams and beneath the ground are of the highest importance. The people of California have recognized this fact and for many years have through their legislature co-operated with the United States Geological Survey in the determination of stream flow and the location of underground supplies.

Records Are Available to the Public.

The Geological Survey has available for distribution the annual volumes on the surface water supply of the Pacific coast drainage basins in California covering the years 1904 to 1913 inclusive, with the exception of that for 1906, and all or any of these reports may be obtained free on application to the Director, U. S. Geological Survey, Washington, D. C. Inasmuch as the great value of these reports lies in the record having been kept for several years, thus showing the fluctuations from year to year, doubtless many engineers will find the complete set of great value to them.

NOTICE TO LUMBER DEALERS.

Mr. Franklin H. Smith, Special Agent of the Bureau of Foreign and Domestic Commerce, who has spent a year in the Orient, Australia and New Zealand making extensive investigations for the markets for American lumber, will be at the Bureau, 307 Customhouse today. Mr. Smith will be here part of next week also and will be pleased to confer with anyone interested. The result of Mr. Smith's investigations is sure to prove of great value to lumbermen of the Pacific Coast. Arrangements for appointments may be made by telephoning Sutter 1425.



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OFFICIAL PROPOSALS.

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock P. M. on Nov. 29, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:

Yolo County, near the easterly side of the Yolo By-pass (H-1-Yol-6-E), a plate girder bascule 80-foot clear span with reinforced concrete approaches. Total length about 141 feet.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the offices of the Division Engineers at Los Angeles and San Francisco, and at the division in which the work is situated. The Division Engineers' offices are located at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. SPERN,
California Highway Commission.
AUSTIN E. FLETCHER,
Highway Engineer.
WILSON R. ELLIS,
Secretary. (*)

Dated: Nov. 1, 1915.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Three Buildings" will be received at the naval station, Pearl Harbor, Hawaii, and at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. November 27, 1915, and then publicly opened, for constructing one reinforced concrete power house, one reinforced concrete operating building and one wooden double quarters for chief operators at the naval station, Pearl Harbor. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR ROLLER CASINGS, ETC.

ROLLER CASINGS, ETC.—Office of the General Purchasing Officer, Panama Canal, Washington, D. C.—Sealed proposals will be received here until November 16, 1915, under file 1909-C for furnishing 4 roller plates, 2 roller casings, 4 roller cages, 4 roller bearing sleeves, 100 rollers, 4 thrust washers, 2 roller retaining rings, 100 rollers, 60 segments, 2 worm shafts and 2 worm wheels. For further information address P. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 988—Proposals for Cast Iron Keel Blocks, Cast Iron Bilge Block Slides, Garbage Incinerator, Drill Press, Lathe, Steel Tubing, Spring Plates, Nails, Rivets, Staples, Pipe Fittings, Water Closets, Sheet Lead, Holy Stones, Currying Brushes, Plate Glass, Airbrake Hose, Leather and Lard Oil.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. November 17, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 988) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. P. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

NORTH DAKOTA BUILDING. PROPOSALS FOR THE SALE AND REMOVAL OF THE NORTH DAKOTA STATE BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED PROPOSALS for the sale, and complete removal of the North Dakota State Building at the Panama-Pacific International Exposition, at San Francisco, Cal., are asked by the North Dakota Commission to the Panama-Pacific International Exposition.

One proposal is desired for the sale and complete removal of the building and fixtures and clearing lot to official grade.

All proposals shall be securely sealed accompanied by a certified check for ten per cent (10%) of the amount of the proposal, and mailed as follows: "To Will E. Holbein, Secretary North Dakota Commission, to the Panama-Pacific International Exposition, North Dakota Building, Panama-Pacific International Exposition, San Francisco, Cal." Proposals will be received up to and including noon of Saturday, November 13, 1915.

A bond of \$2,000 shall be filed by successful bidder with the Secretary of the North Dakota Commission to guarantee the Commission that the removal of the building shall not start before December 5th, 1915, and that it shall be entirely removed on or before March 4th, 1916.

Commission reserves right to reject any or all bids.

NORTH DAKOTA COMMISSION, North Dakota Building, Panama-Pacific International Exposition. (*)

PROPOSALS FOR THE SALE, WRECKING AND REMOVAL OF THE NORWAY BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED PROPOSALS for the sale, wrecking and complete removal of the Norway Building at the Panama-Pacific International Exposition, at San Francisco, Cal., are asked by the Norwegian-American Auxiliary.

Two proposals are desired, one to be for the sale, wrecking and complete removal of the building and furniture and clearing lot to official grade, and the other for the sale, wrecking and complete removal of the building without furniture.

All proposals shall be securely sealed and mailed as follows: "To J. R. Quistad, Secy., Norwegian-American Auxiliary, to the Panama-Pacific International Exposition, Norway Building,

Panama-Pacific International Exposition, San Francisco, Cal." Proposals will be received up to and including noon of Monday, November 15, 1915.

Commission reserves right to reject any or all bids.

NORWEGIAN-AMERICAN AUXILIARY
P. L. Halse, President.

Call For Bids For Razing the Iowa Building on the Grounds of The Panama-Pacific International Exposition.

The undersigned will receive bids for razing the Iowa Building on the grounds of the Panama-Pacific International Exposition, in accordance with the rules of the Exposition Company and the Iowa Commission to the P. P. I. E.

No bids will be received after November 15, 1915. Full information may be obtained from the Iowa Commission to the P. P. I. E., at its offices at Iowa House, on the Exposition Grounds. IOWA COMMISSION TO THE P. P. I. E.
Woodworth Clum, Secretary. (tt)

BIDS WANTED.

FOR WRECKING NEW YORK STATE BUILDING.

BIDS will be received until twelve o'clock, noon, Thursday, November 18th, for the sale of the New York State Building, Panama-Pacific International Exposition and the clearing of the site thereof. The bids to provide:

FIRST, for the sale of the building to include to contain plumbing fixtures complete for 25 bathrooms, three toilet rooms, gas and electric fixtures and steam heating plant.

SECOND for the sale of the building without bathrooms, toilets, electric fixtures or steam plant.

Building and blue print plans, etc., may be examined at building at any time. Bids accompanied by twenty-five (25) per cent thereof to be submitted to New York State Commission, Panama-Pacific International Exposition.

NORMAN E. MACK, Chairman.
DANIEL L. RYAN, Secretary.

NOTICE TO HOUSE-WRECKERS.

PROPOSAL FOR THE SALE AND REMOVAL OF THE LUMBERMEN'S BUILDING AND HOUSE OF HOO-HOO AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED PROPOSALS for the sale and complete removal of The Lumbermen's Building and House of Hoo-Hoo, South Horticultural Gardens, Panama-Pacific International Exposition, San Francisco, Cal., are asked by the Board of Governors.

Proposals to be for the complete removal of Building from premises and grading of lot clear to level of curb, prior to March 15th, 1916. Proposal will be exclusive of small room at rear which is simply a lean-to and all radiators, furniture and draperies; but will include main building, plate glass in window openings, toilets, lavatories, pipe, both sanitary and water, chandeliers, lighting fixtures, flowers, shrubs and plants and logs and flower boxes in colonnade and pergolas and the pylons.

All proposals shall be securely sealed, accompanied by certified check for 10% of the amount of proposal and mailed as follows: "To A. B. Wastell, Executive Secretary, The Lumbermen's Building and House of Hoo-Hoo, 1111 Hobart Building, San Francisco, Cal." Proposals will be received up to and including noon of Saturday, November 20th, 1915.

The Board of Governors reserves the right to reject any or all bids and the 10% deposit will be forfeited if balance of the amount of accepted bid is not paid in to this Board by December 5th, 1915.

For further particulars apply to undersigned at 1111 Hobart Building, FOR THE BOARD OF GOVERNORS, A. B. WASTEL, Executive Secretary. (*)

PROPOSALS FOR CLEARING.

CLEARING—Department of the Interior, U. S. Reclamation Service, Washington, D. C.—Sealed proposals will be received at the office of the U. S. Reclamation Service, Meadow Creek, Wash., until 2 o'clock p. m. December 1, 1915, for clearing the reservoir site at Lake Keechelus, Wash., of all timber, undergrowth and brush and for the purchase of sawmill machinery at the site. Bids are also invited on about 160,000 feet, board measure, of lumber and 200,000 feet, board measure, of logs in accordance with data contained in the specifications. For particulars address the U. S. Reclamation Service, Meadow Creek, Wash.; Denver, Colo., or Washington, D. C. A. P. DAVIS, chief engineer.

PROPOSALS FOR BUILDING.

BUILDING—Department of the Interior, Office of Indian Affairs, Washington, D. C.—Sealed proposals plainly marked on the outside of the sealed envelope "Proposals for Addition to Brick Assembly Hall, Salem School, Oregon," and addressed to the Commissioner of Indian Affairs, Washington, D. C., will be received at the Indian Office until 2 o'clock p. m. of November 15, 1915, for furnishing materials and labor for the construction of an addition to the brick assembly hall, in strict accordance with the plans, specifications and instructions to bidders, which may be examined at the United States Indian warehouses at Chicago, Ill.; St. Louis, Mo., and Builders' Exchange at St. Paul, Minn., and of the superintendent of the Salem Indian School, Chemawa, Ore. For further information apply to the superintendent of the Salem School. CATO SELLS, commissioner.

PROPOSALS FOR BUILDING.

BUILDING—Fort Logan, Colo.—Sealed proposals, in triplicate, for furnishing all materials and labor required in constructing basements under noncommissioned officers' quarters will be received until 11 a. m. November 15, 1915. Information on application to quartermaster.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 986—Proposals for the purchase of Miscellaneous Iron and Steel Scrap Offered for Sale by the Panama Canal and Which is no Longer Needed. Sealed proposals will be received at the office of the general purchasing officer the Panama Canal, Washington, D. C., until 10:30 a. m. November 22, 1915, at which time they will be opened in public, for purchasing the above-mentioned articles. Blanks and general information relating to this circular (No. 986) may be obtained from the office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOXER, major, corps of engineers, U. S. Army, general purchasing officer.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC Works of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 24th day of November, 1915, for doing the following work, including the furnishing of the neces-

sary labor and materials therefor, to wit:

The construction of the Hetch-Hetchy Railroad.

Progressive payments will be made in the manner set forth in the specifications.

Said work must be done in accordance with the plans and specifications on file in the office of the Board of Public Works, to which reference is hereby made, and must be commenced within fifteen (15) calendar days and completed within three hundred (300) calendar days from the date of the contract to be made and entered into therefor.

The amount of bond for faithful performance of contract has been fixed at two hundred thousand dollars (\$200,000.00).

The attention of bidders is also called to Act 2895 of the Legislature of the State of California entitled "An act to secure the payment of claims of material men, mechanics, or laborers employed by contractors upon State, Municipal, or other public work," which act provides that a contractor to whom is awarded a contract for the execution of public work in the State of California shall, before entering upon the performance of such work, file a good and sufficient bond in an amount not less than one-half of the total amount payable by the terms of the contract. (Approved March 27, 1897, Statutes 1897, Amended 1911, Statutes of 1911).

All proposals offered shall be accompanied by a check, certified by a responsible bank, payable to the order of the Clerk of the Supervisors of said City and County, for an amount not less than ten per centum of the aggregate of the proposal, and no proposal will be considered unless accompanied by such check.

Printed proposal forms will be furnished gratuitously upon application at the office of the City Engineer, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids. By order of F. J. CHURCHILL, Secretary.

NOTICE TO HOUSE MOVERS.

FOR SALE for immediate removal two frame buildings, No. 23 and No. 71 Barrett street, bet. 21st and 22nd Sts. Address Reid Bros., 104 Montgomery St., San Francisco. (*)

NOTICE TO CONTRACTORS.

OFFICE CONSTRUCTION QUARTERMASTER, Fort Mason, Cal.—SEAL-ED PROPOSALS will be received here until November 24th, 1915, and then opened for constructing (including plumbing, heating and lighting). Addition to Nurses Dormitory, Letterman General Hospital. Further information on applications. (*)

PROPOSALS FOR BUILDING REPAIRS.

BUILDING REPAIRS—Treasury Department, Supervising Architect's Office, Washington, D. C.—Sealed proposals will be opened in the office at 3 p. m. November 18, 1915, for the extension, remodeling, etc., of the U. S. post office at Boise, Idaho. Drawings and specifications may be obtained from the custodian at Boise, Idaho, or at this office, in the discretion of the supervising architect, JAMES A. WET-MOLTE, acting supervising architect.

NOTICE TO CONTRACTORS.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 981—Office of the General Purchasing Officer, Panama Canal, Washington, D. C.—Sealed proposals will be received here until November 16, 1915, under proposal 981 for furnishing two steel oil storage tanks. Bids are desired both for delivery and erection. Each tank to be 90 feet in diameter and 35 feet high. For further information address F. C.

E. R. Hoerchner

Attorney-at-Law

Phone Garfield 2856

Phelan Bldg.

San Francisco

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BOGGS, major, corps of engineers, U. S. Army, general purchasing officer.

PROPOSALS FOR MARINE RAILROAD.

MARINE RAILWAY—Sealed proposals indorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. November 27, 1915, and then there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Proposals are invited on separate component parts of the complete railway. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 979—Proposals for Copper Cable and Wire, Steel Reinforcing Bars, Steel Wire, Poultry Netting, Bolts, Nuts, Rivets, Nails, Lag Screws, Boat Spikes, Washers, Pipe Fittings, Ship Augers, Twist Drills, Winch, Hinges, Key Blanks, Hammers, Coal Baskets, Street Lamps, Water Gauge Lamps, Hose, Packing, Rubber Bands, Pencils, Cardboard, Japan Oil, Locomotive Black, Yellow Ochre, Yellows will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. November 15, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 979) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOXER, major, corps of engineers, U. S. Army, general purchasing officer.

The Municipal Bond Market is looking up, and the Bond Buyers are looking the "Building and Engineering News" up. A proposal ad for your bonds in our columns will bring competition.

ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

RESIDENCE—2 story and base, frame, \$8,000. San Francisco. Architects, Falch & Knoll, Hearst Bldg., S. F. Owner, Mrs. Allen. Location, Forest Hill. Will contain eight rooms, two baths, sleeping porch and separate garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

RESIDENCES—4, 3 story and base, frame, \$7,500 each. San Francisco. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Norman B. Livermore, Merchants' National Bank Bldg., S. F. Location Valley and Jones streets. Each will contain eight rooms, two baths and sleeping porch with basement garage. Interior finish pine and hardwood with some white enamel. Hardwood floors. Furnace heat, open fire places and hot water heaters. Mantels tile and brick. Bath rooms finished in tile. Exterior covered with cement plaster and brick veneer. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,200. San Francisco. Architect, none. Owner, Fred A. Steinhmann, 451 Mission street, S. F. Location, east Mission north Brazil. Will contain five rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—3, 2 story and base, frame, \$10,000 to \$12,000 each. San Francisco. Architects, Falch & Knoll, Hearst Bldg., S. F. Owners, Newell-Murdoch Co. Location, Forest Hill. Each dwelling will contain nine rooms, three baths, sleeping porches and separate garages. Interiors will be finished in hardwood, pine and white enamel. Hardwood floors will be used throughout. Furnace heat, open fire places, hot water circulating system and tile or brick mantels. Bath rooms finished in tile. Exteriors covered with pressed brick veneer and cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owners, Lindberg Bros., 237 Surrey street, S. F. Location, north Army east Bryant. Will contain six rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile or brick mantel. Imitation tile in bath. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$5,760. San Francisco. Archi-

tect, J. A. Porporato 719 Washington street, S. F. Owner, George V. Oliva, 2142 Larkin street. Location, north Filbert west of Hyde. Will contain eight rooms bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire places and tile mantels. Furnace heat and automatic water heater. Tile wainscot in bath room. Exterior covered with cement plaster on metal lath. Plans prepared and work to be done by Day Labor.

APARTMENT HOUSE—3 story and base, brick and steel, \$200,000. San Francisco. Architects, Smith & Stewart, 241 Kearny street, S. F. Owner's name withheld. Location, Mission near 5th. Will contain 300 rooms arranged in suites of two and three rooms on the upper floors and a number of modern stores on the ground floor. Interior finish pine and elm. Steam heat, elevator service, hot water system, oil burning plant and vacuum cleaning. Tile bath rooms and wall beds. Patent store fronts. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

APARTMENT HOUSE—3 story and base, frame, \$35,000. San Francisco. Architect, Charles J. I. Devlin, Pacific Bldg., S. F. Owner, Daniel Moran. Location, southeast corner Octavia and Hayes. Will contain five stores on the first floor and a total of 40 rooms on the upper floors. Interior finish pine and elm with hardwood floors. Wall beds. Steam heat and hot water supply. Bath rooms finished in tile. Patent store fronts. Exterior covered with cement plaster. Plans complete and figures being taken.

APARTMENT HOUSE—4 story and base, brick and steel. Cost not stated. San Francisco. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, Lange & Bergstrom, Sharon Bldg., S. F. Location, Post between Jone and Leavenworth. Will contain a number of two and three room suites with wall beds and private bath rooms. Interior finish pine and hardwood. Hardwood floors. Steam heat, elevator service, and hot water supply. Oil burning furnace. Tile in bath rooms. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared and work to be done by Day Labor under the direction of the owners.

APARTMENT HOUSE—2 story and base, frame, \$5,500. San Francisco. Architect, W. S. Rhodes, 3372 16th street, S. F. Owner, Henry Sipple. Location, 19th near Lexington. Will contain four suites of three rooms and bath. Interior finish pine and elm panels. Some hardwood floors. Tile bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and figures being taken.

APARTMENT HOUSE—3 story and base, brick. Cost not stated. San Francisco. Architect, Edward G.

Bolles, 660 Market street, S. F. Owner's name withheld. Location, 18th and Valencia streets. Will contain stores on the first floor and a number of two and three room suites on the upper floors. Interior finish pine throughout with some hardwood floors. Patent store fronts. Steam heat and hot water supply. Wall beds and tile baths. Exterior faced with cement plaster. Plans being prepared.

APARTMENT HOUSE—2 story and base, frame, \$10,000. San Francisco. Architect, Edward E. Young, 251 Kearny street, S. F. Owner, Thomas Scoble, 363 14th avenue, S. F. Location, west Palm avenue north Euclid. Will contain four suites of four and five rooms and bath. Interior finish pine and elm panels. Hardwood floors. Open fire places. Hot water system. Wall beds. Tile bath rooms. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BUREAU OF ARCHITECTURE—City and County of San Francisco. The last monthly statement published by the Bureau of Architecture gives the following condition of plans and specifications underway in the offices:

ISOLATION HOSPITAL—Plans and specifications are complete for the one story diptheria carrier ward building and bids will be taken shortly.

CENTRAL EMERGENCY HOSPITAL—Working drawings are ready for tracing, pending the decision of the Department of Public Health regarding the location of the proposed structure.

POLYTECHNIC HIGH SCHOOL—Plans and specifications are complete for the lighting fixtures and bids will be advertised for shortly. Plans are being prepared for an athletic field at the westerly end of the site. The field will contain hand ball and tennis courts, basket ball courts, asphalt paving, etc.

HALL OF JUSTICE, COUNTY JAIL—Tracings for the installation of a passenger elevator are complete and are now being checked, estimates will be called for shortly.

REDDING SCHOOL—Plans and specifications have been completed and approved by the Board of Education. Bids will be taken the end of this month.

SAN FRANCISCO HOSPITAL—The preparation of plans and specifications for the northeast and southeast wings is progressing quite rapidly. The plans have been approved by the Department of Public Health. Date for calling bids will be announced shortly.

ENGINE HOUSES—Plans and specifications are being prepared for engine houses No. 4 and 17; preliminary sketches for No. 4 have been approved by the Board of Fire Commissioners, and working drawings are well under way. Bids will be called for in the near future.

SCHOOL FOR BERNAL HEIGHTS DISTRICT—Preliminary sketches have been prepared, these, together with estimates, will be handed to the Board of Education for their approval at once.

FACTORY—4 story and base, reinforced concrete, \$200,000. San Francisco. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, John B. Hollman Co. Location, 1th and Brannan streets. Will be fireproof throughout, with concrete walls, floors and roof slabs. Interior finish pine. Hollow tile partitions, metal window sash and frames. Elevator service, steam heat, oil burning equipment and hot water system. Exterior faced with cement plaster. Plans complete and figures being taken.

FLATS—3 story and base, frame. Cost not stated. San Francisco. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner, Mrs. Buckmeister. Location, Webster near Herman. Will contain three modern flats of five and six rooms. Interior finish pine with some elm panels and hardwood floors. Open fire places and tile or brick mantel. Tile bath rooms. Automatic water heaters. Exterior covered with cement plaster and rustic. Plans being prepared.

FLATS—3 story and base, frame, \$11,000. San Francisco. Architect, August Nordin, Mills Bldg., S. F. Owner, M. C. Mahoney. Location, north Green street of Octavia. Will contain six modern flats. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Tile baths. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans being prepared and figures to be called for at once.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owners, W. J. Hemminga Co., 1660 Fell street, S. F. Location, east 15th avenue south of California, covering an area of 25 by 64 feet. Will contain two flats of five and six rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

GARAGE—2 story and base. Class A construction. Cost not stated. San Francisco. Architects, Smith & Stewart, 244 Kearny street, S. F. Owner's name withheld. Location, California east of Leavenworth. Will cover a large ground area and has been designed for a commercial garage. Construction fireproof. Concrete floors. Machine shop. Exterior faced with cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$2,750. San Francisco. Architect, none. Owner, A. R. Lapham, 511 12th avenue, S. F. Location, east 12th avenue south of Cabrillo. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Tile bath. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

BEACH ESPLANADE—Cost not stated. San Francisco. Engineer, City

Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. The Board of Public Works has released C. E. Lambuth from his contract to construct the first section of the Ocean Beach Esplanade and will advertise for new bids to be opened November 12th. Lambuth's bid for this work was \$48,500, which amount he now claims was too low. Plans can be secured from the City Engineer's office, Temporary City Hall.

MARKET ALTERATIONS—Frame construction. Cost not stated. San Francisco. Architect, August G. Headman, New Call Bldg., S. F. Owner, Hermann's Market Location, northeast corner of Bush and Franklin streets. Work will consist of installing of new stalls, marble and tile work, painting, plastering, plumbing and electric work. Plans are complete and figures are being taken.

THEATRE—1 story and base, brick and steel, \$27,500. San Francisco. Architect, Mathew O'Brien, Foxcroft Bldg., S. F. Owner, B. L. Losey. Location, south Geary west of Powell, covering an area of 13 1/2 by 3 1/2 feet. Construction fireproof. Interior finish pine and hardwood with ornamental plaster. Steam heat, modern ventilation and vacuum cleaning. Exterior faced with cement plaster. Plans complete, figures in and under advisement.

Contracts Awarded.

APARTMENT HOUSE—3 story and base, frame, \$30,000. San Francisco. Architects, Falch and Knoll, Hearst Bldg., S. F. Owner, Isabella Daisley. Contractors, Higginson Co., Humboldt Bank Bldg., S. F. Contract price, \$30,000.

Loring P. Rixford Wins Competition

Sacramento Library Competition Attracts Fifty-Five Architects From all Parts of the State.

(By Special Wire.)

SACRAMENTO, CAL., Nov 4th, 1915—Competitive plans submitted by Architect Loring P. Rixford of San Francisco were selected by the Jury of Award for the new Sacramento Library to be erected in this city.

Architect Rixford's plan shows two wings connected by a main stack. On the main floor will be the children's library and periodical rooms. The main reading room and delivery rooms occupy the second floor, while the third floor is devoted to special libraries, branch and school libraries. Exterior has been treated in the Italian renaissance.

Fifty-five sets of plans were submitted, coming from architects in all of the principal cities of the State, including Los Angeles. Five honorable mentions were made as follows: Bliss & Faville, John Baur, Washington J. Miller, all of San Francisco, Withey & Davis of Los Angeles and Corlett & Stilberg of Oakland.

The competition was conducted under the American Institute of Architects schedule for competitions, Architect Edgar A. Mathews acting for the Institute.

The building will be a three-story and basement Class "A" structure and is to cost not in excess of \$50,000. The competition attracted more than the usual attention and many of the leading members of the profession competed.

OAKLAND AND ALAMEDA COUNTY

STREET WORK—Cost not stated. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. At a recent meeting of the City Council, the following action was taken relative to street improvements. Adopting plans and specifications for the construction of a sewer in Tompkins avenue from Yale avenue northwesterly and recommending passage of resolution of same. Adopting plans and specifications for the improvement of Farnum street between Fruitvale avenue and 34th avenue, and recommending passage of resolution for same. Awarding contract to Hansome-Crummey Company for the improvement of 19th avenue from East 12th street southwesterly. Granting permission to Joseph Carroll to construct a sewer in Adeline street from the manhole in 56th street to a point 120 feet northwesterly therefrom.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, A. T. Andersen. 7225 Lockwood, Oakland. Location, north East 37th street west of Randolph. Will contain five rooms, bath and sleeping porch. Interior finish pine with some white enamel. Hardwood floors and open fire place. Tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, M. H. Tremble, 2175 Rawson, Oakland. Location, west 31st avenue south of Fortune. Will contain five rooms and bath. Interior finish pine and elm panels. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—1, 1 story and base, frame, \$1,500 each. Oakland, Cal. Architect, none. Owner, J. R. Peppin, San Leandro. Location, 102nd avenue and Orange street. Will contain four rooms and bath. Interiors finished in pine throughout. Some hardwood floors. Open fire place and tile mantels. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 1 1/2 story and base, frame, \$2,500 each. Oakland, Cal. Architects, Hutchinson & McLean, 470 12th street, Oakland. Owner, W. A. Anderson, 1774 Auscon avenue, Oakland. Location East 11th street. Will contain six rooms, bath and sleeping porch. Interior finish pine with some

wood floors. Open fire places and tile or brick mantels. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Berkeley, Alameda Co., Cal. Architect, Universal Drafting Bureau, 1844 5th avenue, Oakland. Owner, C. Texdahl. Will contain six rooms, bath and sleeping porch. Interior finish pine and redwood with some white enamel. Hardwood floors, open fire place and tile mantel. Automatic water heater. Bath room finished in tile. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, E. L. Higgins, 5250 Miles avenue, Oakland. Location, west Thomas south of Prospect. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile or brick mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,000. Oakland, Cal. Architect, none. Owners, El Nido Building Co., 584 16th street, Oakland. Location, east Valle Vista south Sunnyside. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors, open fire place and tile or brick mantel. Tile wainscot and floors in bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owners, Boyd, Carlos & Co., Hudson and Claremont streets, Oakland. Location, east Arbor avenue north Hudson. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Bath room finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$4,700. Oakland, Cal. Architect, M. I. Diggs, 2444 Powell, Berkeley. Owner, J. C. O'Connor, 5214 Bryant avenue, Oakland. Location, east Carlton south of Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and tile or brick mantels. Furnace heat. Bath rooms finished in tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$6,000. Berkeley, Alameda Co., Cal. Architect, H. H. Gutterston, 68 Post street, S. F. Owner, Mr. Brock. Location, Thousand Oaks. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places, tile and brick mantels and furnace heat. Bath rooms

finished in tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

APARTMENT HOUSE—2 story and base, brick and frame, \$22,000. Berkeley, Alameda Co., Cal. Architect, James W. Plachek, Acheson Bldg., Berkeley. Owner, W. Heywood. Location, University avenue and Grove. Will contain four stores and ten suites of three rooms and bath. Interior finish pine and hardwood with some hardwood floors. Steam heat and hot water supply. Wall beds. Tile bath rooms. Patent store fronts. Exterior faced with pressed brick veneer and cement plaster. Plans complete and figures being taken.

APARTMENT HOUSE—3 story and base, frame, \$23,000. Berkeley, Alameda Co., Cal. Architect, Eugene K. Martin, 2192 Shattuck avenue, Berkeley. Owner, G. W. Higgins. Location, Virginia and Euclid avenue. Will contain sixteen suites of three rooms and bath. Interior finish pine. Some hardwood floors. Rector system of heating, hot water supply and vacuum cleaning. Bath rooms tile. Wall beds. Exterior covered with cement plaster. Plans complete and architect taking sub-figures.

FLATS—2 story and base, frame, \$4,000. Berkeley, Alameda Co., Cal. Architect, Eugene K. Martin, 2192 Shattuck avenue, Berkeley. Owner, L. Hercovich. Location, corner of Cedar and Arch streets. Will contain two flats of five and six rooms. Interior finish pine and elm panels with some white enamel and hardwood floors. Open fire places and tile mantels. Bath rooms tile. Automatic water heaters. Exterior covered with cement plaster. Plans being prepared.

Contracts Awarded

THEATRE—1 story and base, brick, \$14,000. Oakland, Cal. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner, Mr. Werum. Contractor, W. C. Brown, 1624 64th street, Oakland. Contract price, \$14,000. Note: Contractor is now taking sub-figures.

SAN JOSE AND THE SANTA CLARA VALLEY

SEWER CONSTRUCTION—Cost not stated. Daly City, San Mateo Co., Cal. Engineer, City Engineer, Daly City. Owners, Daly City. A resolution of intention providing for the construction and installation of an 8-inch salt glazed vitrified sewer pipe along Bellevue avenue, commencing at Henrietta street, running east 633 feet; and an 8-inch salt glazed sewer vitrified sewer pipe along Bellevue avenue from Olive street 633 feet to Whittier street; 8-inch salt glazed vitrified sewer pipe in the center line of Lowell street 633 feet; 8-inch diameter salt glazed vitrified sewer pipe in the center line of Lowell street and running 422 feet; 8-inch diameter salt glazed vitrified sewer pipe in Bellevue avenue 225 feet along said Lowell street; 15-inch salt salt glazed vitrified sewer pipe along said Lowell street north 116 feet; 12 feet of 12-inch diameter salt glazed vitrified sewer pipe at the intersection of Bellevue avenue with Henrietta

street; 12 feet of 15-inch diameter salt glazed vitrified sewer pipe at the intersection of Bellevue avenue with Oliver street; the construction of 4 manholes; 4 lampholes, 99 8-inch by 4-inch Y branches, 8 16 inch by 4 inch Y branches, 91 6 feet riser pipes of salt glazed vitrified sewer pipe. Further information may be had from the City Clerk.

ROAD CONSTRUCTION—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor Cozzins, Salinas. Owners, Monterey County. At the next meeting of the County Supervisors, County Surveyor Cozzins will submit plans for two road improvements to be made in Monterey County. One is the half mile cut on the hill near the Oliver ranch house, just beyond the Carmel River on the Coast road, in the Sur Road District. The other piece of road work is for the grading, macadamizing and surfacing of the 15-mile stretch from Del Monte to the Castoville city limits. Further information will be given on this work when the plans have been accepted.

BRIDGE—Reinforced concrete. Cost not stated. Madera, Madera Co., Cal. Engineer, County Surveyor, Madera. Owners, Madera County. The County Supervisors have authorized the construction of a new bridge over the creek near the Munich school house. Further information relative to this work may be had from the County Engineer at Madera.

CHAPEL—1 story, reinforced concrete. Cost not stated. Menlo Park, San Mateo Co., Cal. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, St. Patrick's Theological Seminary. Construction will be fireproof. Interior finish pine, hardwood, art glass and ornamental plaster. Heat from central plant. Exterior faced with cement plaster. Preliminary plans complete.

FACTORY—1 story, concrete and frame, \$5,000. Palo Alto, Santa Clara Co., Cal. Architect's name not given. Owners, Boden Automatic Hammer Co., 162 Second street, S. F. Will contain main factory room and offices. Cement floor. No interior finish. Exterior cement and corrugated iron. Plans being prepared.

ELECTROLIERS—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, City Engineer, San Jose. Owners, City of San Jose. The design of the Pacific States Electric Company for electroliers to be installed on North First street has been accepted by the North First Street Improvement Association.

Contracts Awarded.

STREET IMPROVEMENT—Cost as follows. San Jose, Santa Clara Co., Cal. Engineer, City Engineer, San Jose. Owners, City of San Jose. Contractors, Bell & Rice, San Jose, New avenue from Rucker to Leavesley, \$4,287. John Boyle, 660 North 10th street, San Jose, concrete curtain walls on Campbell Creek, \$1,462.

FURNISHING PIPE—\$1,760.09. Redwood City, San Mateo Co., Cal. Engineer, Town Engineer, Redwood City. Owners, Town of Redwood City. Contractors, United States Pipe Co., S. F. Contract price, 1,750 feet of 6-inch and 1,900 feet of 4-inch pipe, \$1,760.09.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

CITY HALL—2 story and base, reinforced concrete, \$50,000. Richmond, Contra Costa Co., Cal. Architect, James T. Narbett, associated with J. G. Ogborn, Richmond. Owners, City of Richmond. Location, Macdonald avenue and 23rd street. Fireproof construction. Will contain all city offices. Interior finish pine and hardwood with tile and marble wainscot. Steam heat, hot water supply and oil burning system. Exterior faced with cement plaster. Plans nearly complete.

SCHOOL—1 story, frame. Cost not stated. Crystal Springs, Solano Co., Cal. Architect's name not given. Owners, Crystal Springs School District. John A. Wilson, clerk, Suisun. Will contain two class rooms. Interior finish pine. Exterior cement plaster or rustic. Plans complete and figures being taken. Bids open on November 15th.

STREET IMPROVEMENT—Cost not stated. Napa, Napa Co., Cal. Engineer, City Engineer, Napa. Owners, City of Napa. At the last meeting of the City Council bids for the improvement of Nursery, Ash, Vallejo and Jackson streets were ordered re-advertised, as the bids were opened too soon and in violation of law. Further information together with plans for this work may be had from the City Engineer or City Clerk at Napa.

STREET IMPROVEMENT—Cost as follows. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. At the last meeting of the Town Trustees the following bids were received for the improvement of West and Valley streets: Carnahan & Molford, 45 Kearny street, S. F., \$2,177; Construction and Engineering Co., 1017 Folsom street, S. F., \$1,859.79. No action was taken in awarding a contract. Further information will be given of this work when an award of contract is made.

BATH HOUSE FILTERS—Cost not stated. San Rafael, Marin Co., Cal. Engineer, Town Engineer, San Rafael. Owners, Town of San Rafael. In the matter of filters for the Municipal Baths, the Council at its last meeting ordered the Clerk to re-advertise for bids for the same. The bids will be received at the December session.

FLAT AND STORE—2 story and base, frame. Cost not stated. Pittsburg, Contra Costa Co., Cal. Architect, A. W. Cornelius, Merchants' National Bank Bldg., S. F. Owners, Grosshen Bros. Will contain a store on the first floor and modern flats above. Interior finish pine. Exterior cement plaster and rustic. Plans complete and work to be done by Day Labor.

HOTEL AND STORES—2 story and base. Class C construction, \$35,000. Martinez, Contra Costa Co., Cal. Architect, none. Owner, William P. Olm, 1615 Fell street, S. F. Will contain a number of stores on the first floor and modern hotel rooms and baths above. Interior finish pine. Steam heat, oil burning equipment and hot water system. Patent store fronts. Exterior faced with cement plaster and pressed brick. Plans complete and work to be done by Day Labor.

SCHOOL—1 story, hollow tile or frame. Cost as follows. Torrey, Contra Costa Co., Cal. Architect, Norman R. Coulter, 46 Kearny street, S. F. Owners, Selby School District. Kollar & Crane submitted the lowest bid for the work on propositions 1 and 2, while Caldwell & Son were low on proposition 3, which calls for hollow tile. A complete list of the bids will be found under the heading of Marin and Contra Costa in this issue. No contract has been awarded.

Contracts Awarded.

SEWER CONSTRUCTION—Cost not stated. San Anselmo, Marin Co., Cal. Engineer, Town Engineer, San Anselmo.

School Bids Opened By Sibley Trustees.

All Figures Taken Under Advisement
For One-Story School Designed by
Architect Norman R. Coulter.

Bids were opened at the Wednesday evening meeting of the School Trustees of the Selby School District, Contra

Bidder.	Prop. 1	Prop. 2	Prop. 3
Caldwell & Son.....	\$5,797	\$ 8,597	\$ 9,797
Schultz & Wilson.....	9,323	9,539	10,761
W. D. Henderson.....	9,278	9,331	10,258
Moore & Burlingame.....	9,925	10,175	10,975
Kellar & Crane.....	8,160	8,550	10,260
Collman & Collman.....	9,813	10,210	11,272
Robert Glaze	8,898	9,084	10,898

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

STREET PAVING—\$50,000. Oakdale, Stanislaus Co., Cal. Engineer, City Engineer, Oakdale. Owners, City of Oakdale. The City Trustees will take up for consideration at their next meeting the question of improving F street in order to connect with the State highway. To pave the street for its full length will cost about \$50,000. Further information will be given when a decision is reached.

SEWER CONSTRUCTION—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, City Engineer, Bakersfield. Owners, City of Bakersfield. At the last meeting of the City Council resolutions of intention in sewer district 73, covering a district between Palm and Dracona on S street were adopted. Bids on this work will be called shortly.

CONCRETE FACING AND CURTAIN WALL—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, Chief Engineer Hermann, Modesto. Owners, Modesto Irrigation District. As the result of re-advertisement for the work of constructing a concrete facing and curtain wall for Dam No. 1 of the Modesto Irrigation District, due to refusal of John Monk, lowest bidder on former advertisement at a figure of \$57,971, to proceed with the work, the district will have to pay at least \$15,000 more than his figure for the work. This was shown at the opening of bids by the board of directors, the lowest of five bidders being Pearl Bros. of Oakdale, at a figure of \$72,800. The other bids were Tibbitts-Pacific Co., S. F.,

mo. Owners, Town of San Anselmo. Contractors, Martin Rock Co., San Anselmo. Contract covers construction of sewers in Forest avenue and Willow avenue.

SEWER CONSTRUCTION—\$10,026.20. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Contractor W. J. Tobin, 735 Filbert street, Oakland. Contract for sewers in District F. Contract price, \$11,026.20.

MOTORS FOR PRISON—\$5,700.90. San Quentin, Marin Co., Cal. Engineer, State Engineer, Sacramento. Owners, State of California. Contractors, General Electric Co., S. F. Contract price for 56 motors \$5,700.90.

Costa County, for the construction of a one story frame or hollow tile school building designed by Architect Norman R. Coulter, 46 Kearny street. Bids were submitted on three separate propositions as follows. Prop. 1, as per plans and specifications; Prop. 2, for Klingstone exterior facing and Prop. 3, for hollow tile walls and cement exterior facing. All bids were taken under advisement. Following is a complete list of the bids received:

\$77,770. Contra Costa Construction Co., S. F., cost plus 15 per cent, with guarantee not to exceed \$75,000; Teichert & Ambrose of Sacramento, \$89,510; Ross Construction Co., S. F., \$78,950. Action will be taken on the bids in a few days.

CULVERT—Concrete, \$3,520. Modesto, Stanislaus Co., Cal. Engineer, Chief Engineer Hermann, Modesto. Owners Modesto Irrigation District. Secretary C. S. Abbott of the Modesto Irrigation District has been instructed to communicate with the Southern Pacific Co. stating that the district will accept the proposal of the company to build a large culvert under the track for the main drainage canal between Modesto and Salida. The present culvert is too small to carry the drainage water.

DEEPENING CANAL—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, Chief Engineer F. C. Hermann, Modesto. Owners, Modesto Irrigation District. At the last meeting of the board of directors of the Modesto Irrigation District, plans and specifications were adopted for deepening, cleaning and extending the main drainage canal of the district from the Southern Pacific's right-of-way to Finnegan cut of the San Joaquin River. The bids are to be opened at 10 o'clock November 15th. Further information may be had from the district's Chief Engineer, F. C. Hermann, at Modesto.

IRRIGATION DAM—Cost not stated. Oakdale, Stanislaus Co., Cal. Engineer, William Mulholland and J. M. Howells, Oakdale. Owner, Oakdale Irrigation District. Work on the proposed Woodward reservoir near Oakdale will be started shortly, according

to word received from this city. Farmers want immediate action on the project. William Mulholland, builder of the Los Angeles aqueduct, and J. M. Howells, chief engineer of the Great Western Power Company, recommended an earth dam without the concrete core that originally was planned. Twelve test pits have been sunk at the site of the proposed dam, two of them 40 feet deep and the rest ranging from 30 to 35 feet. The dam itself will be of earth, and sufficient material suitable for that purpose is close at hand. The first work on the dam itself will be the building of a large take-out, which will be a cement structure in culvert form. This structure alone will cost \$20,000, it is estimated. Should work start at once, it is thought that from 3,000 to 5,000 acre feet of water will be available late next season for irrigation purposes.

RESIDENCE — 2 story and base, frame, \$3,000. Fresno, Fresno Co., Cal. Architect's name not given. Owner, A. E. Cochran, Fresno. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Automatic water heater. Tile floor in bath. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,000. Fresno, Fresno Co., Cal. Architect, none. Owner, K. C. Buwald, 346 Mona avenue, Fresno. Location, 3511 Mona avenue. Will contain six rooms and bath. Interior finish pine throughout. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES — 4, 2 story and base, frame, \$1,000 each. Fresno, Fresno Co., Cal. Architect, Eugene Mathewson, Forsythe Bldg., Fresno. Owners, Shepard-Cochrane Co. Location, Ventura Vista Tract. Each will contain eight rooms, bath and sleeping porch. Interiors finished in pine, white enamel and hardwood veneer. Hardwood floors, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heaters. Exteriors covered with cement plaster. Plans being prepared.

MUNICIPAL AUDITORIUM — 2 story and base, brick, \$35,000. Visalia, Tulare Co., Cal. Architects, Coates & Traver, Rowell Bldg., Fresno. Owners, City of Visalia. An official announcement has been sent out stating that bids will close November 17th for the construction of the Visalia Municipal Auditorium.

STREET PAVING — Cost not stated. Fresno, Fresno Co., Cal. Engineer, City Engineer, Fresno. Owners, City of Fresno. The City Council has accepted the offer of the Stewart Fruit Company to exchange a triangular piece on Ventura and Angus, in order to arrange for the paving of Ventura avenue from Railroad street to the city limits, a distance of about eight blocks. The agreement will make it possible to straighten to a large extent the curve at the intersection of R and Ventura streets. A petition for paving is expected to be presented soon. Resolutions of intention pro-

viding for the improvement of Coast and Franklin avenues have been passed by the Council.

ELECTROLIER SYSTEM — Cost not stated. Fresno, Fresno Co., Cal. Engineer, City Engineer, Fresno. Owners, City of Fresno. Plans for an electrolier system in the unlighted district of the city on J and Tuolumne streets were adopted at the last meeting of the City Council, and a resolution of intention providing for the installation of them has been passed.

BRIDGES AND GRADING — Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. At a recent meeting of the County Supervisors the Clerk was instructed to advertise for bids until December 9th for bridges and grading of section 3 of the Caliente-Kernville highway, and for culverts, grading and paving of section 1-A of the Bakersfield-McKittrick highway.

STORES — 1 story and base, brick. Cost not stated. Fresno, Fresno Co., Cal. Architect, Eugene Mathewson, Forsythe Bldg., Fresno. Owner, James Portheus. Location P and Tulare streets, covering an area of 75 by 65 feet. Will contain five stores. Interior finish pine. Patent store fronts. Exterior faced with pressed brick or cement plaster. Plans complete and figures being taken.

Contracts Awarded.

STREET PAVING — Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, City Engineer, Modesto. Owners, City of Modesto. Contractor, W. E. Worswick, Jr., Fresno. Contract price not stated. Contract covers paving intersection of L and 5th streets.

RESIDENCE — 2 story and base, frame, \$7,890. Visalia, Tulare Co., Cal. Architects, Swartz & Swartz, Rowell Bldg., Fresno. Owner, Miss Mary F. Chatten. Contractor, D. L. Barnhart, Visalia. Contract price, \$7,890.

RESIDENCE — 2 story and base, frame, \$5,000. Fresno, Fresno Co., Cal. Architect, Eugene Mathewson, Forsythe Bldg., Fresno. Owner, A. E. Cochran. Contractors, F. J. Stone & Son, 2007 Mariposa street, Fresno. Contract price, \$3,000.

BRIDGE — Timber, \$1,092. Sanger, Fresno Co., Cal. Engineer, County Surveyor, Fresno. Owners, Fresno County. Contractors, Benson & Johnson, Kingsburg. Contract price, \$1,092.

BRIDGE — Reinforced concrete. Cost not stated. Hanford, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractors, Adell-Cortwright Concrete Pipe Co., Hanford. Contract price not stated.

BRIDGE — Reinforced concrete, \$6,000. Newville, Glenn Co., Cal. Engineer, County Surveyor, Willows. Owners, Glenn County. Contractors, Cotton Bros., 340 32nd street, Oakland. Contract price, \$6,000.

SCHOOL — 1 story, frame, \$5,965. Milnes School District, Stanislaus Co., Cal. Architect's name not given. Owners, Milnes School District. Contractor, R. E. De Viek, Oakdale. Contract price, \$5,965.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

SCHOOL — 1 story, portable. Cost not stated. Vallejo, Solano Co., Cal. Architect, none. Owners, Town of Val-

lejo. Bids will be opened on November 17th at 8 p. m. for furnishing a portable school. Complete information can be secured from G. V. Whaley, secretary of the Board of Education.

STATE HIGHWAY CONSTRUCTION — Cost not stated. Yreka, Siskiyou Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. T. A. Bedford, Division Engineer of the State Highway, accompanied by H. S. Conley, assistant engineer, and A. Lowden, resident engineer of the Siskiyou division, have returned from a tour of inspection down the Klamath River as far as Happy Camp. This trip is preliminary to a survey to be made down the Klamath River for a road to connect with Humboldt County's automobile road to Orleans Bar and on to Eureka. This survey is to gather data on the feasibility of such a road to connect with the California-Oregon highway at the junction of the Shasta and Klamath Rivers between Yreka and Hornbrook. Such a road following the Klamath River to the coast would run on an easy grade and in a country where snow does not obstruct traffic in the winter time and could be used the year round. It is part of the Highway Engineer's plan to make a connecting loop between the coast and central highways of the State.

STREET PAVING — Cost not stated. Woodland Yolo Co., Cal. Engineer, City Engineer, Woodland. Owners, City of Woodland. Although they have not been awarded the contract, the Clark & Henery Construction Co., Ochsner Bldg., Sacramento, is assembling material on the ground for the paving to be done in this city. When bids were opened on the work the Clark & Henery Co. submitted the lowest figure.

DEEPENING DITCHES — \$50,000. Live Oak, Sutter Co., Cal. Engineer's name not given. Owners, Reclamation District No. 777, Live Oak. Land owners of District 777 have called a meeting to consider the matter of providing adequate drainage for the district. It is estimated it will cost \$50,000 to deepen present ditches sufficiently to insure the safety of orchard trees and other crops. Ways and means to provide drainage will be taken up.

RESIDENCE — 1 story and base, frame, \$6,500. Davis, Yolo Co., Cal. Architect, none. Owner, A. R. Pedder, Davis. Location, Bowers' Addition. Will contain seven rooms, baths and sleeping porch. Interior finish pine and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heater. Exterior covered with cement plaster and rustic. Wall beds. Plans being prepared.

APARTMENT HOUSE — 3 story and base, frame, \$15,000. Stockton, San Joaquin Co., Cal. Architect, W. B. Thomas, Yosemite Theatre Bldg., Stockton. Owner, A. J. McPhee. Location, northeast corner San Joaquin and Poplar streets. Will contain a number of two and three room suites. Interior finish pine and elm with some hardwood floors. Central heating system, hot water supply and wall beds. Bath rooms tile. Exterior covered with rustic and cement plaster. Plans

complete and work to be done by Day Labor.

BRIDGE—Steel and reinforced concrete. Cost not stated. Yolo By-pass, Yolo Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be opened on November 29th for constructing a plate girder 80-foot clear span bridge with reinforced concrete approaches. Total length 141 feet. All former bids for this work were rejected. An official proposal appears in another column of this issue.

BRIDGE CONSTRUCTION—Reinforced concrete, \$2,850. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. No action of awarding the contract to J. W. Terrill, 1111 29th street, Sacramento, for the construction of the bridge in Del Paso Park was taken at the last meeting of the Park Board. The bid of Terrill was the lowest bid submitted, but was above the engineer's estimate. Terrill bid \$3,100, while the estimate was placed at \$2,850.

CHURCH—1 story and base, frame. Cost not stated. Manteca, San Joaquin Co., Cal. Architect, Peter L. Sala. Commercial & Savings Bank Bldg., Stockton. Owners, Roman Catholic Church, Rev. Father W. E. McCough, pastor. Will contain main auditorium and Sunday school rooms. Interior finish pine. Some art glass windows. Exterior covered with rustic. Plans being prepared.

CITY HALL AND JAIL—4 story and base. Class A construction, \$175,000. Sacramento, Cal. Architects, Shea & Loquist, Bankers' Investment Bldg., S. F. Owners, City of Sacramento. Plans have been completed and approved for the construction of this building and bids will be called for at once. Construction will be fireproof. Will contain all city offices and the jail. Interior finish pine and hardwood with marble and tile wainscot and bases. Steam heat, oil burning equipment and vacuum cleaning. Exterior faced with cement plaster.

BANK—2 story, brick. Cost not stated. Ravendale, Lassen Co., Cal. Architect's name not given. Owners, California Land and Power Co., W. B. Edwards, Pres., Ravendale. Will contain banking rooms on first floor and hotel rooms above. Interior finish pine. Central heating system and hot water supply. Exterior faced with pressed brick. Plans complete and work to be done by Day Labor.

IRRIGATION PROJECT—Cost not stated. Woodland, Yolo Co., Cal. Engineer's name withheld. Owners, Prairie Ditch Co., Woodland. Articles of incorporation have been filed in Woodland by the Prairie Ditch Co., which plans to build an irrigation ditch, bulkheads, etc., to connect with a tributary of the main Yolo Water & Power Company's canal. The stockholders are: Lou Ulrich, Dan McGregor, G. Benedict, H. T. Griffin, Andrew Stum, J. O. Davis, Samuel Frank, George Reiden and B. B. Hare.

ROAD IMPROVEMENT—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, County Surveyor, Stockton. Owners, San Joaquin County. At a recent meeting of the County Supervisors plans and specifications were

adopted for grading a little less than three miles of the French Camp road from a point a mile east of Escalon to the Stanislaus County line. Bids for the work will be opened November 22nd at 11 o'clock a. m.

Contracts Awarded.
TRANSPORTER STATION FOR SEWER PLANT—\$3,325. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractor, J. W. Terrill, 1111 29th street, Sacramento. Contract price, \$3,325.

LOS ANGELES AND SOUTHERN CALIFORNIA

SEWER CONSTRUCTION—Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Bids will be opened on November 18th at 12 noon for constructing an 8-inch vitrified pipe sanitary sewer in Sola street from an existing manhole at the center of San Andreas and Sola streets to a manhole to be constructed in the center of Sola and Gillespie streets. To construct an 8-inch vitrified pipe sanitary sewer in Gillespie street from manhole to be constructed in Sola street to a manhole to be constructed in Michitorenna street.

ROAD CONSTRUCTION—Cost not stated. Los Angeles, Cal. Engineer, County Surveyor, Los Angeles Owners, County of Los Angeles. The Board of Supervisors directed the road commissioner to prepare plans and specifications for the construction of a road in Mint Canyon. The road is to be built of concrete, beginning at a point about five miles north of Saugus and extending to Palmdale in the Antelope Valley. Further information will be given of this work when the plans are complete.

BRIDGE CONSTRUCTION—Steel and concrete, \$25,320. Myers Creek, Imperial Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Holland Construction Co., San Diego, submitted the lowest figure for constructing the reinforced concrete and steel highway bridge over Myers Creek in Imperial County. Bids were opened by the State Highway Commission. Holland's bid was \$15,600 and the engineer's estimate is \$25,320.53. No contract has been awarded.

FACTORY—10 story and base, reinforced concrete. Cost not stated. Los Angeles, Cal. Architect, A. C. Martin, Higgins Bldg., L. A. Owner's name withheld. Location, near Alameda

street, covering an area of 100 by 100 feet. Fireproof construction, reinforced walls, floors and roof slabs. Hollow tile partitions, metal window sash and frames. Elevator service and steam heat. Oil burning equipment. Exterior cement plaster. Plans being prepared. Bids being taken for reinforcing steel.

HOTEL AND STORES—4 story and base. Class C construction, \$30,000. Los Angeles, Cal. Architect, Charles H. Kysor, Wright and Callender Bldg., L. A. Owner, A. L. Phillips. Location, 6th near Ruth, covering an area of 35 by 100 feet. Will contain several stores and sixty rooms. Interior finish pine. Patent store fronts, steam heat and hot water service. Exterior faced with pressed brick. Plans complete and figures being taken.

GARAGE—2 story and base. Class C construction. Cost not stated. Los Angeles, Cal. Architect, Albert C. Martin, Higgins Bldg., L. A. Owners, Tony Milcovitch and Miss T. Garibaldi. Location, Los Angeles street between 5th and 6th streets. Designed for a commercial garage. Concrete floors, metal window sash and frames. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.
STREET IMPROVEMENT—\$13,475. Santa Barbara, Santa Barbara Co., Cal. Engineer, City Engineer, Santa Barbara. Owners, City of Santa Barbara. Contractors, F. R. Ritchie & Co., Chronicle Bldg., S. F. Contract for repaving East Boulevard including Booth Point. Contract price, \$13,475.
OUTFALL SEWER—\$206,199.10. El Centro, Imperial Co., Cal. Engineer, City Engineer, El Centro Owners, Towns of El Centro and Imperial. Contractor, James Kennedy, Washington Bldg., L. A. Contract price, \$206,199.10.

PORTLAND AND OREGON

RAILROAD CONSTRUCTION—\$800,000. Portland, Ore. Engineer, Engineering Dept. Oregon - Washington Railroad & Navigation Co., Portland. Owners, O. W. R. & N. Co. The directors of the O. W. R. & N. have announced that \$800,000 will be spent in rail renewals on various parts of the main line between Portland and Harington. The units to be improved with the approximate costs are: Troutdale to Bonnevillie, 25 miles, with 30-pound steel, replacing 75-pound steel; cost, \$190,000. Blalocks to Coyote, 37 miles, with 30-pound steel, replacing

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75-pound steel; cost, \$290,000. Echo to Yoakum, 10 miles, with 90-pound steel, replacing 80-pound steel; cost, \$80,000. Pendleton to Gibbon, 25 miles, with 90-pound steel, replacing 80-pound steel; cost, \$190,000. Gibbon to Duncan, 9 miles, with 90-pound steel, replacing 80-pound steel; cost, \$50,000. The aggregate distance to be covered by these renewals is 106 miles.

SEATTLE AND WASHINGTON

WAREHOUSE ADDITION—4 story, reinforced concrete. Cost not stated. Seattle, Wash. Engineer, Port of Seattle Commission. Owners, City of Seattle. All bids for the construction of the proposed four-story reinforced concrete addition to the Port of Seattle, Whatem avenue warehouse, have been rejected and the project postponed indefinitely. Bids which were opened showed H. Brandt low bidder at \$60,500, and ranging from that to \$84,000 by Hoy & Co., railroad contractors of Spokane.

SCHOOL—2 story and base, reinforced concrete and steel, \$115,000. Bellingham, Wash. Architects, Heath & Gove, National Realty Bldg., Tacoma. Owners, City of Bellingham. Plans have been completed for the new high school building and bids are now being taken. Construction will be fire-proof. Interior finish pine with maple floors. Steam heat, oil burning furnace and vacuum cleaning. Exterior faced with pressed brick. Separate figures for general construction, heating and ventilating, plumbing and electric work.

HOME ECONOMICS BUILDING — 2 story, reinforced concrete, \$99,926. Seattle, Wash. Architects, Behb & Gould, Denny Bldg., Seattle. Owners, State of Washington. Bids opened by the Board of Regents of the University of Washington for the construction of the home economics building show Finne & Gjarde, Northern Bank Bldg., Seattle, low on their bid of \$99,926. Further mention will be made when the contract is awarded.

OFFICES AND CLUB ROOMS — 12 story and base, reinforced concrete, \$400,000. Seattle, Wash. Architect, A. Warren Gould, American Bank Bldg., associated with George W. Lawton, Owner, James Moses, leased to The Artie Club. Location, northeast northeast corner of 3rd and Cherry, covering an area of 120 by 112 feet. Will contain 180 offices on the Third avenue frontage, while the entire Cherry street frontage will be occupied by the Artie Club. Concrete walls, floors and roof. Interior finish pine and hardwood with special trim in the club rooms. Steam heat, oil burning plant, vacuum cleaning, hot water supply and three elevators. Metal window sash and frames, hollow tile partitions. Exterior faced with pressed brick and terra cotta. Plans ready for figures within a month.

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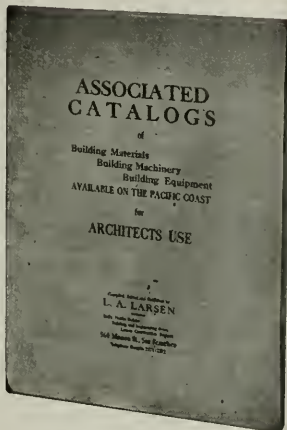


Here is where the Architect usually files the circulars, catalogues, announcements, etc., that come to his office. He can't take care of them. There are too many of them.

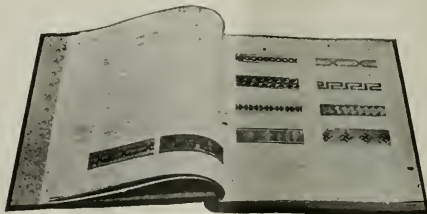


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Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

SAN FRANCISCO COUNTY.

No.	Owner	Contractor	Amt.
3116	Reinhart	Reinhart	2900
3117	Reinhart	Reinhart	2900
3118	Tryon	Coburn	2000
3119	Traversaro	Garibaldi	400
3120	Techau	Horn	1000
3121	Haggen	Haggen	500
3122	McLeran	McLeran	6000
3123	Stillman	Stillman	400
3124	Johnson	Johnson	3700
3125	Stoff	Kincanon	5000
3126	Burkhart	Casty	4702
3127	City Invest Co.	Rudgear	11749
3128	City Invest Co.	McLeran	177212
3129	Stand Sec.	Martin	8900
3130	Beulah	Peterson	41500
3131	Keil	Stockholm	39000
3132	Kolander	Denke	39000
3133	S P Co.	Church	1500
3134	Rincon	Houle	2190
3135	Peterson	Johnson	4760
3136	Oliva	Zinkand	2840
3137	Burton	Arnold	1000
3138	Mondino	Mondino	500
3139	Werz	Barrett	500
3140	Effinger	Effinger	1000
3141	Scott	King	5000
3142	Maddock	Maddock	900
3143	Hemmings	Hemmings	2200
3144	Getz	Fauth	400
3145	Steinmann	Steinmann	2500
3146	Boherycz	Rudametin	7500
3147	Lindberg	Lindberg	400
3148	Besazzo	Besazzo	400
3149	Cavaglieri	Cavaglieri	2897
3150	Anderson	Anderson	1175
3151	Blum	Blum	10000
3152	Babcock	Babcock	400
3153	Scoble	Scoble	500
3154	Woodhams	Filippis	3900
3155	Pyne	Gilmore	7500
3156	Foley	Carlson	7500
3157	Nuhenberg	McKenzie	7500
3158	Dipaola	Filippis	7500
3159	Livmore	Livmore	7500
3160	Livmore	Livmore	7500
3161	Livmore	Livmore	7500
3162	Livmore	Livmore	7500
3163	Green	Falvey	5000
3164	Green	Falvey	5000
3165	Green	Falvey	2450
3166	Sale	Leigh	2000
3167	Pheby	Pheby	3091
3168	S P Invest	Monson	1975
3169	Castro	Nelson	2000
3170	Bartel	Hanson	6000
3171	Alleigh	Booker	2500
3172	Horgan	Leigh	5000
3173	Meyerstein	McMullin	2100
3174	Spalding	Kelly	1450
3174	Martinho	De Lucca	
3175	Slattery	Grahn	

FRAME DWELLING

(3116) N NINETEENTH 50 W Lamson Ave. Two-story and basement frame dwelling.

Owner.....Charles E. Reinhart, 17th and Kansas, S. F.
Architect...None.
Day's work. COST, \$2900

FRAME DWELLING

(3117) N NINETEENTH 25 W Lamson Ave. Two-story and basement frame dwelling.

Owner.....Charles E. Reinhart, 17th and Kansas, S. F.
Architect...None.
Day's work. COST, \$2900

CONCRETE GARAGE

(3118) SW BUCHANAN & VALLEJO.
One-story concrete private garage.

Owner.....E. H. Tryon, 2200 Vallejo, San Francisco.

Architect...None.
Contractor...I. W. Coburn, 452 Duboce Ave., San Francisco.
COST, \$2000

REPAIRS

(3119) NO. 811 SAN JOSE AVE. Repair fire damage.

Owner.....G. Traversaro, 555 Lombard, San Francisco.
Architect...None.
Contractor...V. Garibaldi, 14 Crane, San Francisco.
COST, \$400

ALTERATIONS

(3120) NW POWELL AND EDDY.
New wainscot, plastering, etc.

Owner.....Techau Tavern Co., Prem.
Architect...E. G. Bolles, 660 Market, San Francisco.
Contractor...S. A. Born Bldg. Co., 660 Market, San Francisco.
COST, \$1000

FRAME DWELLING

(3121) S GILMAN 75 NW Hawes.
One-story and basement frame dwlg.

Owner.....Frank Haggen, 1107 Gilman, San Francisco.
Architect...None.
Day's work. COST, \$500

FRAME FLATS

(3122) N FULTON 107 E Arguello Blvd. Two-story and basement frame (2) flats.

Owner.....Ralph McLeran, Sharon Bldg., San Francisco.
Architect...None.
Day's work. COST, \$6000

REPAIRS

(3123) NO. 342 LELAND. Alter and repair dwelling.

Owner.....A. A. Stillman, Premises.
Architect...None.
Day's work. COST, \$400

FRAME DWELLING

(3124) N CABRILLO 90 E 46th Ave. Two-story and basement frame dwlg.

Owner.....Johnson & Johnson, 818 14th Ave., San Francisco.
Architect...None.
Day's work. COST, \$3700

CLASS "C" APARTMENTS

(3125) S SUTTER 87-6 E Hyde E 25x S 187-6. Concrete work and reinforcing steel for four-story and basement Class "C" reinforced concrete apartments.

Owner.....Louis D. Stoff, 321 Bush, San Francisco.
Architect...Albert Schroepfer, 68 Post, San Francisco.
Contractor...John G. Kincanon, 215 Montgomery, S. F.
Filed Oct. 30, '15. Dated Oct. 27, '15.
2nd floor joists set.....\$1250
4th floor joists set.....1250
Completed and accepted.....1250

Usual 35 days.....1250
TOTAL COST, \$5000

Bond, \$2500. Sureties, Edw. Charnok and F. H. Green. Limit, 35 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS AND ADDITIONS

(3126) E BELVEDERE 100 N Waller 25x123-54. All work except plumbing, painting, electric work, finish hardware, wall beds, lighting fixtures and shades for alterations and additions to frame building into 6 apartments.

Owner.....A. Burkhart, 1633 Waller, San Francisco.
Architect...Theo. W. Lenzen, Humboldt Bank Bldg., S. F.
Contractor...John Casty, 110 Jessie, San Francisco.

Filed Oct. 30, '15. Dated Oct. 28, '15.
New roof completed, building raised and 1st story frame enclosed.....\$1100
Brown coated.....4200
Completed and accepted.....1294
Usual 35 days.....1198
TOTAL COST, \$1792

Bond, none. Limit, 35 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(3127) S MARKET AND THIRD SW 75 xSE 70. Ornamental iron and bronze work for alterations in Claus Spreckels Building.

Owner.....City Investment Co., 905 1st National Bank Bldg., San Francisco.

Architect...J. R. Miller, Lick Bldg., San Francisco.

Contractor...Rudgear Merle Co., Bay & Taylor, San Francisco.

Filed Oct. 30, '15. Dated Oct. 20, '15.
On 1th of each month.....75%

Usual 35 days.....25%

TOTAL COST, \$14,749

Bond, \$7374.50. Surety, Fidelity & Deposit Co. of Maryland. Limit, 180 days from filing. Forfeit, \$25. Plans and specifications filed.

ALTERATIONS

(3128) S MARKET AND THIRD SW 125 SE 100 NE 50 NW 30 NE 75 NW 70. All work except painting, shades and fixtures for alterations and additions to Claus Spreckels Building and Claus Spreckels Annex.

Owner.....City Investment Co., 905 1st National Bank Bldg., San Francisco.

Architect...J. R. Miller, Lick Bldg., San Francisco.

Contractor...McLeran & Peterson, Sharon Bldg., S. F.

Filed Oct. 30, '15. Dated Oct. 20, '15.
On 5th of each month.....75%

Usual 35 days.....25%

TOTAL COST, \$117,212

Bond, \$58,606. Surety, Guardian Casualty & Guaranty Co. Limit, 180 days from filing. Forfeit, \$25. Plans and specifications filed.

BRICK APARTMENTS

(3129) NW GEARY AND HYDE N
87-6XW 57-6. All work for four-story
and basement brick apartments.
Owner.....Standard Securities Co.
Architect...Rousseau & Rousseau, Inc.,
110 Sutter, San Francisco
Contractor...Wm. Martin, 110 Jessie,
San Francisco

Filed Nov. 1, '15. Dated Oct. 27, '15.
Ready for 2nd story joists.....\$272
Brick work finished.....272
Brown coated.....272
Completed and accepted.....272
Usual 35 days.....9696
TOTAL COST, \$38,784

Bond, \$20,000. Sureties, D. O. Druffel
and Edwin Peterson. Limit, 130 days.
Forfeit, \$20. Plans and specifications
filed.

FRAME APARTMENTS

(3130) E EUKEKA 286 S 18th E 125
xS 27-6. All work except wall beds
for three-story and basement frame
apartments.

Owner.....The Peulah Real Estate
Company.
Architect...Welsh & Carey, Mer-
chants Nat'l Bank Bldg.,
San Francisco.

Contractor...Pettersson & Persson, 62
Post, San Francisco.

Filed Nov. 1, '15. Dated Oct. 13, '15.
Enclosed.....\$2235
Plastering finished.....2235
Finished and accepted.....2235
Usual 35 days.....2235
TOTAL COST, \$5900

Bond, \$4150. Sureties, H. C. Bennett
and Robert H. Rusch. Limit, 90 days
from issuing permit. Forfeit, none.
Plans and specifications filed.

CLASS "A" THEATRE

(3131) W MISSION 244-4½ N 22nd N
29-11 th at angle 86 deg 23 inches W
160-3 N 6 inches, th at angle 86 deg
44 in. W 90-3 S 116-4 th at angle 86
deg 10 in. E 124 m or 1 th at angle
90 deg E 4-6 th at angle 90 N 17, th
at angle 90 deg E 127-5. All work
for Class "A" moving picture theatre
Owner.....Keil Estate Co., Flood Bldg
San Francisco.

Architect...Reid Bros., 105 Montgom-
ery, San Francisco
Contractor...Stockholm & Allyn, Mo-
nadnock Bldg., S. F.

Filed Nov. 1, '15. Dated Oct. 29, '15.
On 1th of each month.....75%
Usual 35 days.....25%
TOTAL COST, \$61,500

Bond, \$31,000. Surety, New Amsterdam
Casualty Co. Limit, May 1, 1916. For-
feit, \$10 Bonus, \$40. Plans and speci-
fications filed.

CLASS "C" APARTMENTS

(3132) S CUSH 107-6 W Jones W
54-11xS 127-6. All work for four-
story Class "C" brick apartments.

Owner.....Max and Dora Kolander,
110 Franklin, S. F.
Architect...E. H. Denke, 1317 Hyde,
San Francisco

Contractor...F. G. Denke, 1445 11th
Ave., San Francisco.

Filed Nov. 1, '15. Dated Nov. 1, '15.
Brick work ready for 2nd floor
joists.....\$5850
Brick work ready for ceiling
joists.....3550
Completed and accepted.....3550

Usual 35 days.....9750

TOTAL COST, \$39,000
Bond, \$19,500. Sureties, E. H. Denke
and Ella H. Denke. Limit, 120 days.
Forfeit, \$5. Plans and specifications
filed

ASPHALT PAVEMENT, ETC.

(3133) BEACH ST., bet Easterly line
Polk and Westerly line Larkin and
intersection of Beach & Larkin. All
work for asphalt pavement and
granite curbing about S. P. Com-
pany's tracks.

Owner.....Southern Pacific Co., Flood
Bldg., San Francisco.

Architect...None.
Contractor...Church & Clark, 68 Post,
San Francisco

Filed Nov. 1, '15. Dated Sept. 30, '15.
No payments given.....
COST, \$2.10 per lineal ft. for asphalt
on concrete base.

21c per sq. ft. of pavement as shown
on diagram.

\$1.10 per lineal ft. for curb.
Bond, \$1500. Surety, Aetna Accident
& Liability Co. Limit, 60 days. For-
feit, none. Plans and specifications
filed.

FRAME COTTAGE

(3134) SW FITZGERALD AVE (30th
Ave South) 125 SE Ingalls (I) SE 25
xNW 100. All work for one-story
and basement frame cottage.

Owner.....T. F. and Refugio G. Rin-
con, 1175 Fitzgerald Ave.,
San Francisco.

Architect...None.
Contractor...D. Houle, 660 Market,
San Francisco.

Filed Nov. 3, '15. Dated Oct. 30, '15.
Frame up.....\$375
Brown coated.....375
Completed.....375
Usual 35 days.....375
TOTAL COST, \$1500

Bond, none. Limit, 80 days. Forfeit,
none. Plans and specifications filed.

BUNGALOW

(3135) E SHRADER 102-9 S Carmel —
25 E 100 N 25 W 100. All work for
one-story and basement bungalow.

Owner.....John P. Peterson
Architect...Henry Shermund, Mills
Bldg., San Francisco.

Contractor...Johnson & Johnson, 818
14th, San Francisco.

Filed Nov. 3, '15. Dated Oct. 29, '15.
Roof on.....\$547.50
Plastered.....547.50
Completed.....547.50
Usual 35 days.....547.50
TOTAL COST, \$2190.00

Bond, none. Limit, 75 days from re-
cording. Forfeit, none. Plans and
specifications filed.

FRAME RESIDENCE, ETC.

(3136) N FILBERT 159-6 W Hyde W
22xN 137-6. All work except plumb-
ing, painting, shades and chandeliers
for two-story and basement frame
residence and garage.

Owner.....Geo. V. Oliva, 509 Columbus
Ave., San Francisco.

Architect...J. A. Porporato, 619 Wash-
ington, San Francisco.

Contractor...Edw. Zinkand, 434 10th
Ave., San Francisco.

Filed Nov. 3, '15. Dated Nov. 1, '15
Gravel roof on.....\$1000

Brown coated and scratch coat
on.....1000
Completed and accepted.....1190
Usual 35 days.....1570
TOTAL COST, \$4760

Bond, \$1570. Sureties, Karl J. Gunther
and P. Boien. Limit, 90 days. Forfeit,
\$2. Plans and specifications filed.

EXCAVATING, ETC.

(3137) SW FILLMORE & SACRA-
mento W 50xS 40. Excavating, con-
crete, shoring up building, vault un-
derpinning, concrete floor, repair
sidewalk, carpenter work for base-
ment under building.

Owner.....Geo. B. Burton.
Architect...C. J. Colby.
Contractor...H. W. Arnold.

Filed Nov. 3, '15. Dated Nov. 1, '15.
One-half completed.....\$1065
Completed and accepted.....1065
Usual 35 days.....310
TOTAL COST, \$2840

Bond, \$1420. Sureties, L. H. Berth and
L. Denattell. Limit, as fast as pos-
sible. Forfeit, \$5. Plans and speci-
fications filed.

FRAME DWELLING

(3138) S PALOU 150 E Quint. One-
story and basement frame dwelling.
Owner.....B. Mondino, Palou near
Phelps, San Francisco.

Architect...None.
Day's work. COST, \$1000

ALTERATIONS

(3139) NOS. 1577-81 ELLIS. Alter
stores.

Owner.....J. C. Werz, 1575 Fillmore,
San Francisco.

Architect...None.
Contractor...Barrett & Hilp, Sharon
Bldg., San Francisco.
COST, \$500

ALTERATIONS

(3140) NO. 2843 HOWARD. Alter
dwelling.

Owner.....Julia Effinger, 284 Clipper,
San Francisco.

Architect...None.
Contractor...H. J. Effinger, 284 Clipper,
San Francisco.
COST, \$500

ALTERATIONS

(3141) NO. 1241 SEVENTH AVE.
Raise and alter dwelling.

Owner.....Minnie M. D. Scott, Prem.
Architect...None.

Contractor...W. S. King, 224 Haight,
San Francisco.
COST, \$1000

FRAME DWELLING

(3142) NO. 17 BOYD (rear). One-story
and basement frame dwelling.

Owner.....R. H. Maddock, 42 Chesley,
San Francisco.

Architect...None.
Contractor...R. H. Maddock, 42 Chesley,
San Francisco.
COST, \$400

FRAME FLATS

(3143) E FIFTEENTH AVE 100 S
California. Two-story and basement
frame 21 flats.

Owner.....W. L. Hemminga, Inc., 1600
Fell, San Francisco.

Architect...None.
Day's work. COST, \$5000

ALTERATIONS
(3144) NO. 652 SEVENTEENTH AVE.
Alter and repair dwelling.
Owner.....Sol Getz & Son, Chronicle
Bldg., San Francisco.
Architect...None.
Contractor...M. Fauth, 771 21st Ave.,
San Francisco.

COST, \$900

FRAME STORE AND DWELLING
(3145) E MISSION 200 N Brazil. Two-
story frame store and dwelling.
Owner.....Fred A. Steinmann, 4581
Mission, San Francisco.
Architect...None.
Day's work.

COST, \$2200

ALTERATIONS
(3146) NO. 112 HAMILTON. Alter
dwelling.
Owner.....Joseph Boherycz, Premises.
Architect...None.
Contractor...John Rudametkin, 871
Rhode Island, S. F.

COST, \$400

FRAME DWELLING
(3147) N ARMY 100-3 1/2 E Bryant. Two
story and basement frame dwelling.
Owner.....Lindberg Bros., 257 Surrey,
San Francisco.
Architect...None.
Day's work.

COST, \$2500

ALTERATIONS
(3148) NO. 1300 DIVISADERO. Alter
fruit store.
Owner.....Michele Besazzo.
Architect...None.
Day's work.

COST, \$400

FRAME BUILDING
(3149) E POTRERO 130 N 18th. One-
story frame building.
Owner.....G. Cavaglieri, 593 Potrero,
San Francisco.
Architect...None.
Day's work.

COST, \$400

FRAME DWELLING
(3150) W EIGHTH AVE 120 S Noriega
25x120. All work for two-story and
basement frame dwelling.
Owner.....John F. Anderson, 1302
11th Ave., San Francisco.
Architect...Plans by Contractor.
Contractor...A. E. Anderson, 2153 15th,
San Francisco.
Filed Nov. 4, '15. Dated Nov. 1, '15.
Roof on\$700
Plaster on 700
Completed 700
30 days after 797

TOTAL COST, \$2897

Bond, none. Limit, 100 days after Nov.
5. Forfeit, none. Plans and specifica-
tions, none.

FIREIGHT ELEVATOR
(3151) NOS. 46 TO 50 CALIFORNIA.
Install freight elevator.
Owner.....Leon Blum, 214 Front,
San Francisco
Architect...None.
Day's work.

COST, \$1175

REPAIRS
(3152) NO 310 CALIFORNIA (base-
ment). Repair offices
Owner.....Babcock Estate Co., 310
California, San Francisco.
Architect...Nathaniel Blaisdell, 255
California, San Francisco.
Day's work.

COST, \$500

FRAME TENEMENTS
(3153) W PALM AVE 100 N Euclid
Ave. Two-story and basement frame
(4) tenements.
Owner.....Thos. Seoble, 363 14th Ave.,
San Francisco.
Architect...E. E. Young, 251 Kearny,
San Francisco.
Day's work.

COST, \$10,000

BULKHEAD
(3154) NO. 622 NAPLES. Erect bulk-
head.
Owner.....Obie L. Woodhams, San
Mateo.
Architect...None.
Contractor...O. Filippis, 21 Columbus
Ave., San Francisco.

COST, \$400

ALTERATIONS
(3155) NO. 46 EDDY. Alter restaurant
Owner.....Bessie H. Pyne, 2126 Geary,
San Francisco.
Architect...Arthur Scholtz, 339 Phelan
Bldg., San Francisco.
Contractor...T. D. Gilmore, Post and
Taylor, San Francisco.

COST, \$500

FRAME FLATS
(3156) E FIFTH AVE 127-3 N Fulton.
Two-story and basement frame (2)
flats.
Owner.....John J. Foley, 46 Kearny,
San Francisco.
Architect...John J. Foley, 46 Kearny,
San Francisco.
Contractor...N. A. Carlson, 936 Potrero
Ave., San Francisco.

COST, \$5900

NOTE:—Work started.

FRAME RESIDENCE
(3157) W FIFTEENTH AVE 195 N
Quintara N 31xW 127-6. All work for
two-story and basement frame resi-
dence.
Owner.....E. H. Nuhrenberg, Hewes
Bldg., San Francisco.
Architect...Foulkes & Hildebrand,
Crocker Bldg., S. F.
Contractor...K. H. McKenzie & Co., 2783
McAllister, San Francisco.

Filed Nov. 4, '15. Dated Oct. 29, '15.
Frame up and roof on\$772.00
Brown coated 772.00
Completed and accepted 774.50
Usual 35 days 773.00

TOTAL COST, \$3091.00

Bond, \$1546. Sureties, Torrence Prough
and Jas. H. Pinkerton. Limit, 90 days.
Forfeit, none. Plans and specifications
filed.

FRAME FLATS
(3158) E POWELL 68 N Vallejo 29-9x
68-9. All work except window shades
and gas fixtures for three-story
frame flats.
Owner.....Cono Dipaola, 301 Colum-
bus Ave., San Francisco.
Architect...None.
Contractor...V. Filippis, 21 Columbus
Ave., San Francisco.

Filed, Nov. 4, '15. Dated Oct. 28, '15.
1st floor joists in\$1200
Roof on and house enclosed.... 1200
Plumbing in and ready for lath-
ing 1475
Completed and accepted 1375
Usual 35 days 1900

TOTAL COST, \$7700

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

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FRAME RESIDENCE

(3139) E JONES 37-7 N Vallejo.
Three-story and basement and attic
frame residence.

Owner.....N. B. Livermore, Merchants
Nat'l. Bank Bldg., S. F.
Architect...Willis Polk, Hobart Bldg.,
San Francisco.
Day's work. COST, \$7500

FRAME RESIDENCE

(3160) E JONES 99-11 N Vallejo.
Three-story and basement and attic
frame residence.

Owner.....N. B. Livermore, Merchants
Nat'l. Bank Bldg., S. F.
Architect...Willis Polk, Hobart Bldg.,
San Francisco.
Day's work. COST, \$7500

FRAME RESIDENCE

(3161) E JONES 68-9 N Vallejo.
Three-story and basement and attic
frame residence.

Owner.....N. B. Livermore, Merchants
Nat'l. Bank Bldg., S. F.
Architect...Willis Polk, Hobart Bldg.,
San Francisco.
Day's work. COST, \$7500

FRAME RESIDENCE

(3162) NE VALLEJO AND JONES.
Three-story and basement and attic
frame residence.

Owner.....N. B. Livermore, Merchants
Nat'l. Bank Bldg., S. F.
Architect...Willis Polk, Hobart Bldg.,
San Francisco.
Day's work. COST, \$7500

FRAME FLATS

(3163) E TWENTY-SECOND AVE 75
S Lake. Two-story and basement
frame flats.

Owner.....Annie Green, 124 Clayton,
San Francisco.
Architect...None.
Contractor...A. J. Falvey, 124 Clayton,
San Francisco.
COST, \$3000

FRAME FLATS

(3164) E TWENTY-SECOND AVE 50
S Lake. Two-story and basement
frame flats.

Owner.....Annie Green, 124 Clayton,
San Francisco.
Architect...None.
Contractor...A. J. Falvey, 124 Clayton,
San Francisco.
COST, \$3000

FRAME FLATS

(3165) E TWENTY-SECOND AVE 25
S Lake. Two-story and basement
frame flats.

Owner.....Annie Green, 124 Clayton,
San Francisco.
Architect...None.
Contractor...A. J. Falvey, 124 Clayton,
San Francisco.
COST, \$5000

FRAME DWELLING

(3166) W EIGHTEENTH AVE 175 S
Balboa. Two-story and basement
frame dwelling.

Owner.....W. H. Sale, 1015 Chestnut,
San Francisco.
Architect...None.
Contractor...Leigh & Schultz, 419 21st
Ave., San Francisco.
COST, \$2450

ALTERATIONS

(3167) N O'FARRELL 185 W Grant
Ave. Install trusses, beams and
girders to reinforce third and fourth
floors of present building to carry
live load of 250 lbs. per square foot
on each floor.

Owner.....Thomas Pheby, 20 Mont-
gomery, San Francisco.
Architect...O. R. Thayer, 20 Mont-
gomery, San Francisco.
Day's work. COST, \$2000

NOTE:—Job started.

ALTERATIONS

(3168) N CALIFORNIA 30 E Leides-
dorff. Alter Class "C" building. Partitions,
steel beams and girders,
terra cotta tiling, steel purlins and
self-centering mesh and concrete
roof slabs.

Owner.....S. F. Investment Corpora-
tion, 519 California, S. F.
Architect...Nathaniel Blaisdell, 255
California, San Francisco.
Contractor...Monson Bros., 1907 Bryant,
San Francisco.
COST, \$10,000

FRAME DWELLING

(3169) S DAY 230 E Noe. One and
one-half-story and basement frame
dwelling.

Owner.....W. S. Castro, 462 30th, S. F.
Architect...None.
Contractor...Nelson Bros., 515 Dolores,
San Francisco.
COST, \$1975

FRAME DWELLING

(3170) W EDINBURGH 175 S Amazon.
One and one-half-story and basement
frame dwelling.

Owner.....A. Bartell, 24 Shotwell,
San Francisco.
Architect...None.
Contractor...John Hanson, 4077 23rd,
San Francisco.
COST, \$2000

FRAME FLATS

(3171) W EIGHTEENTH AVE 100 S
Geary. Two-story and basement
frame (3) flats.

Owner.....Mrs. Fhebe A. Alleigh, 1177
Ellis, San Francisco.
Architect...None.
Contractor...James Booker, 12 Wolfe,
San Francisco.
COST, \$6000

FRAME DWELLING

(3172) E SIXTH AVE 100 N Geary.
Two-story and basement frame dwlg.
Owner.....P. Horgan, 3028 Geary,
San Francisco.

Architect...None.
Contractor...Leigh & Schultz, 419 21st
Ave., San Francisco.
COST, \$2500

FRAME DWELLING

(3173) BLK 2983 LOT No. 24 and part
No. 25, Claremont Court. Two-story
and basement frame dwelling.

Owner.....Alfred L. Meyerstein, Bal-
boa, San Francisco.
Architect...E. E. Young, 251 Kearny,
San Francisco.
Contractor...McMullin-von Voorhies Co.,
110 Jessie, San Francisco.
COST, \$5000

ALTERATIONS

(3174) NO. 158 GEARY. Alter front,
add mezzanine floor in store.

Owner.....A. G. Spalding & Bros.,
Premises.
Architect...John H. Powers, 460 Mont-
gomery, San Francisco.
Contractor...R. E. Kelly, 158 Geary,
San Francisco.
COST, \$5600

ALTERATIONS

(3174) N UNION 112-6 E Steiner E
25xN 137-6 W A 344. All work for 1-
story Class "C" reinforced concrete
building and alterations and addi-
tions to present building.

Owner.....M. F. Martinho, 2266 Union,
San Francisco.
Architect...Alexander A. Cantin, 68
Post, San Francisco.
Contractor...R. De Luca, 2256 Jones,
San Francisco.

Filed Nov. 5, '15. Dated Nov. 4, '15.
On 1st and 15th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$2100
Bond, \$1050. Surety, Massachusetts
Bonding & Insurance Co. Limit, 50
days after Nov. 8. Forfeit, none. Plans
and specifications filed.

NOTE:—1st report Oct. 18th, No. 2978

FRAME COTTAGE

(3175) E ASHTON AVE 25 S Hollo-
way. All work for three-room and
basement frame cottage.

Owner.....W. Slattery, 223 Jersey,
San Francisco.
Architect...Plans by Contractor.
Contractor...Wm. H. Grahm, 2840 Bry-
ant, San Francisco.

Filed Nov. 5 '15. Dated Oct. 29, '15.
Frame up\$362.50
Brown coated 362.50
Completed 362.50
Usual 35 days..... 362.50
TOTAL COST, \$1450.00
Bond, \$700. Sureties, Geo. Ryan and
Jas. A. Duane. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

LEASE.

Nov. 1, 1915—NO. 345 EDDY. Wm
Palmtag and J H Lynn to C B Cal-
ahan. 10 years. \$87,000.

Nov. 4, 1915—S JACKSON bet Colum-
bus Ave and Kearny; Nos. 533-535
Jackson. G and C Ferro to E Bos-
chetti. 3 years. \$2600.

Nov. 4, 1915—NO. 555 HAYES, S line bet
Octavia and Laguna. Est of Sophia
Uri, decd, by Mose Uri, extr. to Strat
Fant. 36 months. \$990.

Nov. 5, 1915—E VALENCIA 150 N 24th
N 50XE 50. Lillie H Coit to M M
Cook as Crown Oil Co. 1 year. \$720

NOTICE OF NON-LIABILITY.

Nov. 3, 1915—NE GOLDEN GATE
Ave and Buchanan E 137-6XN 120.
Emma Levison as to improvements
on leased property

COMPLETION NOTICES

San Francisco

RECORDED

Oct. 29, 1915—E BRYANT 112-3½ N
Army N 25XE 100. Emil and Elsie
Nelson to whom it may concern..
Oct. 29, 1915—S GROVE 131-3 E Clay-
ton E 25xS 137-6. Emil Nelson to
whom it may concern...Oct. 29, 1915

ACCEPTED

Oct. 30, 1915—N McALLISTER 112-6
W Scott W 25XN 137-6. T I O'Brien
to Henry Conrad.....Oct. 23, 1915

Oct. 30, 1915—S TWELFTH & MAR-
ket SW 25-11 SE 90 SW 50 SE 75
NE 55-11 SW 163. T I De Haal to
San Francisco Elevator Co. Oct. 21 '15

Oct. 30, 1915—NW PIERCE AND
Golden Gate Ave W 34-42XN 137-6.
O'Brien Bros. Inc. to Frasier &
Frasier, Marshall & Stearns Co.
Spencer Elevator Co. F J Klimm, L
V Riddle, Globe Elec Co and Selbert
Co.....Oct. 30, 1915

Nov. 1, 1915—E THIRTY-SECOND
Ave 175 S Clement S 25xE 120.
Gustave Moeller to whom it may
concern.....Oct. 29, 1915

Nov. 1, 1915—E THIRTY-SECOND
Ave 150 S Clement S 25xE 120.
Leigh & Schultz to whom it may
concern.....Oct. 29, 1915

Nov. 3, 1915—W TWENTY-FIRST AV
275 N California N 25XW 120.
Pauline F Gruenberg to J J Mal-
loch.....Nov. 1, 1915

Nov. 3, 1915—W BRYANT 74 N 25th
N 30XW 50. George D and Maggie
Gruenig to Magor Bros.....Nov. 3, 1915

Nov. 3, 1915—E EIGHTEENTH AVE
271 S California 50x120. Otto E
Anderson to whom it may con-
cern.....Nov. 1, 1915

Nov. 3, 1915—S CLAY 57-6 W Stock-
ton. S and G Gump Co by Mac-
donald & Kahn to Nilson & Arras
.....Oct. 26, 1915

Nov. 4, 1915—S ELIZABETH 210 W
Castro W 30XS 114. Eliza J Mason
and J S Greer to O R Ochs.....Nov. 3, '15

LIENS FILED

San Francisco

Oct. 23, 1915—E BARTLETT 165 S
21st S 25XE 90; No. 33 Bartlett.
The Greater City Lumber Co vs
Geo. Itesing and J De Wald.....\$17.15

Oct. 27, 1915—S CHESTNUT & NE
Columbus Ave E 105 S 50 W 63.37
NE 65.065. Santa Cruz Portland
Cement Co vs Rouda & Spivock and
Lewiss Packing Co.....\$1748.95

Oct. 25, 1915—W NINETEENTH AVE
175 N Anza N 25XW 120. Alex W
MacKillop vs H A and Anna C
Schram.....\$265

Oct. 27, 1915—E IRVING 82-6 E 42nd
Ave E 25XN 100. Russell Hinton vs
W Thayer.....\$137.50

Oct. 27, 1915—S CHESTNUT AND NE
Columbus Ave E 105 S 50 W 63.37
N 65.065. The Paraffine Paint Co
vs Rouda & Spivock and Lewiss
Packing Co.....\$108

Oct. 29, 1915—S CHESTNUT AND
NE Columbus Ave E 105 S 50 W
63.37 NE 65.065. Joast Bros vs
Rouda & Spivock and Lewiss
Packing Co.....\$158.41

Nov. 1, 1915—W TENTH AVE 100
S Balboa (B) S 25XW 120. Mc-
Lelland & McLelland vs Alice C and
Paul Bollier.....\$1917.58

Nov. 1, 1915—S CHESTNUT AND NE
Columbus Ave E 105 S 50 W 63.37
NE 65.065. Weidenthal-Gosliner
Elec Works vs Rouda & Spivock
and Lewiss Packing Co.....\$37.50

Nov. 5, 1915—NE COLUMBUS AVE &
S Chestnut E 163 11 S 137-6 W
49 5 1/2 NW 178-11 1/2. Standard
Crushed Rock Co, \$10.91 Healy-

Tibbitts Constr Co, \$262.58 vs Lewis
Packing Co and Rouda & Spivock..

RELEASE OF LIENS

San Francisco

Oct. 23, 1915—S FELL 100 E Steiner
S 137-6XE 37-6. Tony Damico to
Isabella J or Isabel J Murray and
Herbert C Cameron.....\$405

Oct. 25, 1915—NW BUSH AND
Leavenworth 87-6x59. Crown Cor-
Nov. 1, 1915—NO. 2636 HOWARD. E
Al Mathson to Mary L Nelson.....

Nov. 5, 1915—N DELRYH 117-6 E Tay-
lor E 20XN 60. E M and Edward M
Deiventhal to Mary E and J B
Seeley.....

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Am't.
2309	Mergnacco	Mergnacco	1500
2310	Jensen	Jensen	2500
2311	Noble	Ernsberger	1100
2312	El Nido Bldg	Owner	3000
2313	Webber	Ahnefeld	3200
2315	Beckert	Bruecker	4000
2316	Hamke	Goodmundson	400
2317	Dunn	Keogh	100
2318	Hyde	Hyde	400
2319	Eichner	Woodworth	2000
2322	Boyd	Boyd	900
2322	Rly Un	Schneblly	400
2324	Bowles	Davis	400
2325	Burns	Hopper	1100
2326	Higgins	Higgins	2500
2327	Baldwin	Baldwin	400
2328	Reposa	Enos	500
2332	Bullock	Doss	700
2333	Bullock	Doss	700
2334	Andersen	Andersen	2000
2335	Stoer	Wendt	2300
2336	Bullock	Doss	300
2337	Arnold	Andrewson	600
2338	Holmes	Rounds	1750
2339	Cotter	Kluss	2100
2341	Havens	MacGregor	3500
2344	Sullivan	Bellefontaine	2250
2345	O'Connor	O'Connor	4500
2346	Bowd	Bellefontaine	1900
2349	Ross	Koski	8285
2350	Edwards	Earton	4675
2351	Wanner	Ahnefeld	2150
2352	Glory	Ahnefeld	2150
2353	Strang	Strang	1500
2354	Havens	Stubbe	400
2355	Tremble	Tremble	2000
2356	Smith	Stange	650
2357	Bradbury	Fones	1480
2358	Pretias	Dutra	1480
2359	Symon	Symon	1200
2360	McGucin	Peppin	5900
2361	Rly Synd	Jackson	500
2362	Koether	S F Oven	700
2363	Broderick	Stolte	400
2366	Kerrigan	Kerrigan	2350
2367	Bell	Bernhardy	2400
2368	S P	Cal Bitulithe	—
2369	Key Route	Daniel	8719

DWELLING

(2309) E CAMPBELL 31 N 15th, Oak-
land. Two-story 4-room dwelling.
Owner.....Luigi Mergnacco, 1701 14th
Oakland.

Architect...None.
Day's work.....COST, \$1500

DWELLING

(2310) W FORTY-SEVENTH AVE 70
N Thompson, Oakland. One-story 6-
room dwelling.
Owner.....Marie Jensen, 2215 47th
Ave., Oakland.

Architect...None.
Contractor...A. Jensen, 2215 47th Ave.,
Oakland.
COST, \$2500

DWELLING

(2311) S DOPKINS 150 E Bruce, Oak-
land. One-story 3-room, dwelling.

Owner.....Harry E. Nohle, 928 E 24th
Oakland.
Architect...Chester H. Miller, Dalziel
Bldg., Oakland.
Contractor...Frank E. Ernsberger, 6245
College Ave., Oakland.
COST, \$1100

DWELLING

(2312) E VALLE VISTA 134 S Sunny-
slope, Oakland. Two-story 7-room
dwelling.
Owner.....El Nido Bldg. Co., 531 10th,
Oakland.

Architect...None.
Day's work.....COST, \$3000

DWELLING

(2313) E CHETWOOD 300 N Santa
Rosa, Oakland. One-story 5-room
dwelling.
Owner.....W. L. Webber, 14 Moss
Ave., Oakland.

Architect...None.
Contractor...H. Ahnefeld, 3095 King,
Berkeley.
COST, \$3200

STORES AND LIVING ROOMS

(2315) NE SEVENTH & WILLOW,
Oakland. One-story 12-room stores
and living room.
Owner.....Beckert & Kieso, Oakland.
Architect...None.
Architect...None.
Contractor...J. H. Bruecker, 1326 E-12th
Oakland.
COST, \$1000

REPAIRS

(2316) NE TENTH AND WEBSTER,
Oakland. Roof repairs.
Owner.....J. W. Hamke.
Architect...None.
Contractor...A. K. Goodmundson, 565
16th, Oakland.
COST, \$100

DWELLING

(2317) E HOWELL 100 N Rose, Oak-
land. One-story 4-room dwelling.
Owner.....Mrs. S. E. Dunn, Oakland.
Architect...None.
Contractor...Dan Keogh, 5627 Miles
Ave., Oakland.
COST, \$1000

ALTERATIONS

(2318) NO. 5381 ARKANSAS, Oakland
Alterations.
Owner.....Theda Hyde, Premises.
Architect...None.
Day's work.....COST, \$400

TANK FRAME

(2319) NO. 1057 SIXTY-FIRST, Oak-
land. Tank frame.
Owner.....A. Eichner, Premises.
Architect...None.
Contractor...P. Woodworth, 1060 61st,
Oakland.
COST, \$100

DWELLING

(2322) E ARBOR AVE 157 N Hudson,
Oakland. One-story 3-room dwlg.
Owner.....Boyd Carlos & Co., Hudson
and Claremont, Oakland.

Architect...None.
Day's work.....COST, \$2000

ALTERATIONS

(2323) NO. 2752 SAN PABLO AVE.,
Oakland. Alterations.

Owner.....Realty Union Co., S. F.
 Architect...None.
 Contractor...Schnebley, Hostrawser &
 Pedgrift, 6th & Jackson,
 Oakland.
 COST, \$900

ADDITION
 (2324) McADAM ST., "The Pines,"
 Oakland. Addition.
 Owner.....P. E. Bowles, Premises.
 Architect...None.
 Contractor...Wm. Davis & Son, 461 E-
 28th, Oakland.
 COST, \$400

DWELLING
 (2325) W FIFTY-SEVENTH AVE 342
 N E-14th, Oakland. One-story five-
 room dwelling.
 Owner.....Mrs. Mary Burns, 821 20th,
 Oakland.
 Architect...None.
 Contractor...M. E. Hopper & Sons, 1769
 Pleasant Valley, Oakland.
 COST, \$1400

DWELLING
 (2325) W THOMAS 300 S Prospect
 Ave., Oakland. One-story 6-room
 dwelling.
 Owner.....E. L. Higgins, 3250 Miles
 Ave., Oakland.
 Architect...None.
 Day's work. COST, \$2500

ADDITION
 (2327) NO. 3886 MAYBELLE AVE.,
 Oakland. Addition.
 Owner.....Annie M. Baldwin
 Architect...None.
 Day's work. COST, \$400

FIRE REPAIRS
 (2328) N E-TWENTIETH 50 E 22nd
 Ave., Oakland. Fire repairs.
 Owner.....Antone Reposa, 2206 E-
 20th, Oakland.
 Architect...None.
 Contractor...Antone Enos, 1834 E-16th,
 Oakland.
 COST, \$500

REPAIRS
 (2332) NO. 408 E-SEVENTH, Oakland
 Fire repairs.
 Owner.....Miss Ella L. Bullock, 970
 Market, Oakland.
 Architect...None.
 Contractor...C. A. Doss, 2028 E-15th,
 Oakland.
 COST, \$700

REPAIRS
 (2335) NO. 408 E-SEVENTH, Oakland.
 Fire repairs.
 Owner.....Miss Ella L. Bullock, 970
 Market, Oakland.
 Architect...None.
 Contractor...C. A. Doss, 2028 E-15th,
 Oakland.
 COST, \$700

DWELLING
 (2334) N E-THIRTY-SEVENTH 95 W
 Randolph Ave., Oakland. One-story
 5-room dwelling.
 Owner.....A. T. Andersen, 7335 Lock-
 wood, Oakland.
 Architect...None.
 Day's work. COST, \$2000

DWELLING
 (2335) S THIRTY-NINTH 300 E Ade-
 line, Oakland. One-story 5-room
 dwelling.
 Owner.....F. Stoer, 3669 Adeline, Okd
 Architect...None.
 Contractor...Gus H. Wendt, 2425 Le
 Conte Ave., Berkeley.
 COST, \$2300

REPAIRS
 (2336) NO. 412 E-SEVENTH, Oakland.
 Fire repairs
 Owner.....Miss Ella L. Bullock, 970
 Market, Oakland.
 Architect...None.
 Contractor...C. A. Doss, 2028 E-15th,
 Oakland.
 COST, \$500

ADDITION
 (2337) NO. 404 OAKLAND AVE., Oak-
 land. Addition.
 Owner.....Oro O. Arnold, Premises.
 Architect...None.
 Contractor...M. O. Andrewson, 2341 65th
 Ave., Oakland.
 COST, \$600

DWELLING
 (2338) E MARKET 45 S 56th, Oakland.
 One-story 6-room dwelling.
 Owner.....W. M. Holmes, 1076 54th,
 Oakland.
 Architect...None.
 Contractor...F. C. Rounds, 820 56th, Okd.
 COST, \$1750

DWELLING
 (2339) E EMERALD 125 S Garnet,
 Oakland. One-story 6-room dwg.
 Owner.....R. A. Cotter, 664 39th, Okd.
 Architect...None.
 Contractor...Meyers & Kluss, 8314 West
 and 414 Moss Ave., Oakland.
 COST, \$2100

FRAME DWELLING
 (2341) LOT 21 BLK "H" Map East
 Piedmont Heights, Oakland. All
 work for two-story frame dwelling.
 Owner.....Wickham Havens, Inc.,
 Oakland Bk of Svgs Bldg.,
 Oakland.
 Architect...None.
 Contractor...C. M. MacGregor, 470 13th,
 Oakland.
 Filed Nov. 1, '15. Dated Oct. 27, '15.
 Frame up ¼
 Brown coated ¼
 Completed and accepted..... ¼
 Usual 35 days..... ¼
 TOTAL COST, \$3500
 Bond, \$1750 Sureties, J. F. Smith and
 G. A. Scott. Limit, 65 days. Forfeit,
 \$5. Plans and specifications filed.

DWELLING
 (2344) E SAN SEBASTIAN 100 N
 Elsinor, Oakland. Two-story seven-
 room dwelling.
 Owner.....C. A. Sullivan, 4241 Gilbert
 Oakland.
 Architect...None.
 Contractor...A. J. Bellefontaine, 6712
 Flora, Oakland.
 COST, \$3250

DWELLING
 (2345) E CARLTON 68 S Prospect
 Ave., Oakland. Two-story 7-room
 dwelling.
 Owner.....J. C. O'Connor, 5314 Bryant
 Ave., Oakland.

Architect...M. L. Diggs, 2444 Low-
 ditch, Berkeley.
 Day's work. COST, \$4500

DWELLING
 (2346) S 12-SIXTEENTH 40 E 22nd
 Ave., Oakland. One-story 5-room
 dwelling.
 Owner.....M. J. Dowd, Cor. 22nd Ave
 E-16th, Oakland.
 Architect...None.
 Contractor...A. J. Bellefontaine, 6712
 Flora, Oakland.
 COST, \$1900

FRAME DWELLING
 (2349) LOT 185 AND N ½ LOT 184,
 Nova Piedmont, Piedmont. All work
 except heating and vacuum cleaning
 for two-story and basement ten-room
 frame dwelling.
 Owner.....George Ross, 19 Napier
 Ave., Piedmont.
 Architect...John Hudson Thomas, 1st
 National Bank Bldg., Bkly.
 Contractor...Koski Bros., 35 Ramona
 Ave., Oakland.
 Filed Nov. 4, '15. Dated Nov. 1, '15.
 Frame up ¼
 Brown coated ¼
 Completed and accepted..... ¼
 Usual 35 days..... ¼
 TOTAL COST, \$8286
 Bond, \$4143. Surety, National Surety
 Co., Limit, 150 days. Forfeit, none.
 Plans and specifications filed.

FRAME DWELLING
 (2350) LOT 14 BLK "L" East Pied-
 mont Heights, Oakland. All work
 for two-story and basement frame
 dwelling.
 Owner.....Ella B. Edwards, 139 Grand
 Ave., Oakland.
 Architect...None.
 Contractor...C. B. Barton, 1st Trust
 Bldg., Oakland.
 Filed Nov. 4, '15. Dated Sept. 2, '15.
 Within 5 days after hills become
 due and payable.....
 TOTAL COST, \$4675
 Bond, none. Limit, 75 days. Forfeit,
 \$5. Plans and specifications filed.

DWELLING
 (2351) S TWENTY-NINTH 150 W
 Walsworth, Oakland. One-story 5-
 room dwelling.
 Owner.....Albert Wanner, 302 26th,
 Oakland.
 Architect...None.
 Contractor...H. Ahnefeld, 3005 King,
 Berkeley.
 COST, \$2150

DWELLING
 (2352) S TWENTY-NINTH 200 W
 Walsworth, Oakland. One-story 5-
 room dwelling.
 Owner.....Henry Glory, 302 26th, Okd
 Architect...None.
 Contractor...H. Ahnefeld, 3005 King,
 Berkeley.
 COST, \$2150

DWELLING
 (2353) W TWENTY-THIRD AVE 40 S
 E-29th, Oakland. One-story 4-room
 dwelling.
 Owner.....E. A. Strang, 3741 Elston
 Ave., Oakland.
 Architect...None.
 Day's work. COST, \$1500

GARAGE.
(2354) NO. 1081 ASHMONTE AVE., Oakland. Garage.
Owner.....Wickham Havens Co., Oakland Bank of Savings Bldg., Oakland.
Architect...None.
Contractor...R. E. Stubbe, 1209 E-19th, Oakland. COST, \$100

DWELLING
(2355) W SIXTY-FIRST AVE 53 S Fortune Way, Oakland. One-story 5-room dwelling.
Owner.....M. H. Tremble, 2175 Rawson, Oakland.
Architect...None.
Day's work. COST, \$2000

DWELLING
(2356) NW EIGHTEENTH AVE AND E-20th, Oakland. One-story 6-room dwelling.
Owner.....Susan L. Smith, 2332 Chestnut, Oakland.
Architect...None.
Contractor...D. W. Stanage, 896 55th, Oakland. COST, \$2000

REPAIRS
(2357) NO. 824 FILBERT, Oakland. Repairs.
Owner.....Bradbury Estate Co., Los Angeles.
Architect...None.
Contractor...J. H. Fones, 832 Cleveland, Oakland. COST, \$650

DWELLING
(2358) E NINETY-SEVENTH AVE 82 N "A," Oakland. One-story five-room dwelling.
Owner.....A. Freitas.
Architect...None.
Contractor...A. V. Dutra, 1124 Kirkham, Oakland. COST, \$1450

BRICK SHED
(2359) SW TWENTY-FIRST AND SAN Pablo Ave., Oakland. One-story brick storage shed.
Owner.....Symon Bros., 1501 Market, San Francisco.
Architect...A. L. Juis, 1245 Oak, S. F.
Day's work. COST, \$1200

DWELLING
(2360) LOT 29 SEQUOYAH HILLS, Oakland. One-story 6-room dwlg.
Owner.....F. E. McGuelm, Premises.
Architect...None.
Contractor...J. B. Peppin, San Leandro. COST, \$5900

REPAIRS
(2361) NO. 1414 BROADWAY, Oakland Repairs.
Owner.....Realty Syndicate, Prem.
Architect...None.
Contractor...P. H. Jackson & Co., 237 First, San Francisco. COST, \$500

BAKE OVEN
(2362) NO. 5488 COLLEGE AVE., Oakland. Bake oven.
Owner.....T. C. Koerber, Premises.
Architect...None.
Contractor...S. P. Oven Co., 3650 18th, San Francisco. COST, \$700

ALTERATIONS
(2363) NO. 3167 LAGUNA, Oakland. Alterations.
Owner.....W. F. Broderick, Premises
Architect...None.
Contractor...T. C. Stoite, 3149 Laguna, Oakland. COST, \$400

FRAME DWELLING
(2366) NO. 21 PACIFIC AVE., Piedmont. Two-story frame dwelling.
Owner.....W. H. Kerrigan, 5153 Shafter Ave., Oakland.
Architect...None.
Day's work. COST, \$2350

ALTERATIONS
(2367) LOT 5 Map Milton Tract, Oakland. Remodel old dwelling and construct one-story beneath same, making two flats.
Owner.....Sarah Bell, Oakland.
Architect...None.
Contractor...John Bernhardt, 6567 Harmon, Oakland.
Filed Nov. 5, '15. Dated Nov. 4, '15.
Frame up 3/4
Brown coated 3/4
Completed 3/4
Usual 35 days. TOTAL COST, \$2400

Bond, none. Limit, 60 days after Nov. 8.
Forfeit, none. Plans and specifications filed.

CURE, ETC.
(2368) RIGHT-OF-WAY IN Town of Livermore. 3x12 redwood curb, and 5 inch concrete base, 2 inch bitulithic top and roll macadam base and place 2 inch bitulithic top.
Owner.....Southern Pacific Co., Flood Bldg., San Francisco.
Architect...None.
Contractor...California Bitulithic Co., Emeryville, Cal.

Filed Nov. 5, '15. Dated Nov. 3, '15.
Usual 35 days. Total cost
Redwood curbing, 11c per lin ft.
5 inch concrete base, .183 per sq. ft.
2 inch bitulithic top, .12 sq. ft.
Bond, \$3100. Surety New England Equitable Insurance Co. Limit, 60 days. Forfeit, none. Plans and specifications filed.

ROCK
(2369) SAN FRANCISCO BAY. 23,447 tons of rock on rock seawalls.
Owner.....San Francisco, Oakland Terminal Railway, Jones & 22nd, Oakland.
Architect...None.
Contractor...Daniel Contracting Co., 503 Market, San Francisco.

Filed Nov. 4, '15. Dated Oct. 25, '15.
End of 30 days.....82 1/2c per ton
End of 65 days.....82 1/2c per ton
End of 95 days.....82 1/2c per ton
TOTAL COST, \$8719
Bond, \$5000. Surety U. S. Fidelity & Guaranty Co. Limit, 90 days from Sept. 1. Forfeit, none. Plans and specifications filed.

Building Contracts Awarded Berkeley.

No.	Owner	Contractor	Am't.
2314	S. P. Co.	Hutchinson	500
2320	Brain	Barton	400
2321	Hampton	Hampton	500
2342	Fvenzel	Kollmer	3600
2343	Bkly Dev.	Mallanan	2500
2347	Dalmasso	Caretto	1350
2348	Peake	Landell	3200

2364 Stearns Cederborg 400
2365 Whiting Bacheldon 1000

CONCRETE CULVERTS, ETC.
(2314) GILMAN STREET at Third St., Berkeley. Cast iron and concrete culverts and oil macadam.
Owner.....Southern Pacific Co., 13th and Broadway, Oakland.

Architect...None.
Contractor...Hutchinson Co., 1200 Franklin, Oakland.
Filed Oct. 30, '15. Dated Oct. 28, '15.
30 days after completion...All due
Culverts, \$3.00 per lin. ft.
Macadamizing, 9 1/2c per sq. ft.
Oiling and rolling, 3c per sq. ft.
TOTAL COST, \$—
Bond, none. Limit, 60 days. Forfeit, none. Plans only filed.

ADDITION
(2320) NO. 2712 DERBY, Berkeley. Addition.
Owner.....L. B. Brain, Premises.
Architect...None.
Contractor...Barton, Oakland. COST, \$500

(2321) W BONAR 250 S Addison, Berkeley. One-story, 2-room dwelling.
Owner.....E. G. Hampton, 2122 Bonar Berkeley.
Architect...None.
Day's work. COST, \$400

DWELLING
(2342) E HAWTHORNE 50 N Vine, Berkeley. Two-story 7-room dwlg.
Owner.....Dr. F. Herbert Fvenzel, 2729 Dwight Way, Bkly.
Architect...H. H. Gutterson, 68 Post, San Francisco.
Contractor...Jacob Kollmer, 2813 Stuart, Berkeley. COST, \$3600

DWELLING
(2343) E JOSEPHINE 159 S Hopkins, Berkeley. One-story 5-room dwelling.
Owner.....Berkeley Development Co., Shattuck & Addison, Bkly.
Architect...None.
Contractor...Otto W. Mailanan, 1726 10th, Berkeley. COST, \$2500

DWELLING
(2347) W SIXTH 100 N Cedar, Berkeley One-story 4-room dwelling.
Owner.....Zios Dalmasso, Premises.
Architect...None.
Contractor...C. Caretto, 933 Addison, Berkeley. COST, \$1360

DWELLING
(2348) NW BUENA VISTA WAY at its right angle turn, Berkeley. Two-story 7-room dwelling.
Owner.....F. R. Peake Co., 2127 University Ave., Berkeley.
Architect...None.
Contractor...E. Landell, 8704 "D," Okd. COST, \$3200

GARAGE
(2364) NO. 98 THE UPLANDS, Berkeley. Garage.
Owner.....H. B. Stearns, 6429 Regent, Berkeley.
Architect...None.
Contractor...Cederborg & Anderson, 1633 Poplar, Berkeley. COST, \$400

DWELLING

(2356) E CALIFORNIA 150 S Alston Way, Berkeley. One-story 5-room dwelling.
Owner.....Homer Whiting, 2206 Jefferson, Berkeley.
Architect...None.
Contractor...M. A. Bachelson, 1526 Carlton, Berkeley.

COST, \$1000

Building Contracts Awarded

No.	Owner	Contractor	Am't.
2329	Alaska Packers' Ass'n.	Owner	3500
2330	Noble	Noble	2000
2331	Hawalaia	Mehrtens	1325
2340	Hillen	Hillen	16000

RECONSTRUCTION

(2229) FOOT PAIRU ST., Alameda. Reconstruction.
Owner.....Alaska Packers' Ass'n., Premises
Architect...None.
Day's work. COST, \$3500

DWELLING

(2330) NO. 1632 BROADWAY, Alameda. One-story 5-room dwelling.
Owner.....Geo. H. Noble, 2220 Central Ave., Alameda.
Architect...None.
Day's work. COST, \$2000

DWELLING

(2331) NO. 1819 ST. CHARLES, Alameda. One-story 5-room dwelling.
Owner.....A. Hawalaia.
Architect...None.
Contractor...H. G. Mehrrens, 1600 Webster, Alameda.
COST, \$1325

DWELLING

(2340) LINCOLN AVE., Alameda. Eight one-story 5-room dwellings.
Owner.....R. C. Hillen, 450 Haight Ave., Alameda.
Architect...None.
Day's work. COST, \$16,000

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED AMOUNT

Oct. 22, 1915—LOT 2 Except W 7 Map Oak Vale Claremont, Bkly. S W Waterhouse to L A Rose. Oct. 14, 1915
Oct. 23, 1915—LOT 3 except W 7 Map Oak Vale Claremont, Bkly. S W Waterhouse to L A Rose. Oct. 14, 1915
Oct. 23, 1915—LOT 9, Map Oak Vale, Claremont, Bkly. S W Waterhouse to L A Rose. Oct. 14, 1915
Oct. 23, 1915—LOT 25 BLK 14 Map San Pablo Park, Bkly. Arvid E Olson to whom it may concern. Oct. 22, 1915
Oct. 25, 1915—LOTS 53 AND 54 of Reshdn Blks 10 and 11 Howe Tct and ptn Lots 1 and 25 BLK "A" Map No. 1, Highland Terrace, Oakland. Daniel F O'Connell to whom it may concern. Oct. 23, 1915
Oct. 25, 1915—NO. 1433 ASHBY ST. on Cor. Ashby Ave and Brown St., Land Oakland View Homestead Bldg. B A and J M Dice to whom it may concern. Oct. 23, 1915
Oct. 27, 1915—LOT 5 BLK 16 Thousand Oaks, Oakland Tp. W H Fenner by W L Brodrick to F R Peak (as recorded). Oct. 21, 1915

Oct. 27, 1915—LOT 12 and ptn Plot 10 Boardman's Map Rancho Arroyo de la Alameda. Masonic Homes of California to Thos H Day's Sons. Oct. 15, 1915
Oct. 25, 1915—E OAKLAND AVE directly opp Bayo Vista Ave 56x106. Okd. Franklin Riffle to Edwin C Graff. Oct. 23, 1915
Oct. 28, 1915—PTN BLK 2258 Map Shdvn Blks 2256, 2257 and 2258, Valdez Tract, Okd. Seventh Church of Christ Scientist to Anthony & Heyer. Oct. 25, 1915
Oct. 29, 1915—S FOLGER AVE 700 E Bay, Bkly. Mary A Carney to G L Hughson. Oct. 23, 1915
Oct. 29, 1915—PTN LOT 2 BLK 1, Claremont, Bkly. O G Lawton to Van Sant-Houghton Co. Oct. 20, 1915
Nov. 1, 1915—N ASHBY AVE 30 E Brown E 32xN 100, Bkly. B A Dice to whom it may concern. Oct. 20, 1915
Nov. 1, 1915—LOT 18 and ptn Lot 19 Map Dimond Vista, Okd. Grace C Woodburn to whom it may concern. Nov. 1, 1915
Nov. 1, 1915—LOT 15 BLK 3 Martin Kellogg Ppty, Bkly. Alvaretta L McNulty to John W Jersman. Oct. 28, 1915
Oct. 29, 1915—LOT 8 AND S 12x12 Lot 9 Blk "D" Map Fairview Tract, Piedmont. Amy M Ricksbaugh to whom it may concern. Oct. 29, 1915
Nov. 13, 1915—NO. 128 RONADA AVE Piedmont. Sugg Bros Realty Co to whom it may concern. Sept. 30, 1915
Nov. 3, 1915—LOT 2 BLK 21 Map Northbrae, Albany. C E Sinclair to whom it may concern. Nov. 3, 1915
Nov. 3, 1915—50 W NW COR. Dana and Woolsey, Bkly. W E Turner by James W Plachek to Homer Whiting. Oct. 23, 1915
Nov. 3, 1915—LOT 19 BLK "B" East Piedmont Heights, Okd. Pearl Olsen to M E Hopper & Sons. Oct. 30, 1915
Nov. 3, 1915—BAY OF S. F. S F O T Railway to Daniel Contracting Co. Oct. 25, 1915
Nov. 3, 1915—N DAMUTH 662 E Fruitvale Ave E 40xN 125, Okd. James T Black to Harris & Hudson. Nov. 1, 1915
Nov. 3, 1915—E LE CONTE nr. Le Roy Ave, being Lot 2 Blk 18 Daleys Scenic Park Tract, Bkly. Pi Building Ass'n of Delta Delta Delta Fraternity to Van Sant-Houghton Co. Oct. 29, 1915

LIENS FILED

ALAMEDA COUNTY.

Oct. 23, 1915—LOTS 8 TO 24 INCL and ptn Lots 4, 5, 6, 7 and 25 to 32, incl. Map R J McMullin's Shdvn Blk 576, Okd. J E Breitwiser vs Pacific Coast Shredded Wheat Co. \$38.30
Oct. 25, 1915—LOT 20 BLK 22 Map Northbrae, Albany. J D McTeer vs W N Taylor. \$17.25
Oct. 30, 1915—S 3 1/2 LOT 6 BLK "H" Twoby's 2nd Add'n being E Glen Ave 200 N Eunice, Bkly. William Kat vs B W Gelica. \$48.40
Nov. 1, 1915—LOTS 7 AND 8 BLK "J" Map Broadway Terrace, Okd. Redwood Manufactures Co vs Eva and Maynard Anslyn and W C Brown. \$129.16
Nov. 1, 1915—NW TENTH AVE AND

NE 15-20th NW 150xNE 100, Okd. Chas D Haines vs E G Campbell. \$323
Nov. 1, 1915—LOTS 64 AND 65 BLK 11 Map No. 4, Regents Park, Albany. Sunset Lumber Co vs John Larson. \$40.13
Nov. 3, 1915—LOTS 64 AND 65 BLK 11 Map Regents Park No. 4, Albany Contra Costa Bldg. Materials Co vs John Larson, Rhode & Howard and M Pontynan. \$70.72
Nov. 5, 1915—W STANNAGE AVE 275 S Marin Ave S 50xW 100, Albany. M Pontynen vs John Larson. \$52
Nov. 5, 1915—GW FIFTY-SECOND & Dover W 30xS 80, Okd. Burnham Standeford Co vs Edwin D Tichenor and R H Fallmer. \$40.80

OAKLAND BUILDING SUMMARY.

For The Month of October, 1915.

Classification of Buildings	No. of Permits	Costs
1-story dwellings....	75	\$129,722.75
1 1/2-story dwellings....	8	17,600.00
2-story dwellings....	21	88,221.75
3-story apartments....	1	14,000.00
2-story apartments....	2	11,200.00
1-story stores....	3	6,185.00
Test reinforced concrete warehouse....	1	66,000.00
Test reinforced concrete warehouse....	1	46,000.00
2-story brick garage....	1	5,695.00
1-story brick garage....	2	6,000.00
1-story warehouse....	2	580.00
1-story shop....	2	400.00
1-story office....	1	75.00
Steel crane....	1	6,500.00
Transformer house....	1	985.00
1-story factory....	1	800.00
1-story cook house....	2	1,095.00
1-story bunk house....	3	1,975.00
Green house....	1	125.00
Garages, sheds and stables....	72	9,035.00
Tank frames & barns	8	2,618.00
Alterations, additions and repairs	175	52,527.69
Total	384	\$467,339.59

SUMMARY.

New construction	309	414,812.50
Alterations, additions and repairs	175	52,527.09
Total	384	\$467,339.59

BUILDING CONTRACTS.

SANTA CLARA COUNTY.

SHOP

ON STANFORD CAMPUS, Palo Alto.
All work for corporation shop bldg.
Owner.....Leland Stanford Jr., University Trustees
Architect...R. Shaw.
Contractor...E. A. Hettinger, Palo Alto.
Filed Oct. 13, 15. Dated Oct. 11, 15.
On 1st day of each month 75% to be paid for amount due for previous 2 weeks.
Usual 35 days.
TOTAL COST, \$19,753
Bond, \$9877. Sureties, J. H. Peirce and D. O. Druffel. Limit, 130 days Forfeit, \$50 per day. Plans and specifications filed.

FRAME DWELLING

ON SAN JUAN HILL and adjoining the University Reservoir, Stanford Uni-

versity, Palo Alto. All work for two-story frame dwelling.
Owner.....H. R. Fairclough, Stanford University.

Architect...J. K. Branner.
Contractor...H. L. Upham, Palo Alto.
Filed Oct. 11, '15. Dated Oct. 11, '15
Frame up\$1687.50
1st coat plaster on and wiring
in1687.50
Plaster finished, standing trim
in place1687.50
When completed1687.50
Usual 35 days2250.00
TOTAL COST, \$9000.00
Bond, \$5500. Surety, The Aetna Accident & Liability Co. Limit, 100 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

ALPINE AVE, Lot 3 Annie Cross Tract, Los Gatos. All work for frame dwlg.
Owner.....K. R. Elwell, Los Gatos.
Architect...E. W. Stillwell & Co., 411 Biennie Bldg., Los Angeles.
Contractor...J. P. Christensen, Los Gatos.

Filed Oct. 18, '15. Dated Oct. 14, '15.
Frame up25%
When plastered25%
When completed25%
Usual 35 days25%
TOTAL COST, \$3037
Bond, \$1525. Surety, Hartford Accident & Indemnity Co. Limit, 56 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

LOT 4 BLK 41, Palo Alto. All work for frame dwelling.
Owner.....L. A. Reid, Palo Alto.
Architect...J. M. Thomas, 1st National Bank, Berkeley.
Contractor...G. G. Bertsche, Palo Alto.
Filed Oct. 18, '15. Dated Oct. 18, '15.
Frame up\$764
Brown plastered764
When accepted764
Usual 35 days705
TOTAL COST, \$2057
Bond, none. Limit, 60 days. Forfeit, none. Plans and specifications filed.

BRICK BUSINESS BLDG.

NEAR COR. SAN CARLOS & FIRST STs., San Jose. All work for one-story brick business building.
Owner.....John Twohy, T. S. and S. Montgomery, 217 S-1st St., San Jose.
Architect...Wm. Binder, Theatre Bldg., San Francisco.
Contractor...R. O. Summers, 1st and Santa Clara, San Jose.
Filed Oct. 19, '15. Dated Oct. 15, '15.
On 1st and 1th of each month... 75%
Usual 35 days25%
TOTAL COST, \$5338
Bond, \$2669. Surety, Hartford Accident & Indemnity Co. Limit, 60 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

ON RANDALL ST., bet. The Alameda and Morse Sts., San Jose. All work for frame dwelling.
Owner.....J. L. Pierce, San Jose.
Architect...W. E. Higgins, Rea Bldg., San Jose.
Contractor...W. R. Latta, 132 N-11th St., San Jose.
Filed Oct. 20, '15. Dated —.

Frame up and enclosed.....\$ 500.00
Rough plumbing and chimney
up700.00
When accepted1016.25
TOTAL COST, \$2246.25
Bond, \$1124. Surety, U. S. Fidelity & Guaranty Co. Limit, 90 days. Forfeit, none. Plans and specifications filed.

REPAIRS

NO. 81 WEST SANTA CLARA ST., San Jose. Repair brick building.
Owner.....San Jose Building & Loan Ass'n, 42 E-Santa Clara St., San Jose.
Architect...P. D. Wolfe, 1st National Bank Bldg., San Jose.
Contractor...J. C. Thorpe, 28 Porter Bldg., San Jose.
Filed Oct. 25, '15. Dated Oct. 21, '15.
Brick work done..... 1/4
Counted work delivered..... 1/4
Building completed..... 1/4
Usual 35 days..... 1/4
TOTAL COST, \$1925
Bond, \$965. Surety, Fidelity & Deposit Co. of Maryland Limit, 35 days. Forfeit, none. Plans and specifications filed.

REMODELING HOUSE

ON THIRTEENTH ST., bet San Carlos and San Fernando Sts., Naglee Park, San Jose. All work for remodeling old house.
Owner.....L. E. Wood, 49 S-14th St., San Jose.
Architect...F. D. Wolfe, 1st National Bank Bldg., San Jose.
Contractor...J. Perkins, E-Santa Clara and 34th Sts., San Jose.
Filed Oct. 28, '15. Dated Oct. 28, '15.
Frame up\$312
1st coat plaster on..... 312
When accepted312
Usual 35 days312
TOTAL COST, \$1248
Bond, \$600. Sureties, H. P. Damon and G. W. Dobson, Limit, 45 days. Forfeit, none. Plans and specifications filed.

REMODELING SCHOOL

NEAR COR. SARATOGA AND SAN FRANCISCO ROAD, San Jose. All work for remodeling old school house.
Owner.....Milliken School District Trustees.
Architect...C. S. McKenzie, San Jose Bank Bldg., San Jose.
Contractor...P. E. Paterson, San Jose.
Filed Oct. 28, '15. Dated Oct. 14, '15.
As work progresses..... 75%
Usual 35 days25%
TOTAL COST, \$1998
Bond, \$1000. Sureties, J. A. and S. H. Chase, Limit, 60 days. Forfeit, none. Plans and specifications filed.

ON W LOCUST, bet. Grant and Virginia Sts., San Jose. Work not given.
Owner.....A. Servente, San Jose.
Architect...None.
Contractor...S. Di Carlo and E. Scotti, San Jose

Filed Oct. 27, '15. Dated Oct. 23, '15.
Frame up\$425
When roofed425
When completed425
Usual 35 days425
TOTAL COST, \$1700
Bond, limit, forfeit, none. Plans and specifications filed.

COTTAGE

FIFTEENTH ST., bet. Washington and Empire Sts., San Jose. Five-room cottage.
Owner.....W. E. Woodhan, Ryland Bldg., San Jose.
Architect...None.
Day's workCOST, \$2000

COTTAGE

NO. 650 DELMAS, San Jose. Five-room cottage.
Owner.....C. Montoya, 55 Edwards Ave., San Jose.
Architect...None.
Contractor...Win. Hegel, 341 S-15th St., San Jose.
COST, \$1800

COTTAGE

S ST. JAMES et. 7th and 8th Sts., San Jose. Five-room cottage.
Owner.....L. E. Harris, 322 E-St. James St., San Jose.
Architect...None.
Contractor...J. A. Weldon, 629 Wilms Ave., San Jose.
COST, \$1500

ALTERATIONS

E MARKET, bet. Santa Clara and Post Sts., San Jose. Alterations.
Owner.....Kocher.
Architect...None.
Contractor...R. O. Summers, 17 N-1st St., San Jose.
COST, \$1100

ADDITION

SEVENTH AND JULIAN STS., San Jose. Addition.
Owner.....Mrs. Possenbacher, 300 E-Julian, San Jose.
Architect...None.
Contractor...H. De Smet, 398 N-11th St., San Jose.
COST, \$500

GARAGE

NO. 41 N-TENTH ST., San Jose. Garage
Owner.....F. L. Burrell, Premises.
Architect...None.
Day's workCOST, \$400

DWELLING

EIGHTEENTH AND TAYLOR STS., San Jose. Four-room dwelling.
Owner.....D. Campisi, 13th & Taylor Sts., San Jose.
Architect...None.
Day's workCOST, \$400

REPAIRS

SAN PEDRO AND FOX STS., San Jose. Repairs.
Owner.....S. E. Ballard, Premises.
Architect...None.
Day's workCOST, \$100

LIENS FILED

SANTA CLARA COUNTY.

RECORDED AMOUNT
Oct. 18, 1915—BLK 7, Town of Rucker John Delecommuni vs I and Antonina Pizzuto\$66.50
Oct. 18, 1915—BLK 7, Town of Rucker Whitehurst & Hodges vs I Pizzuto and A Pizzuto (his wife)\$22.74

COMPLETION NOTICES.**SANTA CLARA COUNTY.**

RECORDED **ACCEPTED**
 Oct. 18, 1915—LOTS 27 AND 28 BLK 5 Palo Alto, Martins Sub., Palo Alto Madison-Thoits Co to C A Brady...
Oct. 14, 1915
 Oct. 21, 1915—LOT 16 BLK 50, Naglee Park, San Jose. E L Patterson to F C Nelson.....Oct. 18, 1915
 Oct. 25, 1915—LOT 12 BLK 3 Hester Park, San Jose. H P Kessler to L Lewis.....Oct. 25, 1915

BUILDING CONTRACTS**SAN MATEO COUNTY.**

COLUMBARIUM
MT. OLIVET CEMETERY. Metal furring, metal lathing, plastering, Caen stone, cementing and Keene cement work, etc., for columbarium.
 Owner.....Mt. Olivet Cemetery Ass'n., Inc., 209 Post, S. F.
 Architect...W. H. Crim, Jr., 425 Kearny, San Francisco.
 Contractor...A. Knowles, 985 Folsom, San Francisco.
 Filed Oct. 30, '15. Dated Oct. 25, '15.
 On 1st and 15th of each month 75%
 Usual 35 days.....25%
TOTAL COST, \$1552
 Bond, \$776. Surety, Massachusetts Bonding & Insurance Co. Limit, 30 days. Forfeit, \$15 per day. Plans and specifications filed.

DRY HOUSES

HILLS AND KNOWLES TRACT, Redwood City Grading, concrete and carpenter work for four dry houses (not including paper roof).
 Owner.....National Magnesia Mfg. Co., 332 Howard, S. F.
 Architect...None.
 Contractor...San Mateo Building Co. San Mateo.
 Filed Oct. 28, '15. Dated Oct. 27, '15.
 On or before January 10, 1916...\$1200
TOTAL COST, \$1200
 Bond, none. Limit, 30 days after Oct. 31, 1915. Forfeit, none. Plans only filed.

BUILDING CONTRACTS.**SAN MATEO COUNTY.**

RECORDED **ACCEPTED**
 Oct. 28, 1915—KELLEY & DICKSON Ppty. on Upper La Honda facing new Boulevard Road, San Mateo. I Liebes to H W Arnold...Oct. 25, 1915
 Oct. 29, 1915—LOT 15 BLK 18, Crocker Estate Tract Sub No. 1, Daly City. William F Dreyer to whom it may concern...Oct. 28, 1915
 Oct. 30, 1915—LOT 17 BLK 9 Map 2, Stanford Park Tract, North Palo Alto. Arnold G Wagner to Gott & Dewar.....Oct. 29, 1915
 Nov. 3, 1915—PTN LOTS NOS. 1, 2, 3, 22 and 24 Sub No. 3, Burlingame Park. M Ehrenberg to whom it may concern.....Oct. 30, 1915

LIENS FILED**SAN MATEO COUNTY.**

RECORDED **AMOUNT**
 Nov. 1, 1915—TANFORAN RACE Tract, San Bruno. John A Zaro vs New California Jockey Club.....\$228.75

BUILDING CONTRACTS**MARIN COUNTY.**

BUILDING
"B" STREET, San Rafael. All work for one-story building.
 Owner.....A. Tinony, San Rafael.
 Architect...None.
 Contractor...J. A. Kappenmann, San Rafael.
 Filed Oct. 29, '15. Dated Oct. 27, '15.
 1-st joists up.....\$975
 Roof on975
 Building completed975
 Usual 35 days.....975
TOTAL COST, \$3900
 Bond, \$1950. Sureties, J. Albert and F. Rude. Limit, forfeit, none. Plans and specifications filed.

LIENS FILED**MARIN COUNTY.**

RECORDED **AMOUNT**
 Nov. 3, 1915—ROSS VALLEY, Marin Co F Paolinelli vs A Devincenzi and wife Julia and G Trevia...\$52.50

BUILDING CONTRACTS.**CONTRA COSTA COUNTY.**

RESIDENCE
 LOT NO. 12 BLK 1 in Austin Tract in Addition Survey of Town of Martinez. Excavating, concrete, carpenter, plastering, glazing, mill work, stair work, hardware, plumbing, gas fitting, sewerage, painting, staining, varnishing, tinting, papering, electric wiring and all other work as in plans and specifications for one-story, attic and partly basement frame, cement plastered residence.
 Owner.....M. W. Joost, 405 Las Juntas St., Martinez.
 Architect...H. Geilfuss & Son, 45 Kearny, San Francisco.
 Contractor...Ludden & Lambley, Estudillo & Thompson Sts., Martinez.

Filed Oct. 30, '15. Dated Oct. 23, '15.
 Entire frame up.....\$588
 Brown paint on interior and exterior588
 Entire building white coated and exterior finished.....588
 Finished and accepted.....591
 Usual 35 days.....785
TOTAL COST, \$3140
 Bond, limit, forfeit, none. Plans and specifications filed.

COMPLETION NOTICES.**CONTRA COSTA COUNTY.**

RECORDED **ACCEPTED**
 Oct. 28, 1915—LOT 24 Welch Survey on Southerly line of Ward & Wilow. D L Hilson to D H MacQuiddy.....Oct. 28, 1915
 Oct. 28, 1915—SW WARD AND WILLOW Bk 24, Welch Survey. Dorothy Julia Hilson to D H MacQuiddy.....Oct. 27, 1915

BUILDING CONTRACTS**FRESNO COUNTY.**

STORES
 LOTS 28 AND 29 BLK 72, Fresno. All work for stores.

Owner.....Alfred Kutner et al.
 Architect...None.
 Contractor...E. Riggan, 1908 Fresno St., Fresno.
COST, \$10,000

DWELLING
 LOTS 1 TO 4 North Park, Fresno. All work for dwelling.
 Owner.....Chas O. Fink.
 Architect...None.
 Contractor...C. V. Smith.
COST, \$3000

DWELLING
 LOTS 30, 31 AND 32 BLK 53, East Fresno. Dwelling.
 Owner.....A. E. Cockran.
 Architect...None.
 Day's work.
COST, \$2950

DWELLING
 NO. 3511 MONO AVE., Fresno. Dwlg.
 Owner.....K. C. Buwalda, 846 Mono Ave., Fresno.
 Architect...None.
 Day's work.
COST, \$1950

DWELLING
 LOT 6 BLK 18, Alta Vista Tract, Fresno. Dwelling.
 Owner.....F. R. Billings, 1245 San Pablo, Fresno.
 Architect...None.
 Contractor...W. H. Ackerman.
COST, \$2750

LIENS FILED**FRESNO COUNTY.**

RECORDED **AMOUNT**
 Oct. 28, 1915—LOTS 28 AND 29 E ½ Lot 30 Bk 11, College Add'n, Fresno. M E Summers, \$125, Mechanics Planing Mill, \$18 vs A E Pickford et al & Norris & Wallace

FRESNO COUNTY.

NOTICE OF NON-RESPONSIBILITY.
 Oct. 29, 1915—LOT 20 North Van Ness Tract, Fresno. E M Prescott as to improvements on leased property..

BUILDING CONTRACTS.**SACRAMENTO COUNTY.**

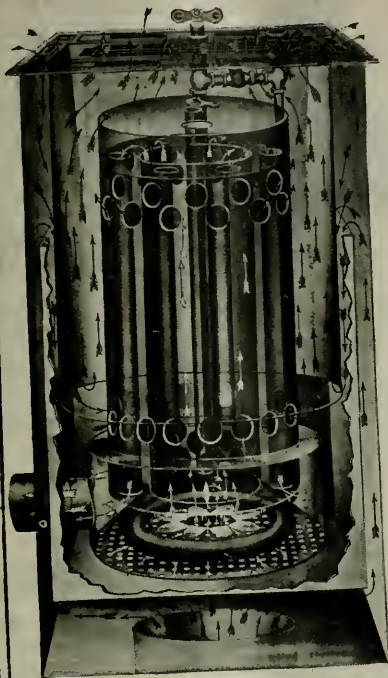
RESIDENCE
HARLEY AVE & UPPER STOCKTON Road in Lot 1140 Wright & Kimbrough Tract 21, Sacramento. All work for one-story 5-room terra cotta hollow tile residence.
 Owner.....P. E. Peterson, 2712 J St., Sacramento.
 Architect...None.
 Contractor...C. J. Hopkinson, 1318 25th St., Sacramento.
COST, \$3000

LIENS FILED.**SACRAMENTO COUNTY.**

RECORDED **AMOUNT**
 Oct. 28, 1915—E ½ OF W ½ LOT 2, K L, 8th and 9th Sts., Sacramento. William Thilbahr and P T Bender vs Nelle and Kate Turton.....\$345

THE WHOLE WORLD AWAITS THE ADVENT OF A PRACTICAL GAS HEATING DEVICE

WITH OUR UNIT PLANT FURNACES HEATING WITH CLEAN GAS IS AS PRACTICAL AND ECONOMICAL AS WITH DIRTY, DUSTY, SMOKY COAL OR OIL



FLOOR FURNACE STYLE B
Size 14½ in. square by 2 ft. high
Has 8-in. Fresh Air Intake with Damper.
Has 3-in. Outlet Vent
Fits in space between floor joists
Hangs from Register which lays flush with floor.

Style

- A. Floor Furnace with fresh air intake on side. For use in buildings having sufficient fresh air circulation under same. For artificial gas only.
 - B. Floor Furnace with fresh air intake at bottom. For use in buildings where it is desirable to obtain air directly from outside of cellar or basement. For artificial gas only.
 - NOTE—Style A and B are built alike except for position of fresh air intake.
 - C. Wall Furnace with fresh air intake at bottom. For artificial gas only.
 - D. Wall Furnace with fresh air intake at back. For artificial gas only.
 - NOTE—Style C and D are built alike except for position of fresh air intake.
- Prices and information on Natural Gas Furnaces Furnished on Application.

Unit Plant Hot Blast Furnaces

On Display, Booth 33

Collective Gas-Exhibit

Manufacturers' Building
Panama-Pacific International Exposition
San Francisco.
Manufactured under Patents, and Patents pending, by

UNIT GAS HEATING CO., Successors to

Central Hardware Co., Inc.

Los Angeles, Cal.

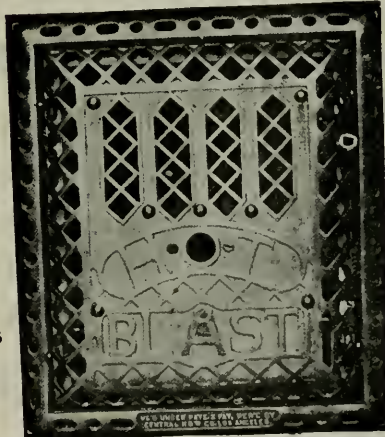
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Sales Agent for Northern Cal.

Unit Plant Hot Blast Furnace

Delivers the Heat

A Complete Answer to the Heating Question.

- Instantaneous**—Furnishes an instantaneous and continuous supply of
- Sanitary**—fresh warm air free from gas fumes, odors, smoke or dust.
- Hygienic**—Maintains an even temperature necessary to health and comfort.
- Scientific**—Built like a real hot air furnace reduced in size.
- Convenient**—Operated from inside of room, saving many steps to cellar.
- Simple**—Any child 10 years of age can operate, turn the key and apply match.
- Economical**—Wall furnace burns 10 cubic feet and floor furnace 20 cubic feet of gas per hour.
- Efficient**—Each furnace will heat from 2 to 5 rooms or from 3,000 to 9,000 cubic feet of space.
- Fireproof**—Has four thicknesses of metal and three air spaces of one inch each between fire and wood; fire is 20 inches from floor.
- Up to Date**—Uses exclusively the Johnson Hot Blast Burner, recognized as the most efficient ever constructed.
- Durable**—Is made from best grade of metal to be obtained.
- Finish**—Register electro plated Flemish Brass. The finish that lasts.
- Installation**—Can be installed by any gas appliance dealer, plumber, tinsmith or hardware merchant at nominal cost.
- Retail Prices**—Wall Furnace, any style, \$22.50
Floor Furnace, any style, 30.00
Installations and fittings extra.



WALL FURNACE STYLE C

Size of Wall Furnace front is 17x19 inches, with a recessed portion of 11x17x1 inches between studding. Recessed portion has a 2-inch vent opening at top and a fresh air intake 3x12 inches at bottom operated with damper in front. Both vent and fresh air intake pipes go between studding.

Our Claim

With Our Unit Plant Hot Blast Floor And Wall Furnaces You Can Furnish Your Customers Auxiliary Or General Heating Heats Gas With Gas In Competition With Coal or Oil

Our Guarantee

Workmanship
Materials
Guaranteed
For One Year
No Gas Odors,
Smoke or
Products
Of Combustion
Will Come Into Rooms Heated Fresh Pure Air Coming In, All Bad Air Goes Out We Will Refund Money Paid For Any of Our Unit Plant Furnaces Which Does Not Prove Efficient According to Our Statements

PROVED BY ALL WHO HAVE USED OR EXAMINED THEM TO BE THE HEATER OF THE PRESENT AND FUTURE

HEAT WITH FRESH AIR NOT REHEATED, REHEATED, STALE AIR

"It Is Almost Human"

Phone Kearny 740



**"The Improved
Norton"**

Door Check and Spring

Still on Deck

Best in the World

**Sure to Close Your Doors
Without Slamming**

Strictly An Air Cushion Check, working automatically.
Simplicity and Durability combined Applied
to either side of any size of door either
Right or Left Hand, without change

In ordering, give size of Door; also projection of Casing (if any)
over door, when Bracket will be sent to fit.

Duplicate Parts in Stock

FRANK D. MORRELL

278 Natoma Street, near 4th

San Francisco



Hot Water

Unlimited--Always on tap

Any home that can
afford a bath-room
can afford

THE

BUNGALOW

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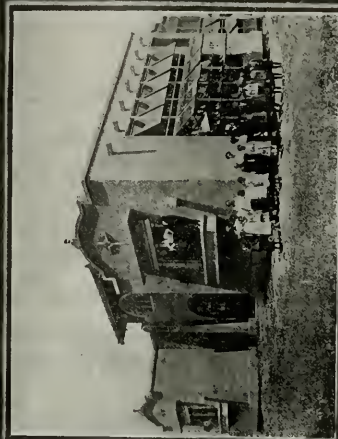
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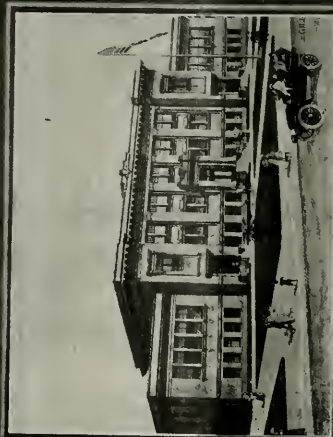
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Leading Articles in this Issue:

Economics of Highway Maintenance

By George Nelson, C. E.

Rural Highways

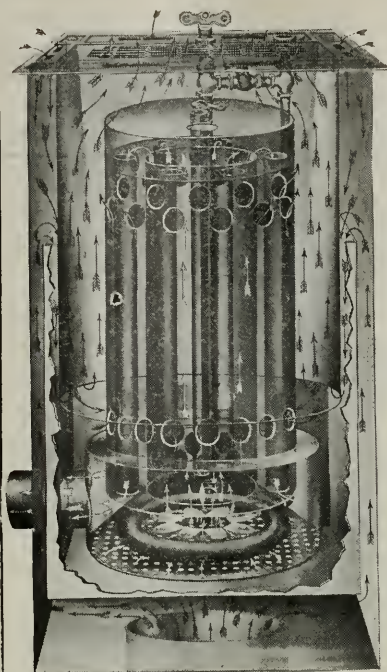
L. W. Page, Director, U. S. Public Roads

Multnomah County Highway System

Staff Article

Tuolumne County Roadwork

By Robert Thom, County Surveyor



FLOOR FURNACE STYLE B
Size 14½ in. square by 2 ft. high
Has 8-in. Fresh Air Intake with Damper.
Has 3-in. Outlet Vent
Fits in space between floor joists
Hangs from Register which lays flush with floor.

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A. Floor Furnace with fresh air intake on side. For use in buildings having sufficient fresh air circulation under same. For artificial gas only.

B. Floor Furnace with fresh air intake at bottom. For use in buildings where it is desirable to obtain air directly from outside of cellar or basement. For artificial gas only.

NOTE—Style A and B are built alike except for position of fresh air intake.

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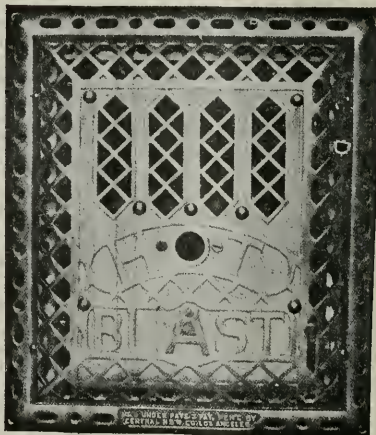
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Building and Engineering News

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San Francisco, November 17, 1915

Fifteenth Year, No 46

Economics Of Highway Maintenance.

By George Nelson, C. E.



Constructing Concrete Base, California State Highway, Near Niles Alameda County.

Protection for Road Surfaces.

The good roads movement is certainly attaining a powerful impetus in this country. Modern highways are being constructed and old roads and trails rebuilt from Maine to California. The advent first of the bicycle and later of the automobile and the motor truck have changed an attitude of indifference in the great majority of men and women to one of more or less enthusiastic interest. With characteristic American energy, we have demanded good roads and have demanded that they be produced at once, and the result is the greatest mileage of road construction in the last five years ever accomplished in a similar period in the history of the world.

In the meantime we have forgotten all about maintaining our new possessions. When we have voted a great bond issue, appointed a commission, and have finally seen the men and teams digging and hauling and rolling on our new avenues of commerce and pleasure, it has seemed to us that the whole thing was done in respect to the roads, and that all that remained was to meet the interest on the bonds and finally to retire them at maturity.

From many parts of the country, however, are now coming walls of disappointment incited by the discovery

that this comfortable view of road building is not borne out by the facts. The demand for good smooth roadways for automobiles and motor trucks has led a large number of our road officials to place the emphasis on surfaces rather than on foundations, with the inevitable result of this policy in any form of construction. The destructive action of swiftly moving automobiles on water-bound macadam roads of old type is too well known to need further comment. A newer development is that of the effect upon road surfaces and upon the weaker bridges and culverts of the gigantic motor trucks that are now taking the place of freight trains for local and interurban haulage. The jitney bus, the latest and most popular of our means of passenger transportation with its load of six or eight tons, carried at a high rate of speed over city streets and suburban roads, is also an important factor in the rapid deterioration of pavements. Threshing outfits and other heavy engine propelled vehicles sometimes travel the highways with their great wheels equipped with the spikes or other projections which are desirable for crossing fields, and these, of course, tend to rapidly tear up the road bed. The old and familiar agent of highway destruction, the heavy

horse-drawn wagon with narrow tires, is just as effective now in its evil work as ever. All these facts call for the most intelligent consideration on the part of the highway officials and of the public which pays the bills.

Various expedients are suggested and are even attempted in different localities for lessening the ill effects upon road surfaces of some of the vehicles above discussed. In some places an attempt is made to limit the weight of freight carrying motor trucks and of their loads. In other places their drivers are supposed to be limited to certain rates of speed. Many States are now prohibiting the appearance upon the highways of traction and other industrial engines with spurred wheels, and undoubtedly there are to be found on the statute books of half of the States, some feeble and forgotten laws with regard to the width of tires of heavy horse-drawn wagons.

All of these attempts are, as we have seen, almost wholly unsuccessful. There is no doubt that the hauling of heavy loads of merchandise on motor driven vehicles is one of the inevitable developments of our period, in the same way as the swift transportation of passengers by automobiles. Restrictive legislation never makes much headway against economic devel-

opment. If there is any region where the wide tire laws are effectively enforced, the news of it has not come to the attention of highway officials generally.

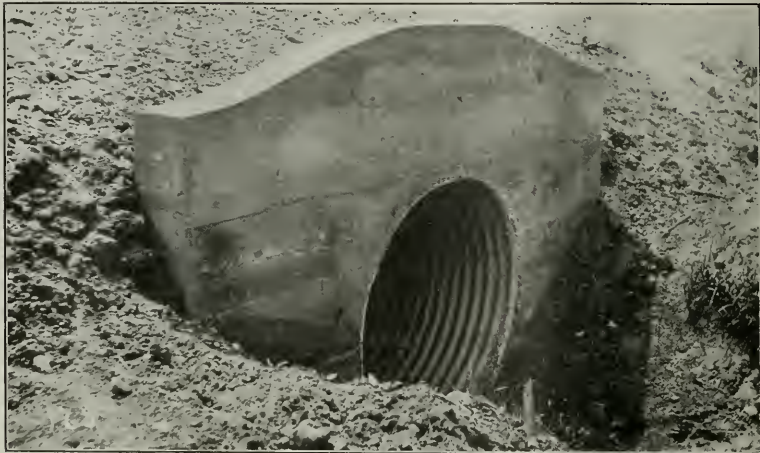
All this could be remedied by the imposition of a logical highway tax. The owner of any vehicle which travels the streets and highways should be required to take out an annual license and to have a numbered tag attached to his vehicle, as is now done with automobiles. The cost of this license could be graded all the way from a merely nominal sum in the case of bicycles, up to an absolutely prohibitive tax in the case of four-horse wagons with two-inch tires or motor trucks intended for loads out of proportion to the capacity of road surfaces and bridge structures. The theory should be that the tax or license fee paid on each vehicle should be in proportion to its destructive effect upon the streets and roads, and it could readily be so arranged as to absolutely

iron corrugated pipe would undoubtedly take the place of most of the frail and impermanent culvert structures, and reinforced concrete, erected under thoroughly competent supervision, that of the decaying timber and plank bridges for the larger streams.

The raising of highway funds would thus become automatic and comparatively simple. We must not flatter ourselves, however, that any portion of the community would be escaping its proper share of the burden. Whether or not we own or drive vehicles, we are all served by them in a greater or less degree, and undoubtedly the expenses of operating them whether in the form of fuel and oil, drivers, or licenses taxes, is laid upon us in the form of the cost of transportation or of the commodities delivered. The method of taxing vehicles in proportion to the wear and tear produced upon the streets and roads, is recommended not as a means of shifting the burden from the shoulders of the own

posed on the surface of a sheet or plates gives opportunity for the formation of a galvanic couple and, therefore, for the corrosion of iron.

The existence of a commercial form of iron which is practically free from impurities has made it possible to construct pipes of relatively thin plates with assurance of reasonable permanence. The corrugated form and overlapping joints of this type of construction results in a very remarkable increase of strength over that of a plain cylinder and also in other striking advantages in practice. The pipe is quite capable of sinking and bending with a shifting and settling embankment without suffering any serious injury, and many of them are in use where this has taken place to a very considerable extent, and which yet are giving good service and seem likely to continue so doing for very long periods. This is, of course, a striking superiority to any rigid form of construction.



Typical Installation of Pure Iron Culvert Under California Highways.

exclude those vehicles which were destructive out of proportion to their service to the community.

The whole of the fund thus acquired should be devoted to highway construction and maintenance. This method of raising street and highway moneys would have many advantages aside from the obvious one of promptness and ease of collection. As above shown it could be used to render difficult or impossible the use of the most undesirable vehicles. The license and tag system would extend the responsibility of drivers of all sorts of vehicles which is now intended to cover automobiles and motor trucks only. The active users of the highways would be those directly taxed for their maintenance, and would thus feel a more direct interest in the wise and efficient use of the funds. Semi-irresponsible boards of commissioners would not be allowed to waste the public moneys in temporary or make-shift road construction, or in the building of wooden bridges and culverts. Pure

ers of real estate, but as the most efficient means for accomplishing several desirable objects other than the raising of the necessary money.

Pure Iron Corrugated Pipe for Drainage.

One of the interesting developments in highway and railway construction and maintenance is the rapidly extending use of corrugated culvert pipe made from pure iron. The large amount of evidence which has been published on the comparatively high resistance to corrosion afforded by iron from which impurities have been almost wholly excluded, leaves very little necessity for further discussion on this point.

Briefly, the principle is that rust and corrosion arise from electro-chemical processes substantially similar to those of the galvanic battery of voltaic cell, and thus depend upon the exposure of two metals or other substances of varying electro-potential to moisture and oxygen. Any substance differing electro-chemically from iron and ex-

The corrugations also enable the pipe to absorb expansion and contraction arising from temperature changes. A very curious fact with regard to this form of pipe is that it clears itself from silt and other obstructions better than smooth pipe. This statement would be found incredible, were it not for the fact that it has been proven many times over where the pipe is used in the form of inverted siphons. Of these there are a great many in the Southwest, and keeping them clear from silt is a very important matter. The explanation seems to be that the corrugations excite ripples in the flowing water and keep the silt in suspension so that it may pass through the pipe. A natural condition somewhat parallel to this is found in the beds of streams. Where these are rough and stony and the water is, therefore, constantly roiled, there is little or no deposit of mud. In the smooth stretches, however, where the only motion is that of the current, mud rapidly accumulates.

RURAL HIGHWAYS.

By L. W. Page, Director, Office of Public Roads, U. S. Department of the Interior, Washington, D. C., U. S. A.

Economic Considerations.

The fundamental problems which confront an engineer in dealing with public road improvement are concerned with determining, first, which roads should be improved; second, what types of improvement should be employed; and, third, what methods of construction and maintenance are most efficient. To solve these problems intelligently requires skill in handling questions of economics in addition to engineering ability. In other words, the highway engineer should be able to determine what to build and where to build it, as well as how the building is to be done, and he should bear in mind that as much waste is likely to result from improving the wrong roads or employing wrong types of improvement as from using faulty materials or methods in making the improvements.

The only reasonable basis for determining which of perhaps a great number of public roads in a community should be improved, or the order in which improvements should take place, is public convenience. In order to make each improvement add the maximum amount to the convenience of the public, however, it is necessary that the engineer who plans the improvements must have a comprehensive understanding of the economic and social relationship which exists between different parts of the community under consideration and also the effect which different roads, if improved, would have in making this relationship more advantageous.

In order to gain a comprehensive understanding of this kind it is usually necessary for the engineer to prepare a plan showing the various highways in proper relation to each other, and showing also how population and industries are distributed. The amount and character of traffic using each important road, or which would use an improved road having the same location, may be estimated by means of traffic counts or otherwise, and should be shown on the plan.

With such a plan before him, it is practical for an engineer to lay out an intelligent system of improved highways which would accommodate the entire community, and to assign relative weights to each unit of the system according to its importance.

The type selected should ordinarily be shown to have a net economic advantage over any other type which might be selected. The economic efficiency of improved roads is affected by a number of factors, some of which are usually more or less indeterminate, but an intelligent evaluation of these factors evidently forms a much more satisfactory basis for making comparisons than would be formed by any set of arbitrary assumptions.

The principal factors which affect

the economic efficiency of an improved road and upon which economic comparisons should be based are: First, cost of construction; second, cost of maintenance; third, amount and character of traffic; and fourth, the average unit cost of hauling before and after the improvement is made.

The first factor, cost of construction, can usually be satisfactorily estimated for any particular road, when the conditions which affect the availability of materials, the character of labor, the prevailing gradients, etc., are understood. These conditions should all be indicated on the model system plan.

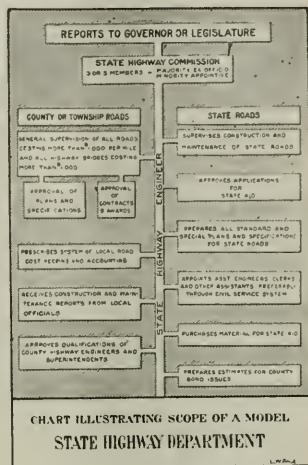
The second factor, cost of maintenance, is dependent on the character of material used, the volume and character of traffic, and the climatic and topographic conditions which affect the road under consideration. For most types of road improvement, the effect of these variables can be estimated within reasonably close limits from the data already available.

The third factor, amount and character of traffic, has its principal importance, from an economic view point, in the effect which it has on the cost of maintenance.

The fourth factor, average unit cost of hauling before and after the improvement, varies very slightly for different types of improved roads, provided that they are all equally well maintained. If the unit cost of hauling before and after the improvement, and the total volume of traffic using the road are known, the total annual saving resulting from the improvement can be evidently be estimated; and, if the improvement is to be justified economically, this total annual saving must be sufficient, after all costs for maintenance and repairs are deducted, to pay a reasonable interest on the original investment.

If a model system of highways has been previously worked out, and the importance of each unit in the system has been properly weighted, it is apparent that the investigation for determining the proper type of improvement to employ on each road will be greatly simplified. It is also apparent that the more comprehensive this system can be made within reasonable limits, the less will be the duplication of work required and the greater will be the possibility of securing satisfactory results through efficient organization. The state is therefore much better circumstanced for planning and supervising road improvement work than are any of its political subdivisions.

There are now forty-two states out of the total of forty-eight which have established highway departments of one kind or another and the organizations under which these departments operate are being constantly revised and improved. This shows that the public is awaking to the advantages to be gained by having all highway



work done under a scientific and comprehensive organization. There is also unquestionably a growing public demand for quantitative assurance that every dollar levied for the purpose of highway improvement is being spent to the best possible advantage, and in order for the engineer to meet this demand, he must be in a position to analyze the factors which affect the economic efficiency of improved roads and reduce the findings to a more or less quantitative rational basis.

Construction.

The customary methods of constructing and maintaining the various types of improved roads are generally well understood by the engineering profession, or at least by those members of the profession who have been sufficiently interested to follow the discussions concerning highway work which are constantly appearing in engineering literature.

The principal types of improved roads are earth, sand-clay, gravel, macadam, bituminous macadam, Portland cement concrete and brick. It seems best to touch only on those features of construction concerning which there has been more or less difference of opinion among engineers, and to express such opinions regarding these features as the experience of the Office of Public Roads would appear to justify.

Diagram shows cross-sections, illustrating each type of road mentioned above, which are believed to represent the best modern practice in highway construction. It should be borne in mind, however, that no typical sections could be made sufficiently general to meet all conditions, and still be of value. Some of the details shown in the diagram, furthermore, have not

*From a paper presented at the International Engineering Congress, San Francisco, Cal., September, 1915.

been universally accepted as representing the best practice, and are more or less liable to be superseded.

The amount of crown which should be given the cross-section of an improved road, for example, is a matter of very great importance and one which has been much discussed. The two factors which have had the most influence in determining this detail are first, the desirability of draining water off to the sides as quickly as possible after it falls on the road, and second, the desirability of keeping the cross-section as flat as possible in order that traffic may not be unduly encouraged to use only the center of the roadway. The character of the road surface determines which of these factors should be given most consideration.

Another much discussed point relates to whether the subgrade for brick and concrete roads should be given a flat or crowned cross-section, and it will be observed that the Office of Public Roads at present recommends the flat cross-section, especially for concrete pavements, where the width does not exceed about 20 feet. This recommendation is based, for the most part, on the fact that fewer longitudinal cracks have been observed in pavements having flat sub-grade cross-sections than where the sub-grade is crowned, and the use of such flat cross-sections adds comparatively little to the cost of the narrower concrete pavements, in which the longitudinal cracks are most objectionable.

Defective foundations can be corrected in a number of ways. Surface drainage is of course the first consideration, and when properly planned, is ordinarily adequate. Some combinations of soil and topographic conditions, however, render effective surface drainage impracticable, and in such cases, one of three methods of foundation treatment shown here will usually be found satisfactory. The Telford base is especially adapted to soils which, even when well drained, are more or less unstable; the V-drain to localities where field stones may be cheaply obtained, and the side ditches to all locations where the soil is inclined to be springy or hard to drain.

Maintenance.

No paper on the subject of "Rural Highways" would be complete without discussing at least to some extent, the important question of road maintenance. Scientific care in planning and constructing public roads cannot possibly obviate the necessity for maintaining them, though it can no doubt greatly assist in meeting this necessity by causing it to be fully recognized and its importance properly appreciated.

The work of maintaining public roads is necessarily more routine in character than other classes of road improvement work, and would therefore seem to be more susceptible to advantage from standardization of methods. In the United States, however, there are discouragingly few localities in which any attempt at systematic maintenance has been made, and these are to be found only in states having strongly centralized control. In many of the states which have well organized highway departments and even those in which state aid for

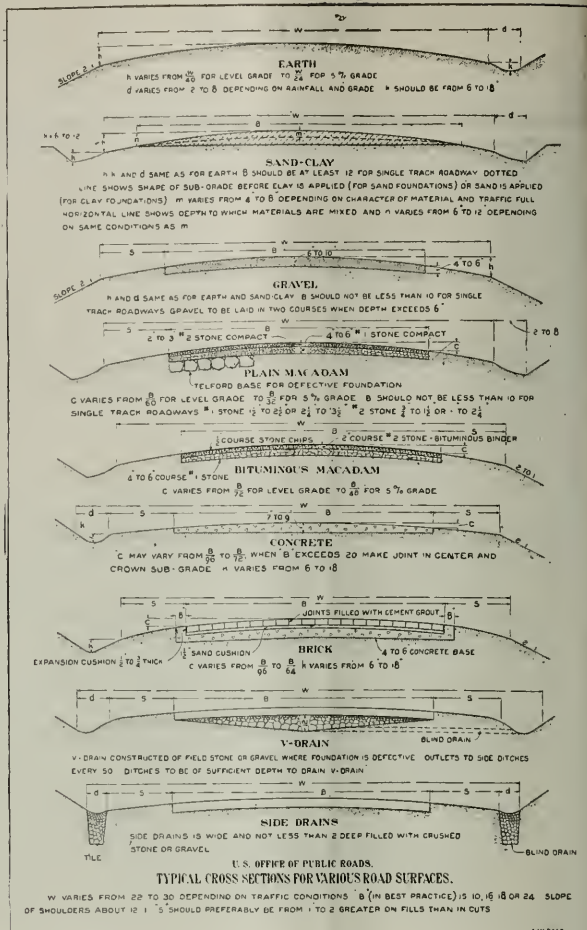
construction is an established policy, all road maintenance work is still being done or left undone under the supervision of the county, township or other local administrations. Judging by the annual reports of the various state road officials, however, it seems that they are practically all agreed that this arrangement is not satisfactory and are accordingly seeking to have the laws or appropriations under which they operate so changed that the work of maintaining the state-aid roads will be done under state supervision. This change has already been made in a number of states, and so far as is known, an immediate improvement has resulted.

Conclusion.

In conclusion it seems fitting to pay some tribute of appreciation to the efforts of highway engineers and other public road officials throughout the country who, notwithstanding the arduous nature of their prescribed duties, are always ready to co-operate in collecting and disseminating information relating to road improvement

work which might be of value to other communities, and who almost uniformly show even broader-minded disposition in their willingness to profit by the experience of others whenever the opportunity is afforded them.

Everyone has observed the employment of pure iron corrugated culverts in highway work in the most progressive States. Some of the railroads that have made quite extensive use of Arco corrugated pipe are the Western Pacific, the Northwestern Pacific, the Soo Line and the Southern. The Pennsylvania has one 12-inch corrugated Arco culvert under the four tracks of its main line near Marsh Run, where it has been in service under perhaps the heaviest railroad traffic in the world for six or seven years and which appears to be in practically perfect condition. In Central and South America and various portions of the Orient, this type of culvert is extensively employed because of its lightness, ease of installation and practical certainty of good results under more or less difficult conditions.



Multnomah County, Oregon, Highway System.

Staff Article

Chronological events leading up to award of contracts for over 600,000 square yards of Warrentite Roadway in Multnomah County, Portland, Ore., June 17, 1915.

In 1903 the first bitulithic pavement under the Warren Bros. Co. patents was introduced and laid in Portland, Ore., on Park avenue.

In 1904 bitulithic was selected by the City Council as the type of pavement for Fifth street, also other downtown streets and contract awarded for approximately 36,203 square yards of pavement.

During the years 1905 to 1913 inclusive the taxpayers and city officials of Portland being highly satisfied with the merits of bitulithic construction contracted and laid over 145 miles of this type of pavement, having an average width of 40 feet.

In 1913 the first piece of asphaltic concrete (Topeka) pavement was laid on sundry streets with the claim that it was "just as good" as bitulithic and cheaper in price—the city also tried some plain concrete on several streets owing to its low cost.

In the spring of 1913 the County Commissioners of Multnomah County built two miles of Warrentite resurfacing macadam on Linnton road, this being their first attempt to apply a modern wearing surface on any of the county highways.

About two years ago at a meeting of the Advisory Board to the County Commissioners, Mr. J. B. Yeon, a prominent Portland capitalist and business man, was appointed County Roadmaster, without salary, for the purpose of providing some definite plan for the construction of permanent highways—this action was taken after many protests had been made by prominent taxpayers of Portland, the citizens of which own 65 per cent of all taxable property in Multnomah County, that the macadam roads were costing an excessive amount of money each year for maintenance and requested that steps be taken immediately to eliminate this annual waste of public funds. [From the Portland, Ore., Morning Oregonian, November 19, 1913.]

For a millionaire to give us his own business for a whole year, deny himself of many comforts that pertain to on in his station in life, don rubber boots, overalls and jumper and give his time—without a cent of pay—to the occupation of supervising the county roads is rather a long step towards altruistic ideals.

Nevertheless, that is what John B. Yeon, lumber king, real estate holder, owner of the Yeon Building, capitalist, automobilist and good roads enthusiast has agreed to do for the people of Multnomah County. * * *

"I expect to do the business the same as if it were my own," said Mr. Yeon yesterday. * * *

"At the end of the year I shall expect to give the people of Multnomah Coun-

ty an accounting for every dollar.

"I expect to point to the roads of this county and show the people that they have 100 cents' worth of improvement for every dollar I spend.

"I have made no plans excepting one—there will be no politics on this job. Pull won't count. I shall hire and fire men on their merits or demerits only. * * *

"I want to give Multnomah County good permanent roads—the kind that won't have to be rebuilt for twenty years." * * *

W. M. Ladd, of the Ladd & Tilton Bank gave his emphatic endorsement to a 2 mill levy, provided Mr. Yeon accepted the roadmastership. * * *

Among those present were hotel men, bankers, merchants, manufacturers and laboring men, and the representatives were unanimous in the opinion that a 2 mill assessment be made. * * *

Upon Mr. Yeon's appointment being confirmed officially he at once delegated Messrs. S. Benson and E. E. Coovert, also prominent business men and capitalists of Portland, to represent him in making a complete examination of all classes of hard surface pavements. These two gentlemen made a thorough investigation of the paving situation through the East and Middle West, personally interviewing many engineers and city officials and both collected considerable data on cost of road construction and durability of the material as a permanent pavement.

As a result of their findings and upon the approval of the County Roadmaster, a small contract for two miles of warrentite was awarded in the summer of 1914 for resurfacing old macadam on Riverside Drive.

During the early part of 1915 Mr. Yeon announced that it was his intention to submit to the voters of Multnomah County a proposition to issue \$1,250,000 in bonds for road work, same to be retired serially in 15 years' time. Shortly after the bond election, the County Roadmaster with Messrs. Benson et al openly advocated the use of Warrentite Roadway as the best and most economical road surface on the market.

[From the Portland, Ore., Evening Telegram, April 23, 1915.]

"I want warrentite and brick for the trunk roads of Multnomah County. This is no time for experimenting. I'll fight to protect the public and prevent the money voted for bonds from being wasted."

This is the declaration of S. Benson. "To the County Commissioners I shall recommend Warrentite and brick, the latter for the steep grades and dangerous places, but the Warren people need not think that because this will be my recommendation that they will have a cinch. Prices must be right and the quality of work must be the best."

This is the statement of Roadmaster John B. Yeon.

Together they are willing to stake their reputations and assume the responsibility, and say their sole interest is to see that the public gets its money's worth and that the roads laid are real roads, durable roads.

With the statement of their position on the paving question, Yeon and Benson have brought the big paving fight into the limelight. It has been smoldering, threatening and been whispered for weeks, lurking in the background, preparing to break out and precipitate a row in the middle of May when the bids are opened. Therefore, to take the public into their confidence and explain, clearly, why they believe warrentite and brick the best, Messrs. Benson and Yeon decided to tell their position without delay.

"Let it be borne in mind," said Roadmaster Yeon, "that there will be open specifications and competition. The fact that I believe warrentite the best does not mean that Warren Brothers have a cinch, for the price must be right or the bids will be thrown out. We know there is opposition to a patented pavement, but the people of Portland have not complained against this pavement except on the ground of price and that is why the price must be right. Anyone can bid on warrentite and every contractor may do so, for all I know—I do know that several are figuring on bidding on this pavement.

Mr. Benson is most emphatic in his stand. He has spent time and several thousands of dollars making a study and compiling data on all sorts of pavement.

"Why spend money for pavements that won't stand up?" asks Benson. "Any pavement looks good when it is laid, but how about 10 years later? We have reports from all parts of the United States on pavements, and the general verdict is for warrentite. I personally prefer brick, but brick is too expensive except to be used on steep grades and at bad turns, so I say lay brick on the grades and warrentite elsewhere.

"Our reports show that warrentite is a good pavement and that others are not good, so it would be folly to throw away the money the people voted by putting it into pavements which we are convinced in advance are not going to last. Asphaltic concrete, otherwise known as Topeka, does not wear; it has not given the desired service in this city, for it does not last long enough. And as for cement, there has never been a good cement road. The cement men say, 'Well, it wasn't mixed right'; but what assurance has anyone that the right mixture will be found for Multnomah County when it has not been found in California, for instance, when hundreds of miles were laid and went to pieces? In California they now have to cover their cement roads with asphalt.

"This paving question is vital. The taxpayers do not want their money

wasted, and if the bond issue is used for experimental purposes it will be a waste. Every contractor can bid on warrenite, and I hope they do, and I think they will. The price must be at the right figure, and I believe the owners of the patent are wise enough to realize that they cannot afford to gouge—if they do, then something will happen to make them wake up.

The preference for warrenite is not made haphazard, but from long study, analysis, investigation and tests of the most practical kind. We should benefit from the experiments of others, not make them ourselves. We have gone into the smallest details, and I am firmly convinced that the best roads we can get will be warrenite. There will be kicks against this statement, but I am willing to stake my reputation that it will serve better than the others, and in making this selection over others I assume full responsibility. My sole wish is to see the taxpayers get the best for their money."

"No one realizes better than I do," said Roadmaster Yeon, "that my own reputation is at stake in this matter. But I want to do this thing right, and when it is all over I want to be able to look every taxpayer in Multnomah County squarely in the eye and say to him he has received full value for every dollar spent and a general result that every citizen of the State will be proud of. From investigation, I know the county can get the best results from brick and warrenite. We have out there on the Columbia River one of the scenic highways of the world. So far, I believe it could not be better built. Its grade is right, not over 5 per cent, the curves are right, and it has been constructed with the idea of getting the very best out of the scenic effects. That it should carry the best paving goes without saying. As I look at it, it is going to be an object lesson for the whole State."

The bond issue election was held the latter part of April and carried by a majority of 3 to 1 after meeting minor opposition. Prior to bids being received for the building of these roads, the Portland Chamber of Commerce with a membership of 5,000 of the most prominent business men in the city of Portland appointed a special committee from their executive board to look into the merits of hard surface pavements, said paving committee being composed of F. W. Mulkey (Chairman), Attorney and Commissioner of the Port of Portland, Rodney L. Glisan, Attorney and Capitalist, and Frank McCrillis, prominent real estate and insurance man—after a six week's impartial investigation and the taking of testimony of representatives of every known type of pavement, they concluded their report strongly condemning the use of so-called asphaltic concrete (Topeka) and plain concrete pavements on account of the unsatisfactory results secured from these pavements in this vicinity.

The Portland Chamber of Commerce through its board of directors, consisting of 35 prominent men, unanimously endorsed the use of warrenite pavement for all county roads under this bond issue, giving as their reason the success of the Warren pavements now

in use in the city of Portland from 5 to 12 years, which demonstrated conclusively its durability and wearing qualities.

[From the Portland, Ore., Voter, June 19, 1915.]

The paving report printed in full in last week's issue of the Oregon Voter was unanimously adopted by the board of trustees. * * *

On June 9th, 1915, bids were opened for surfacing a large mileage of Multnomah County macadam roads at an estimated cost of \$1,250,000. A tabulation of all proposals showed asphaltic concrete and plain concrete pavements underbid warrenite from \$180,000 to \$250,000. The matter was then referred to Roadmaster Yeon by the County Commissioners for recommendations, who reported that he would refuse to assume any responsibility for the laying of any but the warrenite pavement, as to his mind this material has proven by long test to be durable and low in maintenance cost, and therefore would not recommend Topeke or concrete pavements owing to their experimental stage, ease of cracking and the many indications of their failure on the work already laid in this city.

[The paving report was printed in full in Building and Engineering News for July 7, 1915. Editor.]

The County Commissioners, consisting of Messrs. Lightner, Holbrook and Holman, met in session on June 18th and awarded contracts in general conformity with the County Roadmaster's recommendations, being backed by delegations of important property owners and newspapers whose reports are extracted as follows:

Warren Construction Co: Columbia River highway, 179,820 sq. yds. warrenite; Sandy road, 136,000 sq. yds. warrenite; total 315,820 sq. yds.

Pacific Bridge Company: Columbia River highway, section D, 97,244 sq. yds. warrenite.

Oskar Huber: Powel Valley road, 81,640 sq. yds. warrenite.

Boyajohn-Arnold & Peterson: Canyon road, section A, 8,620 sq. yds. warrenite.

Clark & Henery Construction Company: Base Line road, 93,222 sq. yds. warrenite. Total warrenite yardage, 596,546 sq. yds.

Boyajohn-Arnold & Peterson: Columbia River highway, 6,682 sq. yds. brick.

Montague & O'Reilly Company: Foster road, 46,400 sq. yds. concrete; Capitol highway, 45,070 sq. yds. concrete; Canyon road, section B, 9,450 sq. yds. concrete; total concrete, 100,920 sq. yds.

Total yardage for all pavements, 704,148 sq. yds.

84.8 per cent of the total yardage awarded by the County Commissioners for hard surface pavements represents warrenite construction. Warrenite was unanimously adopted at \$250,000 over the lowest bid on asphaltic concrete pavement and at \$180,000 over the lowest bid for highest type of concrete pavement, namely, Wayne County, Mich., specifications.

In this connection it might be interesting to know that all the Portland newspapers and many civic organizations highly endorsed and compliment-

ed the commissioners on their good judgment in adopting warrenite on 85 per cent of the total work let as against experimental types of construction which were offered at a great saving in first cost.

[From the Portland, Ore., Journal, June 22, 1915.]

Work on hard surfacing the main travelled roads of the county at a cost of \$1,250,000 is at last under way and by next week it should be in full swing.

The first actual construction was begun yesterday by the Warren Construction Company on the Sandy road where the highway joins the city boundary. A crew of men was put to work scarifying and preparing the old macadam base to receive its coating of crushed rock and asphalt.

On the other roads the different contractors are securing sites for mixing plants and assembling equipment.

The roads are to be paved to a width of 18 feet, with macadam shoulders two feet in width. * * *

MULTNOMAH COUNTY PAVING.

Better roads for the outlying portions of Multnomah County, Oregon, are, in the opinion of Rufus C. Holman, chairman of the Board of County Commissioners, an urgent need, and the forthcoming budget of expenditures to be made during the coming year should not omit necessary appropriations for this work, he says.

Now that the main highways of the county have been hard surfaced, he thinks the roads further out should be improved to make a continuous thoroughfare from the country districts into the city.

"By the hard surface work that has been going on this season," said Mr. Holman, "we will have our main roads in such condition that we will be able to save a large part of the maintenance charges that have formerly been an annual expense, and this money might well, in my opinion, be devoted to putting the roads into the near-by country districts in good condition. Just what amounts of money will be required I cannot now say, as I am having the figures compiled, but I feel this should be cared for in making up the forthcoming budget.

"Right here, close at hand, on the west of us, perhaps at a distance ranging from six to ten miles, is a large area of rich and productive country that is practically inaccessible on account of poor roads.

"I want to see sufficient funds put into our budget for the development of roads into this section.

"I feel sure this effort will be repaid many times in the good that will be accomplished."

MILITARY ROADS.

Thomas A. Edison has come out strongly for improved roads and bridges as a means of insuring quick movements of troops in case of war, even at Federal expense. Mr. Edison is quoted as follows:

"I should go beyond the mere providing of men and munitions, and I would have the Government revamp the country on a strategic basis; for

instance the Government ought to build a system of military roads along the seaboard and take charge of all roads which have a strategic value, put them and keep them in splendid condition, reduce the grades, widen them where necessary and strengthen the bridges for the passage of the artillery and heavy trucks.

McKITTRICK - BAKERSFIELD ROAD COMPLETED.

Contractors Castro & Blaisdell have completed the work of grading the Bakersfield-McKittrick highway from a point beginning at the eastern termination of the McKittrick foothills and ending at the western, where the road connects with the corporate limits of the city of McKittrick. The highway between the localities indicated is to remain in its present condition until after the rains of the fall.

ORANGE COUNTY HIGHWAYS.

The Orange County Highway Commission is nearing the completion of its work. Surveyors and part of the office force have been dismissed and the department is now getting ready to finish the last of the roads under its jurisdiction.

When the commission had finished 107 miles of road planned in the original bond issue of \$1,270,000 there was a surplus of \$240,000 on hand. The roads now building are being financed out of the surplus. In the division of the surplus it was agreed by the Board of Supervisors that the current expense fund of the county would be drawn upon to pave a road between Placentia and Yorba, and to pave the Santa Ana Canyon road. Those roads will be improved under the direction of the Board of Supervisors and County Surveyor McBride.

MOUNT DIABLO BOULEVARD.

The second scenic boulevard that climbs the slopes of Mount Diablo at an average grade of 5 per cent will be completed soon.

Announcement is made that in order to enhance the natural beauty of the scenic trip thousand of toyon or "red berries," madrone and pine trees will be planted along the new boulevard. The young trees and shrubs are already under cultivation in the big Homestead nurseries at the foot of Diablo just out of Walnut Creek.

Twenty miles of water pipes have been laid along the boulevard to feed the young trees and shrubs when planted. The red berries, madrone and pine are natives of the Diablo country and will fit in admirably with the beauties of natural wooded growth along the mountain.

Plans are taking shape for the construction of an observatory on the summit equipped with a six-inch telescope that will be a permanent advertising medium for twenty-seven counties and hundreds of towns visible from the summit of Diablo.

The construction of a unique inn, in which the natural contour of the mountain and the rock formations on the summit will be utilized, is another plan of development under consideration.

YOLO CAUSEWAY.

By January 1st travel will be passing over the Yolo by-pass causeway, connecting Sacramento and the main trunk line of the State Highway with the laterals on the west side of the valley, according to the State Highway Commission.

The bridge, which is three miles in length, is 90 per cent finished, and the contractors are now at work building the railing and laying a small strip of the flooring.

In West Sacramento the contractors are nearing the completion of a strip of highway that will run from a point half a mile west of the M street bridge to the east end of the causeway. It has not yet been decided whether the highway shall cross the M street bridge or over the Southern Pacific bridge.

LINCOLN HIGHWAY COMPLETELY MARKED.

The second year of the Lincoln Highway propaganda, far from falling short of the accomplishments which marked its establishment and first year of progress has, on the contrary, witnessed an even greater development, according to Austin F. Bement, secretary of the Lincoln Highway Association.

The first year of the Lincoln Highway's existence was a year of big things. Over half of the entire length of the road was actually marked, and much was done towards its beautification. The commendation of the President of the United States, the Governors of the States traversed, many members of the United States Senate and House, and other prominent men in every field of endeavor served to give the work tremendous impetus.

To all practical purposes, the Lincoln Highway is now completely marked from New York to San Francisco. There are points where the marking is not as complete as it should be, but this is being rapidly taken care of. Automobile clubs, local good roads organizations, boards of commerce and other civic and patriotic organizations, have made it a point to complete the marking in their localities. In many places the tourists find the red, white and blue marker on every successive telegraph pole for miles, as in sections of Iowa and Nebraska. Again only one or two to the mile will be found, this particularly in the far west, where the Lincoln Highway is the only road and it is practically impossible to "go wrong."

In Utah and Nevada, States of tremendous areas and sparse population, great effort has been put forth toward improvement of the Lincoln Highway by the ranchers living along its course. The aid of the counties has been given in as great a measure as possible, and over \$75,000 has been spent on the route in these two States in the past year. These desert roads are far more than 75 per cent of their extent kept in good driving condition, and the constant attention the Lincoln Highway receives, even miles from the nearest communities, tends to constantly better its surface.

The Lincoln Highway from Lake Tahoe on the Nevada-California border to San Francisco is practically in boulevard condition for 100 per cent of its length. The roads of California and the marvelous scenery of the high Sierra along the Lincoln Highway have drawn thousands of tourists West this season.

Figures as to touring increase run from 25 per cent in the Eastern States to as high as 500 to 600 per cent at Western points. D. E. Watkins of the California State Automobile Association of San Francisco estimates that 25,000 motor cars have entered the State this year, the majority coming over the Lincoln Highway. Two years ago less than one-tenth of this number drove into California.

MINT CANYON ROAD.

Prospects for the completion of the Mint Canyon road to connect with the Antelope Valley, Los Angeles County, by the end of 1916, were declared bright by R. W. Pridham, chairman of the Board of Supervisors when he announced a new plan of action for the building of that much-needed highway.

Chairman Pridham, strongly seconded by Supervisor Hamilton, declared that he would bring before the Supervisors a plan for financing the construction of the highway by use of a portion of the automobile license funds, and, if necessary, the surplus funds of the county to supplement the county road fund.

"The property owners in the Antelope Valley are entitled to immediate consideration of plans for connecting up the unfinished links in this highway," said Supervisor Pridham.

"The Board of Supervisors has already let a contract for a five-mile link of this road from Saugus to Palmdale and a five-mile road north from Saugus with a bridge over Soledad Creek connecting with Mint Canyon. I am further in favor of issuing an order immediately to the road commissioner to prepare plans and specifications for the entire mileage of the Mint Canyon road that is not already provided for, which amounts to about thirty-five miles."

"I also further favor building the road from county funds in order to complete it by the end of 1916 and of appropriating sufficient money from the auto license fund for the same purpose. I will present the matter at the next meeting and also will advocate that when the steam shovel finishes its work on the Topanga Canyon road it be put to work on the Mint Canyon road."

KLAMATH RIVER ROAD.

Following a trip of inspection made by Division Engineer T. A. Bedford of the State Highway and his assistants, Engineers Comly and Lowden, it is reported a survey will be made of the proposed road down the Klamath River as soon as members of the engineering force can be spared from work on the highway.

The road is projected from Yreka to the Klamath River and then down the

stream to Orleans Bar by way of Happy Camp. The terminus of the road is at Eureka, and the road is completed from that city to the line between Humboldt and Siskiyou Counties, near Orleans Bar.

The building of this road means the construction of the loop connecting the road down the coast with the highway through the Sacramento Valley to San Francisco. Long before the organization of the State Highway Commission such a road had been hoped for by residents of northern and western Siskiyou, and since work on the state system of highways has been commenced there has been much talk of the building of this loop.

The opening of the road down the Klamath River means an immense development of mining, stock raising, horticultural and agricultural resources which are dormant at present on account of the lack of transportation. There are immense deposits of copper thoroughly prospected and proven to be of great value, provided means of transportation are afforded.

ROAD ECONOMICS.

Department of Agriculture Will Keep Record of Highway Mileage.

During the past twenty years State governments have been active in a constantly increasing measure in behalf of road improvement. To January 1, 1915, expenditures aggregating \$211,559,163 have been made from the appropriations by the legislatures of 39 States. With these funds improved roads to the extent of 35,477 miles have been constructed during this period of twenty years.

The results accomplished by the various State highway departments are ascertained through a corps of collaborators, made up of one collaborator in each State highway department. Through these collaborators the office of public roads and rural engineering obtains monthly reports showing progress made, funds expended, and work contemplated in the respective States. In this way the office has assembled exact information as to the expenditure of State and local funds for construction of roads and bridges, for maintenance, and for overhead expenses; the amount of State funds available for road work in 1915; the mileage of State and State-aid roads constructed; and the mileage of roads maintained by the State. The information thus collected has been carefully tabulated and checked so as to show progress from year to year throughout the United States in the improvement and maintenance of the public roads.

SCOTIA BRIDGE IS COMPLETED.

Making a record for the construction of steel highway bridges, the Mercer-Fraser Company has just completed the big steel bridge across the Eel River at Scotia, Humboldt County, Cal. The bridge replaces the steel cable bridge which went out during the high water of last winter.

The Mercer-Fraser Company was awarded the contract on June 15 of this year and began work on the struc-

ture on July 10. By employing a system of daily reports from the shipping point in the east from which the steel was obtained the building material was kept constantly on the move and few delays were experienced in the receipt of material. Whenever a car became held up on the way out to this coast the company was immediately informed of the fact and could take the necessary steps to keep the car moving.

In consequence the building operations proceeded steadily and in less than four months the contract has been filled. As it now stands the bridge consists of two steel spans, pin connected, of 35 feet each in length. The spans are supported on concrete piers. The contract price was \$54,395.

The bridge is now ready for use and will be opened to the public just as soon as it has been accepted by the Board of Supervisors.

PIT RIVER BRIDGE NEARLY COMPLETED.

Rapid progress is being made in the construction of the new reinforced concrete bridge across Pit River at Wyndham Ferry, at the mouth of McCleod River, on the line of the State highway. Nearly all the false work is in.

The span of 240 feet is said to be the longest in the State. The bridge will cost a little over \$27,000. The north end of the bridge passes over the Sacramento and Eastern Railroad, which runs along the river.

TULARE COUNTY LETS CONTRACTS FOR BRIDGES.

Contracts have been let by the Supervisors for the construction of new concrete bridges on the line of the State highway through Tulare County, the total cost of which will be \$20,000. These will be sufficient for that portion of the State road for which funds are now available. All told, Tulare County must build bridges to the value of \$120,000 when the State highway is completed the entire length of the county.

DEVILISH CARTOONS.

His Satanic Majesty, the Devil, is a favorite character with the German cartoonist, according to *Cartoons Magazine*, but the Devil's grandmother is supposed to be even more satanic than Old Nick himself. Thus, an Austrian cartoonist has the Devil's grandmother asking him why he is fixing himself up so well. "I'll tell you, grandma," is the reply, "I'm expecting five kings, a czar and a president, and when such distinguished company arrives I must present a front."

TRAFFIC OVER SOME OF THE WORLD'S BUSY HIGHWAY BRIDGES.

In a paper recently presented before the Western Society of Engineers, Charles M. Spofford, gave the follow-

ing statistics concerning the width of roadway and traffic over some of the important bridges of the world.

Brooklyn Bridge.—Width of roadway. Two roadways at 16 ft. 9 in. each between curbs, with single street car track on each.

Traffic in 1909. Surface cars, round trip, 1,489,364; average per day, including Sundays, 4,080 single trips. Other vehicles, 1,525,262; average per day of twenty-four hours, including Sundays, 4,179.

Manhattan Bridge, N. Y.—Width of roadway. One roadway at 35 ft. without street car tracks.

Total roadway vehicle traffic in 1910, 918,535; average per day, including Sundays, 2,516.

Total roadway vehicle traffic in 1909, 1,673,333; average per day including Sundays, 4,584.

Queensboro Bridge.—Width of roadway. One roadway 33 ft. 1½ in. clear with space for street car on either side, giving a total width of 33 ft. 2½ in.

Waterloo Bridge, London.—Width of roadway in the clear, 27 ft. 6 in. 10,192 horse and motor vehicles. No street cars.

Blackfriars Bridge.—Width of roadways in the clear, 73 ft. 6 in. 14,067 horse and motor vehicles, including 1,829 electric tram cars.

The following figures are from the 1911 Report of the London Traffic Branch of the Board of Trade and refers to traffic on one day in 1911 between 8 a. m. and 8 p. m.

Westminster Bridge, London.—Width of roadway in the clear, 54 ft. 14,613 horse and motor vehicles, including 2,975 electric tram cars.

London Bridge.—Width of roadway in the clear, 37 ft. 13,771 horse and motor vehicles. No street cars.

Tower Bridge, London.—Width of roadway in the clear 35 ft. 9,552 horse and motor vehicles. No street cars.

Northern Avenue Bridge, Boston.—Width of roadway. Two roadways each 18 ft. 9 in., and one roadway at 18 ft 6 in. between curbs, without provision for street cars. Traffic on February 27, 1913, between 7 a. m. and 6 p. m., 3,644 vehicles.

Congress Street Bridge, Boston.—Width of roadway. One roadway 44 ft. between curbs on fixed spans; 31 ft. 4 in. between curbs on draw-span. This bridge, including draw-span, is used regularly by three lines of vehicles. No street cars. Traffic on September 11, 1908, 7,362 vehicles.

Malden Bridge, Draw-Span, Boston.—Width of roadway. Two roadways each 19 feet. 6 in. between curbs, with street car track on each roadway.

Roadway Bridge, Boston.—Width between curbs 40 ft., with double track street railway. Traffic on March 8, 1915, from 6 a. m. to 10 p. m., 398 cars, 1,925 other vehicles. Four lines of traffic.

Meridian Street Bridge, Boston.—This bridge is a comparatively narrow structure, having a distance between trusses of 25 feet and between curbs of 21 ft. 3 in. The traffic across this bridge on Sept. 10, 1912, between 6 a. m. and 10 p. m., consisted of 1,145 vehicles, including street cars.

In Bernardino County Highways.

B. Gill Chairman; W. A. Freemire, George S. Hinkley, Commissioners; J. Bright, Jr., Engineer; R. H. Mack, secretary.

On October 20th, 1914, a bond issue of \$1,750,000 was voted by the people of this county for the purpose of constructing 191 miles of permanent roads. It was proposed to build two types of roads, the concrete and macadam, 90 miles of the former and 100 miles of the latter. The concrete road to be 16 feet wide and 5 inches thick, composed of a 1:2:4 mix, almost perfectly level, with very little crown, and expansion joints placed at a slight interval in every forty feet of the pavement.

The macadam road to be 5 inches thick after rolling. Both types of road have two feet of oiled shoulders on each side and a wearing surface composed of asphaltic oiled shoulders on each side and a wearing surface composed of asphaltic oil and screenings, at least one-half inch thick.

The money from the sale of the bonds is placed with the County Treasurer for the credit of the Highway Commission on March 1st, 1915, and work begun at once.

The Highway Commission has made slight departure from the usual method of contracting the work. In that they are building most of the roads by contract account, under the direction of the Commission, only one contract having been let at this time and two more contracts being advertised.

There are eleven force account gangs working, six of which are laying concrete, four laying macadam, and one doing the twenty-one mile road built through the Cajon Pass, which is more or less mountainous.

Six concrete gangs are averaging the aggregate, a little over one-half mile per day and the macadam gangs at the same, and at the present time they are averaging about fifteen miles of completed roadway a month. All gangs, and up to date there have been completed twelve miles of concrete road and two miles of macadam.

The two types of culverts they are using are the corrugated iron pipe and reinforced concrete.

Riverside County Highways.

Commissioners—W. B. Clancy, Chairman; A. P. Campbell, Secretary; Sam C. Evans, Geo. M. Pearson, Chief Engineer; Wm. H. Stearns, Assistant Engineer; Mrs. C. L. Gilmore, Assistant Secretary.

Amount of bond issue, \$1,125,000. Types of road adopted, concrete, 16 miles wide, 4 inches thick and a 1:2:4 mix, will be 105.3 miles. Macadam road 16 feet wide will be 17 miles. Oil dirt road about 16 miles. Graded road, 80 miles. Surfaced with local material 10 miles. Heavy graded road 9 miles. Mileage of each type constructed—concrete 16 miles; concrete laid, 3 miles of macadam laid; 40 miles of graded road. County furnishes f. o. b. nearest siding sand, gravel, cement, reinforcing

steel and corrugated iron pipe. Macadam work contractor furnishes rock.

There is 60 miles of concrete roads under contract or completed, 3 miles of heavy grading contracted for which is about 60 per cent completed. This road will be contracted next year after hills have settled.

Ten miles of oil roads and 12.5 miles of macadam under contract; 83 miles of graded road under contract. First contract was signed October 7, 1914.

SAN MATEO COUNTY

From Colma to Halfmoon Bay Completed.

This highway is a part of the San Mateo County highway system that is being built under the 1 1/4 million dollar bond issue.

From Colma to Halfmoon Bay is a distance of twenty-eight miles. From the State highway at Colma, through the town, the surface of the new road is of asphalt. A short distance beyond the town limits marks the beginning of the fine smooth new macadam road with an asphaltic oil wearing surface, which leads over the hills west of Colma on a 5 per cent grade. This easy grade continues until San Pedro Mountain is reached, then a 6 per cent grade leads to the crest, from where, at a point 1500 feet above sea level, a magnificent panoramic view of the Pacific ocean and San Francisco bay may be had.

The ocean shore is reached at Edgemar, from which point it follows the coast line to the town of Montara.

From Montara to Halfmoon Bay the road has a concrete base with an asphaltic oil surface. The entire road has a driving surface of sixteen feet, giving ample room for machines to pass and making the "safety first" factor a prominent one.

PARKDALE - COTOPAXI ROAD IN COLORADO.

A Colorado highway which is destined to become known for its scenic attractions was completed recently. It is a twenty-three-mile stretch between the towns of Parkdale and Cotopaxi, and forms a gateway to the western part of the State through the canon of the Arkansas River.

Construction of the road began two years ago, and cost \$100,000, according to State Highway Commissioner Ehrhart, who announced its completion. Thirty thousand of the \$100,000 of cost was contributed by the counties the highway traverses, the remainder being furnished by the State. It was constructed partly by convict labor.

From an engineering standpoint the road represents one of the most difficult pieces of construction in the entire system of State highways. Much of the way was cut through solid granite, it being necessary at one point to build the highway through a tunnel. The road skirts the Arkansas River the entire distance, offering scenic attractions typical of the Colorado Rockies.

The new highway takes the place of a thirty-two-mile hill road between Parkdale and Cotopaxi, which ran through Copper gulch and crossed the sandy bottom of the gulch forty-eight

times in eight miles. It gives an easy water grade between Canyon City and Salida, and is particularly important in that it is a link in the Santa Fe trail and Rainbow transcontinental route from the east to the Pacific coast.

Effect Of Various Vehicles On Modern Roads.

The Massachusetts Highway Commission, after a full investigation, officially states in its annual report, recently issued, that the greatest cause of the destruction of modern roads is not the automobile nor the motor truck, but the heavily loaded vehicle drawn by horses.

In two instances quoted in the current report, fifty to seventy-five ice teams a day, carrying three tons or more each on 2 1/2-inch to 3-inch tires, broke up within a month the side of the road on which the loaded teams traveled, while the surface lasted three months on the other side where the teams came back empty. For miles beyond the ice houses the roads are still in good condition. These roads are of macadam treated with heavy asphaltic oil.

"The traffic study shows that it is not the number of teams, but heavy teams—two or more horses and heavy loads on narrow tires—that cause the failure," says the report.

Some of the Findings.

A carefully prepared statement as to the causes of wear and what certain roads will stand, is presented as one of the results of the traffic study entered on some years ago by the commission. Among the results are the following:

A good gravel road will wear reasonably under a daily traffic composed of 50 to 75 light teams, 25 to 30 loaded one-horse vehicles, 10 to 12 loaded two or more horse-drawn wagons and 100 to 150 automobiles. With a larger number of automobiles, the gravel should be oiled. The oiling presents what is spoken of as a "blanket" surface, consisting of heavy asphaltic oil and sand. If the oil be applied hot, the blanket surface will last three to five years; if cold, it must be renewed every year.

Oiled gravel will stand fairly well under 75 to 100 light teams, 30 to 50 heavy one-horse vehicles, 20 heavy wagons with two or more horses and 500 to 700 automobiles daily.

Waterbound macadam will stand under a daily traffic of 175 to 200 light teams, 175 to 200 heavy one-horse vehicles and 60 to 80, perhaps more, heavy wagons with two or more horses. If even 50 to 100 automobiles per day go over the road at high speed, dust layers will be serviceable. With a really good dust-layer the road will stand 200 to 500 automobiles a day, although the stones will wear.

Antos Keep Road Rotted.

Waterbound macadam with an oil and sand blanket, applied hot, will be economical with 150 to 200 light teams, 75 to 100 heavy one-horse vehicles, 25 to 30 heavy wagons with two or more horses, and automobiles up to 1,400, or more with fewer teams and with 50 or more motor trucks. The large number

of automobiles seems to keep the oil rolled down when it would cut up and crumble without this traffic. This same road, however, will cut up and crumble under a traffic of 100 heavy one-horse vehicles and 50 two or more horse wagons on narrow tires, such as loaded farm wagons, ice wagons, loads of wood.

FRESNO COUNTY HIGHWAYS.

A question of vital importance to the voters of this section of California—the proposed additional \$15,000,000 bond issue to complete the present state highways and build three laterals from the San Joaquin Valley to the coast—has developed since the visit here of C. F. Stern, State Highway Commissioner.

It is now planned to have the county highway system link with the lateral to the coast from the Visalia-Hanford lateral via Coalinga. The question now is whether the county highway will run direct from Fresno to Coalinga, or will connect with the lateral between Hanford and Coalinga.

J. B. Woodson, division engineer for the State highway, and W. S. Farley, engineer for the Fresno County Highway Commission, this week made a trip through the Coalinga district. Later they were joined by John Neu, H. E. Vogel and Harry Winnes, the members of the Fresno County Highway Commission.

Voters of Fresno County are more interested in the lateral that will lead through Coalinga. The other laterals will be through Pacheco pass from a point in Madera County to Santa Clara County, and from Bakersfield to San Luis Obispo County.

Tuolumne County, Cal. Roadwork

The Hon. Board of Supervisors,
Tuolumne County, Cal.
Gentlemen:

As requested I hereby present a report on the operations of the Austin gasoline roller and the Buffalo Pitts steam roller with scarifiers and scrapers on the Columbia road.

The portion of road reconstructed lies between Browns Flat and the Pedro ranch, a distance of 5,760 feet, or 1.08 of a mile. The grades run from level up to 10 per cent. The grades were not changed. The width of road was from 14 to 20 feet, with an average width of 17 feet; the width was increased to from 15 to 23 feet, with an average width of about 19 feet.

The road was exceptionally rough, and was hard to work on account of the numerous boulders and large rocks near the surface, embedded firmly in the soil.

Time Occupied.

The time occupied during operations was 6½ days, from Thursday morning the 8th to Thursday noon the 14th inst., omitting Sunday the 10th.

Operating Expense of Austin Gasoline Roller.

Distillate, 121 gals at 10c per gal.	\$12.10
Gasoline, 1 gal at 25c per gal.	.25
Lubricating oil, 1 gal.	.26
Cup grease, 2½ lbs at 11c per lb.	.35
Bolts	.65
Waste	.10

Total for period of 6½ days...\$13.21

Cost per day	2.03
Length of road reconstructed per day	438.5 ft.
Time occupied in reconstructing 1 mile	12.01 days
Cost per mile	\$24.45

Operating Expenses of Buffalo Steam Roller.

Crude oil, 568 gals at 5c per gal.	\$28.40
Wood, 3-8 load at \$1 per load.	1.50
Water, 6½ days at \$1 per month	.21
Lubricating oil, 1¼ gals at 36c per gal.	.45
Engine oil, ½ gal at 30c per gal.	.15
Cup grease, 3 lbs at 14c per lb.	.42
Waste	.10

Total for period of 6½ days	\$31.23
Cost per day	4.80
Length of road reconstructed per day	438.5 ft.
Time occupied in reconstructing 1 mile	12.04 days
Cost per mile	\$57.80

Entire Labor Expense (Including Surveying.)

Wages, (both machines)	\$230.25
Apportioned to each machine	115.12
Cost per day, (each machine)	17.71
Cost per mile, (each machine)	213.39

Powder and Implements Expense.

Powder, fuse and caps	\$2.35
Picks and shovels	1.00
Drills, sharpened	1.40
Scarifier teeth sharpened	1.00

Total (both machines)	5.75
Apportioned to each machine	2.87
Cost per day, (each machine)	.44
Cost per mile, (each machine)	5.31

Gasoline Roller.

Entire cost per day	\$ 20.18
Entire cost per mile	243.16

Steam Roller.

Entire cost per day	\$ 22.95
Entire cost per mile	273.53

Speed of Machines.

Ordinary speed of gasoline roller, 1.43 miles per hour. Distance travelled per day of 8 hours 11.44 miles.

Ordinary speed of steam roller, .50 miles per hour. Distance traveled per day of 8 hours, 10.50 miles.

(Note: One hour is deducted from the steam roller per day for time occupied in taking water four times daily.)

Remarks.

Austin Gasoline Roller: This roller is the single cylinder type of machine, and is said to weigh 12 tons. Its water tank holds 135 gallons, or sufficient to run two days. Its distillate storage tank holds 32½ gallons, or sufficient for 1½ days run.

This roller scarified the entire road both ways, excepting the hill immediately beyond the water trough, which has a grade of 10 per cent; here the roller scarified downhill only.

The time occupied in starting this roller in the morning is, ordinarily, 20 minutes.

Austin Scarifier: This scarifier is a compact machine weighing about 6,500 pounds. It has proven to be a success in this demonstration. It has 4 reversible teeth 34 inches long by 2½ inches square.

Austin Giant Scraper: This scraper or grader weighs about 2,000 pounds. It has a blade 7 feet long by 18 inches wide and has done satisfactory work.

Buffalo Pitts Steam Roller: This roller weighs 12-13 tons. Its water tank holds 225 gallons and has to be refilled 4 times daily, the average consumption of water being about 900 gallons. Each refilling occupies 15 minutes with water convenient to road. The fuel tank holds 55 gallons or sufficient for a day's run.

Using the Austin scarifier this roller was able to scarify both ways on all the road. It scarified up-hill on the steepest portion—16 per cent, without trouble, although it should be men-

tioned that the road had been previously spiked. This roller seems to be more powerful than the gasoline roller. The time occupied in starting this roller in the morning is, ordinarily, 45 minutes.

Scarifier and Scraper—The Ohio Invincible: This is a combined scarifier and scraper, weighing over 6,000 lbs. The scarifier has six steel teeth, 24 inches by 2½ inches, bent at the point and located in front of the scraper. The scarifier was not a success on this road, being evidently, not strong enough; it was damaged on the first trip.

The scraper has a blade 8 feet long by 18 inches wide. It worked successfully.

Each machine worked one-half of the road the entire length. The gasoline roller worked the south or outside half and the steam roller worked the north or inside half. The south half, worked by the gasoline roller was, if anything, the worse side of the road. Both machines did good work. The steam roller worked a trifle faster than the gasoline roller, but when the time occupied in refilling the water tank is taken into consideration, the steam roller had no advantage, in distance travelled, over the gasoline roller in a day's run. Water, on this demonstration was convenient, and the crude oil was obtained from Jamestown.

One very important factor, which should be taken into consideration, but which could not be ascertained in this short demonstration, is the wear and tear, or the life of each machine. It would probably take a few years constant use of each machine to ascertain this, and of course, the only way the county could determine this factor would be by purchasing both machines.

Respectfully submitted,

ROBERT THOM,
County Surveyor.

CONTRA COSTA COUNTY HIGHWAYS.

Contra Costa County has awakened to the value of good roads and is making a strenuous effort to overcome obstacles that have interfered with its road development.

And one of the first results of its good roads campaign, inaugurated several months ago, is the announcement that by December 1 the Tunnel road, "the gateway" into the Mt. Diablo country, will be open to traffic in a brand-new dress of concrete.

From the north portal of the inter-county tunnel to Walnut Creek, a distance of thirteen miles, the reconstructed highway will possess an average width of twenty-two feet, of which eighteen feet will be of concrete five inches deep.

The surfacing, whether of asphalt or oil and gravel, will be done next spring. Meanwhile the highway will prove a boon to motorists lured to the Mount Diablo country by its scenic beauties.

Simultaneously with the completion of the tunnel road is the fact the second scenic highway to the summit of Mount Diablo will be finished on that date. This highway will be the finest mountain roadway in the West, and will have an average grade of 5 per

cent to the very summit of the meridian mountain.

While during the summer months motorists made the trip to the summit by the old road out of Danville and by way of the Mount Diablo Park Club, this climb was found rather strenuous. Consequently they will welcome the new boulevard, with its easy grade. The old road has been closed pending the completion of the new boulevard.

Other highway work throughout the county is being rushed to completion.

The Bay Point road from Martinez to Stockton, which shortens the distance between the two cities by six miles is nearly finished.

The Mount Whitney Road.

Last August agitation was started for the building of a road up Mount Whitney, and an expedition was organized which spent three weeks gathering data and making the preliminary survey of the proposed route. The party found the road feasible.

The first ten miles of the proposed road lies within the boundaries of Kern County, running from Weldon, on Kern River, elevation 2,000 feet, to the first table lands at an elevation of 6,250 feet. While this portion of the road will be the most difficult to build, still there are no serious obstacles to overcome, and in no instance will more than a 10 per cent grade be necessary.

Kern County will undertake to construct this portion of the highway as soon as the remainder of the project is assured. From these first table lands to Mount Whitney the road will approximate eighty-five miles, and the general character of the foundation through which it will pass is decomposed granite and loose rock. In fact, the greater part of the entire distance will be through loose material, all of which is suitable for a permanent highway.

In order to facilitate and bring about actual results in the shortest time possible, a permanent organization was effected at Big Meadows one evening while the expedition party was still intact. Before a blazing campfire of pine logs, in the very heart of the Sierra Nevada, was organized the Mount Whitney Road Association, which has for its sole purpose the building, or of causing to be built, an automobile road to Mount Whitney, the highest point in the United States, which will at the same time give to the people a scenic route unsurpassed anywhere in the world.

The association is comprised of the entire membership of the expedition and an executive committee of the following officers: C. A. Barlow of Bakersfield, president; Horace G. Miller and Standish L. Mitchell of the Automobile Club of Southern California, Ernest V. Sutton of the Los Angeles Chamber of Commerce, Angus Crites of Bakersfield, personal representative of Governor Johnson, and Jefferson Gilliam of Isabella, as vice-presidents; Frank E. Smith of Bakersfield, secretary and treasurer; G. W. Jones of the engineering department of Los Angeles County, and G. W. Barton, County Engineer of Kern County, as engineers. A

meeting of this executive committee was held at the Kern County Board of Trade in Bakersfield September 15, to confer with Court Du Bois, U. S. Assistant Forester, and C. E. Pachford, Assistant U. S. District Forester, both of whom are strong believers in the great value this project would prove to the Forestry Department.

So enthusiastic was the party over the possibilities of the great project when the members reached the summit of Mt. Whitney they thereupon filed the following notice of location in the name of the people:

"Notice of Location.

"We, the undersigned, citizens of world, hereby locate in behalf of the people for all time the following described pleasure land, to wit:

"Beginning at Mount Whitney, thence running easterly to the edge of the plateau, thence southerly along said plateau to Onyx, Kern County, California, lying and situate on the south bank of Kern River, known as the south fork, thence westerly along said south fork of Kern River, to the junction of said south fork and Kern River proper, then northerly, following the meanderings of said Kern River to a point due west of Mount Whitney, thence easterly to point of beginning;

"Together with all mountain peaks, distant views, meadows, parks, canyons, forests, brooks, vistas, scenery, crystal air, and all other spots, points and attractions;

"To have and to hold for themselves and their heirs for health and amusement.

"The initial monument of this location is a mound of rock on the highest point of the United States proper, which is on the extreme peak of Mount Whitney, the Queen of the Sierra Nevada.

"Dated and potted this tenth day of August, 1915. (Signed)

Horace G. Miller, vice-president, and Standish L. Mitchell, secretary, and Carl E. McStay, special representative of the Automobile Club of Southern California; Ernest V. Sutton, Los Angeles Chamber of Commerce; G. W. Jones, engineer Los Angeles County Road Department; Walter Vail, official photographer; N. D. Darlington, State Highway Commissioner; Wilbur Hall, Saturday Evening Post; Walter M. McStay, Los Angeles Examiner; C. A. Barlow, president Kern County Board of Trade; Angus Crites, personal representative of Governor Johnson; J. H. Thomber, C. H. Bennett and Frank E. Smith, of Board of Supervisors, Kern County; J. W. Kelly, captain of the expedition; Jeff Gilliam, chief guide and manager; Charles B. Hartwick, Taft Petroleum reporter; Walter V. Woelke, managing editor Sunset Magazine; G. H. H. H. Sunset Magazine; A. M. Barton, Engineer Kern County; Wright Jewett and Vance Anderson of Kern County Branch of Auto Club of Southern California; E. Hatchford, assistant district United States Forester; J. Cunningham, United States Forest Supervisor; T. Beard, forest ranger."

The findings of the engineers are unanimous as to the feasibility of the route proposed, and all are of the opinion that an automobile road can be

built to within one and one-half miles of Whitney's summit at a cost surprisingly low for mountain roads.

As a matter of fact there are absolutely no difficult engineering problems to overcome, and of the ninety-five miles of proposed road, not more than five miles are of expensive construction.

Petitions for the proposed Mt. Whitney highway from Bakersfield to the county line above Weldon on the South Fork of the Kern River have been filed with the County Supervisors of Kern County.

The petitions call for a scenic road up the Kern River from Bakersfield into the Hot Springs Valley, on to Weldon and from Weldon to the plateau. Roughly, it is estimated that the road will cost in the neighborhood of \$200,000, though it may run under that figure.

The Board of Supervisors has appointed a committee to investigate the proposition and to find out what amount of money will be required to build the proposed road before calling the election for bonds.

STATE CORPORATION DEPARTMENT

American Tuna Company, Los Angeles, which proposes to secure a site on Los Angeles harbor and to build a fish canning factory, is permitted to sell 25,000 shares of preferred stock at par, \$1 per share, to net not less than 80, and to issue a like number of common shares to E. M. Heron, S. Takeuchi and G. W. Lake. The common shares are to be held as an escrow until such time as the company is able to pay annual dividends of 6 per cent on the common after the payment of a like dividend on outstanding preferred.

Excelsior Film Manufacturing Co., Los Angeles, is permitted to sell 1,198 shares at par, \$10 per share, and to issue 1,198 shares to H. M. Joss and Paul Sullivan in exchange for a scenario and organization expenses. The permit provides, in accordance with the application, that the holders of the shares sold for money shall be reimbursed to the full par value before any dividends are paid to the Joss-Sullivan shares. Thereafter the latter shall receive \$6,000 dividends and further earnings shall be distributed to all shares alike. The company proposes to produce a feature film play to be known as "The Mockery."

Security Building Company, San Francisco, is permitted to sell 250 shares at par, \$100 per share, to net 100 per cent, for the purpose of subdividing and building on its property.

Millennium Dawn Industrial Corporation, Los Angeles, an organization of colored people, who propose to go into the laundry, restaurant and other lines of business on a co-operative basis, is permitted to sell 1,000 shares at par, \$1 per share, to net the full amount of the selling price.

Concordia, a San Francisco Club, is permitted to issue \$15,000 bonds to net par for the purpose of renewing an outstanding issue of \$15,000 held by club members, the balance to apply to building obligations. The bonds are subject to a first mortgage of \$35,000.

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ADVANCE CONSTRUCTION NEWS.

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$10,000. Architect, Charles J. Rousseau, 36 Kearny street, S. F. Owner, John G. Kincannon, 215 Montgomery street. Location, south Washington east of Steiner, covering an area of 25 by 92 feet. Will contain six suites of three rooms and bath. Interior finish pine with some elm panels and hardwood floors. Wall beds and hot water system. Tile baths. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 6 story and base, brick and steel, \$85,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Gerard Investment Co. Location southeast Geary and Leavenworth streets, covering an area of 44 by 83½ feet. Will contain 40 suites of two and three rooms. All apartments equipped with private baths and wall beds. Interior finish pine, hardwood and white enamel. Hardwood floors. Steam heat, oil burning system, automatic elevator and hot water system. Bath rooms finished in tile. Marble and tile wainscot. Ornamental plaster. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and segregated figures being taken.

SAN FRANCISCO—Apartment house, 3 story and base, brick and steel, \$15,000. Architect, J. C. Hladik, Monadnock Bldg., S. F. Owner, Mrs. N. C. Burnette. Location, east Hyde north of Ellis, covering an area of 25 by 100 feet. Will contain six suites of three and four rooms. Interior finished in pine and hardwood with some hardwood floors. Steam heat and hot water system. Bath rooms finished in tile. Wall beds. Exterior faced with pressed brick. Plans complete and figures to be taken at once.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$12,000. Architect, David C. Coleman, Merchants' National Bank Bldg., S. F. Owners, Friedman Bros. Location, west Guerrero north of 24th, covering an area of 45 by 82½ feet. Will contain 12 suites of three and four rooms. Interior finish pine with some elm panels and hardwood floors. Wall beds. Steam heat and hot water system. Exterior covered with cement plaster. Plans complete and segregated figures being taken.

SAN FRANCISCO—Apartment house and stores, 4 story and base, brick and steel, \$70,000. Architect's name not given. Owner, Robert Trost, 26th and Howard streets. Location, 26th and Mission streets, covering an area of 100 by 100 feet. Will contain six stores and entrance on first floor. Upper floors arranged for two and three room apartments. Interior finish pine throughout. Some hardwood floors. Steam heat, oil burning system, auto-

matic elevator and hot water system. Bath rooms tile wainscot and composition floors. Patent store fronts. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$38,000. Architect, none. Owner, Michael Dempniak, 728 Page street, S. F. Location, northwest corner Vallejo and Leavenworth streets, covering an area of 90 by 57 feet. Will contain two, three and four room apartments. Interior finish pine and hardwood with some hardwood floors. Steam heat and a hot water supply. Bath rooms tile. Wall beds. Exterior covered with cement plaster and shiplap. Plans complete and work to be done by Day Labor.

SEATTLE, WASH.—Apartment house, 5 and 6 story and base, brick and steel, \$75,000. Architect, Louis Baeder, White Bldg., Seattle. Owner, Ernest Carstens. Location, southwest corner Boren avenue and Pine street, covering an area of 53 by 120 feet. Will contain 57 apartments of two, three and four rooms. Interior finish pine and hardwood with some hardwood floors. Steam heat, oil burning system, vacuum cleaning, hot water supply and automatic elevator. Bath rooms tile. Wall beds. Exterior faced with pressed brick. Plans complete and figures to be taken at once.

OAKLAND, CAL.—Apartment house alterations, 2 story, frame, \$2,000. Architect, none. Owner, H. T. Sherriff, 1218 6th avenue, Oakland. Location, Athol avenue near Newton. Work will consist of altering two-story frame dwelling into two-room apartments. Plans complete and work to be done by Day Labor.

BONDS.

STOCKTON, SAN JOAQUIN CO., CAL.—At a recent meet the board of directors of the South San Joaquin Irrigation District it was decided to call for bids for the sale of \$150,000 worth of 5 per cent bonds. The proceeds of the sale will be used to finance the construction of the Woodward reservoir.

FORTUNA, HUMBOLDT CO., CAL.—An election held in Fortuna recently for the voting of bonds of \$10,000, the proceeds to be used in the construction of a high school building, carried by a large majority. A site for the proposed building has already been secured. Bids for the bonds are now being taken.

ASTORIA, ORE.—Bonds of \$100,000 have been voted for the erection of a grade school building in the central part of this city. It is the intention of the board to erect a building containing thirty class rooms. An architect will be selected immediately.

WINTERS, YOLO CO., CAL.—The bond election held in Winters to vote bonds of \$7,000 for a school building

carried by a vote of 8 to 1. The Supervisors of the county have voted \$6,000 towards building the structure, bringing the cost up to \$13,000. As yet no architect has been selected.

MODESTO, STANISLAUS CO., CAL.—The required number of signatures having been secured, the Modesto Board of Trade has presented the petition for the laying out of a system of good roads in Stanislaus County to the Supervisors. Action is expected shortly.

SACRAMENTO, CAL.—Acting on the advice of the Attorney-General, the State Board of Control will refuse to use State funds for the purchase of \$25,000 worth of high school bonds issued by the Riverside High School District.

The Board of Control was advised by the Attorney-General that the bonds were not a good investment because the procedure leading up to their issuing was defective. It is probable that the district will hold another election.

CHICO, BUTTE CO., CAL.—Following a conference between Martin Polk, County Surveyor of Butte County, and Supervisor C. E. Porter, held with the State Highway Commission, relative to the question of whether Butte has sufficient bonds to construct the unit between Gridley and the Sutter County line, the Treasurer of Butte was instructed to furnish the data.

The unit in question is the last open link in the main trunk line in Butte County, and is about three miles long.

SAN ANDREAS, CALAVERAS CO., CAL.—A Calaveras delegation has appeared before the State Highway Commission and asked that they be furnished with information relative to the site of the bridge to be constructed in line with the State highway over Mokelumne River between San Andreas and Valley Spring.

BURBANK, LOS ANGELES CO., CAL.—The election held to vote bonds for fire equipment, electric lighting and the construction of a new city hall, carried last week.

HANFORD, KINGS CO., CAL.—Robert W. Graff, of San Leandro, representing the Travelers' Insurance Company, plans to erect a new store building on his property with a 175 foot frontage on Douty street, opposite the Central grammar school.

LAKEPORT, LAKE CO., CAL.—The Lake County Supervisors have adopted the petition and have ordered an election for the proposed Lake County water district. The date of the election has been set for December 30th.

NILAND, CAL.—The Security Commercial and Savings Bank of El Centro has purchased the \$30,000 school bonds of the Niland School District.

TAFT, KERN CO., CAL.—The election held to vote \$60,000 school bonds carried. An architect will be selected in the near future to design plans for the proposed high school to be erected from the sale of the bonds.

STANVILLE, LASSEN CO., CAL.—The Supervisors have granted the petition to submit the Southern Lassen irrigation project to the voters, but will not be able to set the date for the election until such time as they hear the State Engineer's report. The State Engineer will report on the project as

soon as possible, and the Supervisors will hear the report November 21.

IRICA, ORANGE CO., CAL.—An election will be held December 14th to vote bonds of \$66,000 for a school building. Plans for the building have been prepared by Los Angeles architects.

POMONA, LOS ANGELES CO., CAL.—A special election will be held on January 11 to vote bonds in the sum of \$10,000 for enlarging the bath house and constructing an underground sprinkling system in the city parks, \$5,000 for the erection of a chamber of commerce building; \$15,000 for the construction of storm sewers, and \$20,000 for street improvements.

RIVERSIDE, RIVERSIDE CO., CAL.—The Board of Supervisors has sold the bond issue of the Indio Permanent Road Division. Bonds in the sum of \$65,000 were voted for the improvement of fifty-six miles of road.

NEWPORT BEACH, ORANGE CO., CAL.—The Board of Trustees has decided to call a special election for the purpose of voting bonds in the sum of \$30,000 for the installation of a municipal gas distributing system.

HUNTINGTON BEACH, ORANGE CO., CAL.—The Board of Trustees will at once call a special election to vote bonds for the installation of a gas distributing system for the city.

JACKSON, AMADOR CO., CAL.—Lawrence Burke, former chairman of the Board of Supervisors of Amador County, at a mass meeting recommended that a bond issue of \$250,000 be called for the building and maintenance of good roads throughout Amador County. Burke points out that the county is expending from \$20,000 to \$25,000 a year on roads and that this fund would be sufficient to meet the interest on the bond issue.

SANTA BARBARA, SANTA BARBARA CO., CAL.—It is undecided here whether to place on the ballot for the coming election a proposition to move back the east boulevard 50 feet at an estimate cost of \$55,000 or to build a seawall along the present line of the boulevard at an estimated cost of \$90,000, with \$25,000 additional for repaving. The matter is now under consideration of the City Council.

LOS ANGELES, CAL.—Formal action concluding the sale of \$2,640,000 worth of aqueduct power bonds to Wm. R. Compton Company of St. Louis, and \$750,000 worth of the same issue to the Chase National Bank of New York, has been taken by the City Council.

CALEXICO, IMPERIAL CO., CAL.—The ordinance calling for the \$30,000 civic center bond issue on November 29th, has been passed by the City Trustees.

FRESNO, FRESNO CO., CAL.—A second request for the establishment of a new station building in Fresno has been forwarded to the officials of the Southern Pacific Railroad by the Merchants' Association of Fresno.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—The election held last week to vote bonds of \$10,000 for the purchase of additional fire apparatus carried by a large majority. A call for bids for the various items wanted will be issued after the bonds have been sold.

BRIDGES, DAMS AND HARBOR WORK

BRIDGES AND BRIDGE TIMBERS.—Cost not stated. Engineer's name not given. Owners, Hankow-Canton Railroad. American consular officer reports that tenders will be received until December 7, 1915, by Robert W. Hunt & Co., 2200 Insurance Exchange, Chicago, Ill., and West Street Building, New York, N. Y., for the construction of steel bridges and the furnishing of bridge timbers for the Hankow-Canton Railway, China. Copies of the drawings and specifications may be examined at the bureau or its branch offices. (Refer to files Nos 67587 and 68110). San Francisco Branch, New Custom House.

SAN FRANCISCO.—Steel rolling doors. Cost not stated. Engineer, Assistant State Engineer, Ferry Bldg., S. F. Owners, State of California. Bids will be opened on November 26th by the State Board of Harbor Commissioners, Ferry Bldg., for furnishing and installing steel rolling doors on Pier No. 35. Plans and specifications can be secured from the office of the Secretary at the Ferry Building. An official proposal appears in another column of this issue.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Bridge, steel and concrete. Cost not stated. Engineer, County Surveyor, Santa Cruz. Owners, Santa Cruz County. Bids were opened for the furnishing of material and for the construction of the bridge over the Pajaro River at Chittenden, the cost of which is to be borne by Santa Cruz and San Benito Counties. The following bids were received: The Midland Bridge Co., Kansas City, Mo., \$4,957; Ralston Iron Works, 20th and Indiana, S. F., \$5,170; Dyer Bros., 17th and Kansas, S. F., \$4,200; Clinton Bridge Works, Crocker Bldg., S. F., \$4,095; Security Construction Co., 38th and Alameda, Los Angeles, \$3,654. All bids were taken under advisement.

CHICO, BUTTE CO., CAL.—Bridge construction, steel and concrete. Cost not stated. Engineer, County Surveyor, Chico. Owners, Butte County. To prevent any overflow of water over the holdings of the Leland Stanford University, arrangements have been made to lengthen the new bridge forty feet that will span Butte Creek on the State Highway. The bridge will be 340 feet in length, entirely of steel and concrete construction. Further mention of this work will be made.

SACRAMENTO, CAL.—Bridge construction. Cost not stated. Engineer's name not given. Owners, Yolo County. Jesse Poundstone, superintendent of Reclamation District 108, met with Yolo representatives and the State Reclamation Board in Sacramento and arranged for the building of a bridge across Sycamore Slough in Yolo County. The Reclamation Board has formally granted permission to the Yolo Supervisors to drive piling for the strengthening of the old bridge, but later it was made known that the county favored a new bridge, and as a result of this understanding the Reclamation Board rescinded its former action permitting the repair of the old bridge. The new bridge will permit the passage of dredgers. The site of the proposed new structure is

but a short distance from the old bridge. The right-of-way connecting it with the county road will be furnished by the reclamation district.

AUBURN, PLACER CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, County Surveyor, Auburn. Owners, Placer County. Supervisor Geisendorfer has been given authority to construct a concrete culvert over a creek crossing the Colfax and Forest Hill road by the Board of Supervisors.

RED BLUFF, TEHAMA CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. At the last meeting of the County Supervisors the matter of building two bridges at Los Molinas was brought before the Board. After consideration the Board ordered County Surveyor Lunning to prepare plans and estimates for the proposed structure. Further information will be given when the plans are completed.

MARYSVILLE, YUBA CO., CAL.—Bridge removal. Cost not stated. Engineer, County Surveyor L. B. Cook. Marysville. Owners, Yuba County. County Surveyor L. B. Cook has plans prepared for the removal of the old D street bridge, and the Clerk of the Supervisors has been instructed to advertise for bids on the work. The work has been advertised under two plans. The first plan is that the contract shall be to take down the old bridge and transport it to the county hospital grounds, where it can be used by the county for repairing the other bridges in the county. The other plan is to sell it entirely to the highest bidder, who will be allowed to use the material in the old bridge as he sees fit.

SACRAMENTO, CAL.—Bridge reinforced concrete, \$3,000. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Recommendation has been made by the City Board of Park Directors that all bids for the construction of the concrete bridge in Del Paso Park be rejected. This was done at the request of Director Frank Atkinson, who said he believed a lower bid could be obtained. H. W. Terrell was the lowest bidder. His bid was \$2,850 on the City Engineer's plan and \$3,100 on the plan of Jenkins & Wells. The engineer's estimate was \$3,300. Terrell outbid Jenkins & Wells on their own plans, but Atkinson told the Board he believed the bid could be bettered.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Bridge reinforced concrete, \$6,000. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. In response to a petition presented, the County Supervisors have directed that a bridge be constructed at the Santa Maria crossing on the road leading from Nipomo to Santa Maria, also that the road be repaired where necessary at a cost not to exceed \$6,000. The work will be done by the county.

HANFORD, KINGS CO., CAL.—Bridge and culverts. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings County. At the last session of the Board of Supervisors, plans and specifications for bridges and culverts on highway No. 1, divisions A and B, were accepted, and the County Clerk was instructed to advertise for

bids for their construction. This portion of the county's improved highway is that running north and west from this city to Hardwick, and north five miles from the fair ground road three miles west of this city. Further information may be had from the County Engineer at Hanford.

CORCORAN, KINGS CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Hanford. Owners, Kings county. The County Supervisors have authorized Supervisor McClellan to construct a bridge over the Tule River on what is known as Dairy avenue, running south of Corcoran.

BAKERSFIELD, KERN CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. At the last meeting of the Supervisors bids were ordered advertised for a bridge on the Brundage Lane road over the central branch of Kern Island canal, to be opened on December 7th at 10 a. m.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridges, 4, reinforced concrete, \$50,000 to \$60,000. Engineers, Mayberry & Parker, Pacific Electric Bldg., L. A., associated with Fred Johnston, Santa Barbara. Owners, Santa Barbara County. The engineers have been commissioned to prepare plans for four reinforced concrete bridges to be constructed on the State highway in Santa Barbara County.

VENTURA, VENTURA CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be received by the Board of Supervisors up to 11 a. m. of November 22, 1915, for the construction of the Gardner culvert on Telephone road, about 1½ miles west of Salcoy. The approximate quantities are as follows: 16 yards of class B concrete, 3,700 pounds of reinforcing steel, 62 feet of corrugated iron pipe, 80 feet of guard fence and 135 yards of earth fill.

Contracts Awarded.

VISALIA, TULARE CO., CAL.—Bridges, reinforced concrete. Cost as follows. Engineer, County Surveyor, Visalia. Owners, Tulare County. Contracts were let for the construction of five bridges over Cross Creek on the Goshen-Traver division of the State highway in Tulare County at the last meeting of the County Supervisors. The contracts were awarded to the following: Parlier Construction Co., bridge No. 1, \$1,512; bridge No. 3, \$3,355; bridge No. 5, \$3,388; Noble, Sullivan & Noble, bridge No. 2, \$2,072; Manning Bros., Fresno, bridge No. 4, \$2,270.

VENTURA, VENTURA CO., CAL.—Bridge, reinforced concrete, \$4,856. Engineer, County Surveyor, Ventura. Owners, Ventura County. Contractor, J. P. Hunter, L. A. Contract price, \$4,856. George Nowalk, Santa Paula, was awarded the contract for river protection work at \$1,185. Engineer's estimate \$5,000.

HOLLISTER, SAN BENITO CO., CAL.—Bridge, concrete and timber, \$1,935. Engineer, County Surveyor, Hollister. Owners, San Benito County. Contractor, E. J. Spaulding, Hollister. Contract price, \$1,935.

VENTURA, VENTURA CO., CAL.—Grading and culverts, \$20,000. Engi-

neer, County Surveyor, Ventura. Owners, Ventura County. Contractor, B. E. Black, Ventura. Contract price, \$20,000.

MERCED, MERCED CO., CAL.—Bridge, reinforced concrete, \$4,725. Engineer, County Surveyor A. E. Cowell, Merced. Owners, Merced County. Contractors, Angle & Bibler, Dos Palos. Contract price, \$4,725.

FACTORIES AND WAREHOUSES

MARYSVILLE, YUBA CO., CAL.—Purifier, \$6,000. Engineer, Engineering Dept., Pacific Gas and Electric Co., S. F. Owners, Pacific Gas and Electric Co. The Pacific Gas and Electric Co., with a view of bettering its local service, has under way the construction of a new purifier at its plant on 4th street near the levee.

LOS ANGELES, CAL.—Warehouse, 7 story and base, reinforced concrete. Cost not stated. Architect, Albert C. Martin, Higgins Bldg., L. A. Owner, J. C. Hills, Pasadena. Location, Alpine and San Fernando streets, covering an area of 100 by 100 feet. Fireproof construction, reinforced concrete walls, floors and roof slabs. Hollow tile interior partitions, metal window sash and frames. Two elevators, automatic sprinkler system. Exterior faced with cement plaster. Plans being prepared.

Contracts Awarded

EL CENTRO, IMPERIAL CO., CAL.—Warehouse, 1 story and base, reinforced concrete, \$25,000. Architect, Don W. Wells, 134 North 7th street, El Centro. Owners, Delta Mercantile Co. Contractors, John Harnish Co., Stimson Bldg., L. A. Contract price, \$25,000.

FIRE HOUSES AND JAILS

DINUBA, TULARE CO., CAL.—Jail, 1 story, reinforced concrete. Cost not stated. Architect, none. Owners, Town of Dinuba. A new three-cell building will be constructed in Dinuba. The county will pay half the cost of the proposed building. Further information may be had from the City Clerk at Dinuba.

FIRE REPORT

SANTA ROSA, SONOMA CO., CAL.—The Hall & Shurman warehouse was destroyed by fire last week, causing a loss of \$10,000, on which was carried \$2,600 insurance.

CLIFTON, ARIZ.—The copper concentrators of the Arizona Copper Company have been destroyed by fire. The loss is estimated at between \$750,000 and \$1,000,000.

LOS ANGELES, CAL.—A fire starting ign in the Douglas building in this city caused damage to the amount of \$250,000. Preparations are being made to repair the structure.

REDDING, SIESTA CO., CAL.—Three residences, the property of Mrs. E. A. Reid, Mrs. Neie Cendenning and Edward Gardner, were destroyed by fire last week. The loss is estimated at \$11,000. All of the property destroyed was covered by insurance.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,900. Architect, none. Owner, A. C. Hurrell, 9 Sharon street,

S. F. Location, east 10th avenue south Balboa. Will contain two flats of five and six rooms. Interior finish pine and hardwood with hardwood floors, open fire places, tile mantels and automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, none. Owner, L. B. Ham, 1643 Lake street, S. F. Location, north California west of 17th avenue. Will contain two flats of six and seven rooms. Interior finish pine and hardwood. Hardwood floors, open fire places, tile or brick mantels and automatic water heaters. Tile baths. Exterior cement plaster. Plans complete and work by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, Albert Lapachet, 110 Sutter street, S. F. Owner's name withheld. Location, Union near Hyde. Will contain two flats of seven rooms and bath. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places, furnace heat and tile mantels. Tile baths. Automatic water heaters. Exterior covered with cement plaster. Plans being prepared.

OAKLAND, CAL.—Flats and store, 2 story and base, frame, \$5,000. Architect, none. Owner, C. Welchoff, 8412 East 14th street, Oakland. Location, northwest corner 90th avenue and East 14th street. Will contain stores and flats. Interior finish pine. Open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic. Plans complete and work by Day Labor.

GARAGES

SAN FRANCISCO—Garage, 2 story and base, reinforced concrete, \$35,000. Architect, August G. Headman, New Call Bldg., S. F. Owner, J. K. Bigelow. Location, north Bush between Powell and Mason, covering an area of 87 1/2 by 137 1/2 feet. Fireproof construction with concrete floors and roof slabs. Two inclines. Special electric work and gasoline storage tanks. Exterior faced with cement plaster. Plans complete and figures being taken.

GOVERNMENT WORK & SUPPLIES

U. S. Reclamation Service, Winches.

The following bids were received by the chief engineer, U. S. Reclamation Service, Washington, D. C., for furnishing 10 hoists for radial gates, New Jackson Lake dam:

McKinnon Iron Works, Ashtabula, Ohio, \$2,200; shipping weight, 20,000 lbs; time, 3 months.

Joshua Hendy Iron Works, 75 Fremont street, San Francisco, Cal., \$1,640; weight, 14,800 lbs; delivery, Sunnyvale, Cal., December 18.

Clyde Iron Works, Duluth, Minn., f. o. b. Duluth, \$1,770; weight, 18,000 lbs; 6 weeks.

Samuel T. Williams, 223 North Calvert street, Baltimore, Md., f. o. b. Car diff, Md., \$1,180; weight not stated; time, January 29.

Westernman Iron Works, Seattle, Wash., \$1,214; weight, 18,000 lbs; delivery, 30 working days.

El Paso Foundry & Machine Co., El Paso, Tex., \$1,184.30; weight, 14,000 lbs; time, December 30.

Link Belt Co., Chicago, Ill., f. o. b. Chicago, \$1,558; weight, 14,000 lbs; time, January 6.

Stacey-Schmidt Mfg. Co., York, Pa., f. o. b. York, \$1,625; weight, 16,000 lbs; time, January 31.

The Vulcan Iron Works, Denver, Col., f. o. b. Denver, \$1,369; weight, 13,000 lbs; time, 45 days.

J. & J. B. Millholland Co., Pittsburgh, Pa., f. o. b. Pittsburgh, \$1,350; weight, 13,000 lbs; time, January 20.

Webster Manufacturing Co., Tiffin, Ohio, delivery, Tiffin, \$1,500; weight, 21,000 lbs; time, 60 days.

Penn Bridge Co., Beaver Falls, Pa., delivery, Claysville, Pa., \$948; weight, 13,000 lbs; time, January 30.

American Hoist & Derrick Co., St. Paul, Minn., \$1,634; weight, 15,500 lbs; time, 6 weeks.

Baker Iron Works Co., Los Angeles, Cal., \$1,600; weight, 14,100 lbs; time, 30 days.

Rosedale Foundry & Machine Co., Pittsburgh, Pa., \$1,260; weight, 11,100 lbs; time, January 11.

J. S. Mundy Hoisting Co., Newark, N. J., \$1,150; weight, 20,000 lbs; time, 60 days.

Ellicott Machine Corporation, Baltimore, Md., \$2,077.68; weight, 13,000 lbs; time, February 1.

Whiting Foundry Equipment Co., Harvey, Ill., \$1,740; weight, 17,800 lbs; time, 90 days.

N. J. Foundry & Machine Co., 90 West street, New York City, delivery, Niagara Falls, \$1,397; weight, 12,700 lbs; time, 70 days.

Stockton, Cal., Repairs to Stone.

The contract for dampproofing the stonework at the U. S. post office, Stockton, Cal., has been awarded to Construction and Engineering Co., Inc., at \$883.

Light Vessel No. 83, Repairs.

The following bids were received by the lighthouse inspector, 18th district, San Francisco, Cal., for docking and repairing light vessel No. 83: Item 1, Necessary items; 2, optional items.

Moore & Scott Iron Works, San Francisco, Cal., item 1, \$1,594; 2, \$963.60; 15 days, incomplete.

Main Street Iron Works, San Francisco, Cal., item 1, \$2,407.50; 2, \$1,113.09; 18 days, incomplete.

Mare Island Navy Yard, item 1, \$1,406; 2, \$1,013.12; 10 days, incomplete.

United Engineering Works, San Francisco, Cal., item 1, \$1,312.35; 2, \$1,027.15; 12 days, accepted.

Union Iron Works, San Francisco, Cal., item 1, \$2,574.50; 2, \$2,096; 12 days.

Everett, Wash., Post Office.

In the construction of the U. S. post office at Everett, Wash., for which Henricson & Co., Seattle, Wash., has the contract, air valves manufactured by the Kelly Brass Works and radiator valves manufactured by the Kennedy Valve Mfg. Co. will be used.

San Francisco, Cal., Sub-Treasurer.

As previously reported the contract for the completion of the second story of the U. S. Sub-Treasurer, San Francisco, Cal., was awarded to the Construction and Engineering Company, of San Francisco, Cal. In the prosecution

of the work, air valves for radiators manufactured by the Monash-Younger Co. will be used.

Reclamation Work.

Contract has been awarded for the construction of Mission lateral H and sub-laterals, Flathead irrigation project, Montana, to Wilson Brothers of Polson, Mont. The contract price is \$16,123.50. The contract involves the construction of about 10 miles of laterals and appurtenant structures embracing 43,000 cubic yards of excavation, 140 cubic yards of concrete, 430 square yards of paving, the placing of 9,800 pounds of steel and about 32,000 feet B. M. of lumber. The work is situated on the Flathead River, about 17 miles northeast of Dixon.

Bozeman, Mont., Furniture.

The contract for installing furniture in the U. S. post office at Bozeman, Mont., has been awarded to McGuire Cabinet Co., Los Angeles, Cal., at \$14,155.55.

Hanford, Cal., Vault Shelving.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for installing metal vault shelving in the U. S. post office at Hanford, Cal.:

The H. H. Shults Co., Gowanda, N. Y., \$293.

The American Bank Protection Co., Minneapolis, Minn., \$316.

The Berger Mfg. Co., Canton, Ohio, \$332.

The Keyless Lock Co., Indianapolis, Ind., \$390.

Watson Mfg. Co., Jamestown, N. Y., \$371.

Van Dorn Iron Works Co., Cleveland, Ohio, \$396.

The Canton Art Metal Co., Canton, Ohio, \$405.

The General Fireproofing Co., Washington, D. C., \$445.

Art Metal Construction Co., Jamestown, N. Y., \$482.

SAN FRANCISCO—Restoration work, concrete construction, \$48,000. Architect, G. A. Applegarth, Spreckels Bldg., S. F. Owners, United States Government. Plans are being completed by the California Historical Society for the complete restoration of the headquarters of the Spanish Commandate of 1775, headquarters of the Mexican Commandate of 1824 and the first headquarters of the American Army of 1846 in the Presidio of San Francisco. The present building used as officers' club, and the only adobe building left on the Presidio reservation, is the nucleus around which the society plans to work. A new front, one story in height and 159 feet long and 105 feet deep will be added. It is planned to make the new building one of the highest types of old Mission architecture in the State. Rooms will be provided around an open patio. Congress will be asked for a special appropriation.

FORT BARRY, MARIN CO., CAL.—Fencing. Cost not stated. Engineer, Constructing Quartermaster, Fort Mason. Owners, United States Government. Bids will be opened on November 26th for wire fencing at Fort Barry. Plans can be secured from the Constructing Quartermaster. An official

proposal appears in another column of this issue.

HALLS AND SOCIETY BUILDINGS

PORTLAND, ORE.—Labor Temple, 3 story and base. Class A construction, \$100,000. Architects, Houghtaling & Douglass, Henry Bldg., Portland. Owners, Labor Temple Association. Location, Stout and Morrison and Washington streets, covering an area of 11,200 square feet. Will contain offices, meeting rooms and social rooms. Interior finish pine. Steam heat and hot water system. Exterior faced with pressed brick and terra cotta. Plans being prepared.

HOSPITALS

SAN FRANCISCO—Hospital alterations. Cost not stated. Architect, Albert Lapachet, 110 Sutter street, S. F. Owners, Franch Hospital Association. Location 5th avenue and Geary. Work will consist of extensive alterations to kitchen and kitchen equipment, and the installation of a modern ventilating system. Plans complete and figures being taken.

OAKLAND, CAL.—Hospital dormitory and day hall, 2, 2 story. Class A construction. Cost not stated. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, Alameda County. An official proposal calling for bids on this work, which were to have been opened on November 29th has been rescinded. Further mention will be made when new bids are called.

STOCKTON, SAN JOAQUIN CO., CAL.—Hospital storage barn, frame, \$1,447.50. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. E. W. Book of Stockton submitted the lowest bid at \$1,447.50 for the construction of a hay storage and feed barn at Stockton. A complete list of the bids will be found under the heading of Sacramento, Stockton and Northern California.

COVINA, LOS ANGELES CO., CAL.—Orphans' Home, group of 1 and 2 story, reinforced concrete, \$75,000. Architect, John F. Blee, Union League Bldg., L. A. Owners, Masonic Orphans Home. The architect has just been selected to prepare plans for these buildings and details of construction have not been made public. Further mention will be made when plans are complete.

PORTLAND, ORE.—Hospital, 4 story and base. Class A construction, \$100,000. Architect not selected. Owners, Multnomah County. The County Commission will appropriate \$400,000 in the 1916 budget for the erection of a county hospital building. A structure to cost \$100,000 has been discussed and plans for such a structure were prepared by Bridges & Webber, local architects, several years ago. The present building is inadequate and a fire trap, according to reports of physicians of the county.

IRRIGATION PROJECTS

MODESTO, STANISLAUS CO., CAL.—Irrigation work, concrete drops. Engineer Herrmann, Modesto. Owners, Modesto Irrigation District. Thurston & Co., Mechanics Institute Bldg., S. F., submitted the lowest figure for drops

on lateral No. 3 at \$20,956.95 and will be awarded the contract.

MODESTO, STANISLAUS CO., CAL.—Irrigation work. Cost not stated. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Chief Engineer F. C. Herrmann of the Modesto Irrigation District was authorized to draw plans and specifications for the Waddy Hill on lateral No. 1, four miles east of Modesto, to take the place of a wooden flume now doing service, by the Board of Directors of the Modesto Irrigation District at a recent meeting. Authorization was also given for drawing plans for concrete headgates for laterals No. 4 and 5.

SANTA ANA, ORANGE CO., CAL.—Irrigation gates and bridges. Cost not stated. Engineer, H. Clay Kellogg, Santa Ana. Owners, Newberg Protection District. Chief Engineer H. Clay Kellogg has been instructed by the directors of the Newberg Protection District to prepare plans for gates and bridges in accordance with the district's recent agreement with the Willows Land Company, and at Rice's Point. Further mention will be made of this work when plans are complete.

TURLOCK, STANISLAUS CO., CAL.—Irrigation work. Cost not stated. Engineer's name not given. Owners, Turlock Irrigation District. At the last meeting of the directors of the Turlock Irrigation District the following improvements to the district were considered: The extension of lateral 8 and the construction of a new side gate in the Ceres main, at the head of the Yeiser ditch.

Contracts Awarded

SANTA ANA, ORANGE CO., CAL.—Moving earth. Cost as follows. Engineer, H. Clay Kellogg, Santa Ana. Owners, Newberg Protection District. Contractor, J. C. Farnsworth, Santa Ana. Contract price, 15 cents per yard, 2,700 yards.

OAKDALE, STANISLAUS CO., CAL.—Irrigation canal work. Cost not stated. Engineer's name not given. Owners, Oakdale Irrigation District. Contractor, Edward O'Malley, 180 Jessie street, S. F. Contract taken on percentage basis.

EUREKA, HUMBOLDT CO., CAL.—Storage dam, concrete. Cost not stated. Engineer, E. J. Burke, Eureka. Owners, Cottage Gardens Nurseries Co. Contractors, Elsmore & Jacobs, 431 G street, Eureka. Contract price not stated. Stanford & Lax, Eureka, tool house and machine room. Cost not stated.

LIBRARIES

SAN FRANCISCO—Library work. Cost not stated. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Bids will be opened by the Library Trustees on November 22 for furnishing artificial travertine stone, plain and ornamental plastering for the new main library building in the Civic Center. Plans can be secured from the office of the architect. An official proposal appears in another column of this issue.

SACRAMENTO, CAL.—Library, 3 story and base. Class A construction, \$30,000. Architect, Loring P. Rixford, Sharon Bldg., S. F. Owners, City of

Sacramento. Architect Rixford's plans have been approved in competition with 56 other sets of plans for the new library building. A complete description of the building and competition will be found under the heading of Sacramento and Northern California in this issue.

MAUSOLEUMS.

SUNSET VIEW CEMETERY, CONTRA COSTA CO., CAL.—Mausoleum, 1 story, reinforced concrete, \$300,000. Architect's name not given. Owners, Pacific Mausoleum Co., Union Savings Bank Bldg., Oakland. Will contain 1,000 crypts, 509 niches for urns and chapel. Construction, fireproof. Art glass, modern plumbing and electric work. Ornamental iron. Exterior faced with cement plaster. Plans complete and work to be carried on under Day Labor system by J. Flood Walker, 305 east 14th street, Santa Ana.

MONROVIA, LOS ANGELES CO., CAL.—Mausoleum, 1 story. Class A construction. Cost not stated. Architect's name not given. Owners, Monrovia Mausoleum Co., represented by T. W. Dryden, Story Bldg., L. A. Will contain 200 crypts, urns and chapel. Interior finish marble. Modern plumbing and electric work. Exterior faced with cement plaster. Plans complete and figures being taken.

WHITTIER, LOS ANGELES CO., CAL.—Mausoleum, 1 story. Class A construction, \$50,000. Architect, J. J. Frankenfelder, Story Bldg., L. A. Owners, Whittier Heights Cemetery Association. Will contain 200 crypts, urns and chapel. Interior finish marble. Plumbing, electric work and art glass. Exterior faced with cement plaster. Work to be done by Day Labor under the direction of Frank B. Gibson, Story Bldg., L. A.

POWER DEVELOPMENT.

SAN FRANCISCO—Power development, \$11,000,000. Engineer, Engineering Department, Pacific Gas and Electric Co., S. F. Owners, Pacific Gas and Electric Co. The State Railroad Commission has authorized the Pacific Gas and Electric Co. to issue to March 1st, 1917, \$12,500,000 worth of first preferred stock. With the exception of \$1,447,500, which will be used in reimbursing the treasury, the issue will be utilized in construction work. The main outlays planned are: For the construction of a concrete dam and spillway to increase storage capacity of Lake Spaulding, Placer County, \$703,116.27. For increasing the capacity of the Drum plant, Placer County, to 10,000 kilowatt, \$565,209.78. For the construction of three power houses in the Lake Spaulding District, \$1,410,976.48. For the construction of a three-pool transformer line from the Drum power house to Cordelia substation, \$566,229.39. For the building of a substation at Cordelia and the construction of a power line to the Ildige substation, \$23,621.72. For the extension of the Cordelia-San Rafael power line from Schuetzen Park across the Golden Gate to Station F, in San Francisco, \$272,302.52. For the construction of an 8-inch pipe line to supply Potrero peninsula to the San Francisco County

line, \$47,936.16. The erection of the eight-story class A office building and which is now under construction on Sutter street, San Francisco, at a cost of \$112,285, is also included in the appropriation. The remainder of the issue is apportioned in small amounts for construction and extension work of minor import.

RAILROAD CONSTRUCTION AND EQUIPMENT

RIVERSIDE, RIVERSIDE CO., CAL.—Railroad construction. Cost not stated. Engineer, Engineering Dept. Santa Fe, L. A. Owners, Santa Fe Railroad Co. The Santa Fe Railroad is making preparations to carry out the orders of the State Railroad Commission with reference to the rebuilding the inland route of its line from Murrieta on to San Diego. The work will be started at Murrieta then to Elsinore and on to Highgrove.

Contracts Awarded

VISALIA, TULARE CO., CAL.—Passenger station, 1 and 2 story, reinforced concrete, \$13,900. Architect, Engineering Dept. Southern Pacific Co., Flood Bldg., S. F. Owners, Southern Pacific Co. Contractor, E. E. Etherton, Monadnock Bldg., S. F. Contract price, \$43,000.

RESIDENCES

SAN FRANCISCO—Residence, 2 story and base, frame, \$4,000. Architect, Joseph A. Leonard, 85 Cerritos avenue, S. F. Owners, Urban Realty Co. Location, northwest corner Paloma and Ocean avenue. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels, tile and brick. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$13,000. Architect, W. H. Crim, Jr., 125 Kearny street, S. F. Owner, Henry R. Williard. Location, north Vallejo east of Divisadero. Will contain ten rooms, several baths and a basement garage. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors throughout. Furnace heat, hot water system and open fire places. Mantels tile and brick. Bath rooms tile. Exterior covered with cement plaster. Bids in and under advisement.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,000. Architect, Edward E. Young, 251 Kearny street, S. F. Owners, McMullin-von Voorhies Co., 110 Jessie street, S. F. Location, Claremont Court, S. F. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, white enamel and hardwood. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 5, 2 story and base, frame \$3,000 each. Architect, none. Owners, MacArthur Bros., 1560 Fell street, S. F. Location,

north 19th west of Douglas. Will contain six rooms and bath. Interior finish pine and hardwood veneer. Hardwood floors. Open fire places and tile and brick mantels. Tile bath rooms. Automatic water heaters. Exteriors covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,000. Architect, none. Owner, John E. McCarthy, 1310 13th avenue, S. F. Location, east San Gabriel south Capistrano. Will contain six rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 2, 1 story and base, frame, \$2,000 each. Architect none. Owners, MacArthur Bros., 1560 Fell street, S. F. Location, north Persia east Naples. Will contain six rooms and bath. Interiors finished in pine throughout. Some hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exteriors rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$5,000. Architects, Banning & Stewart, 5215 Broadway, Oakland. Owners, Banning & Stewart. Location, east Belgrave north Napa. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire place. Mantel tile or brick. Tile bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, V. N. Strang, 1521 9th street, Alameda. Location, Nova Piedmont. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile mantels. Bath room tile. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, A. H. Llohan, 1020 55th street, Oakland. Location, west Greenbank east Lake avenue. Will contain six rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile or brick mantel. Tile bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame \$4,000. Architect, Olin S. Grove, 2911 Telegraph avenue, Oakland. Owner, Mrs. Rosiva Rose. Location, Manor Drive. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile bath. Automatic water heater. Exterior covered with cement plaster. Plans com-

plete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, G. W. Quinn, 758 9th avenue, Oakland. Location, west 10th avenue north Bancroft. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors, open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, Eugene K. Martin, 2192 Shattuck avenue, Berkeley. Owner, L. Berceovich. Location, Cedar and Arch streets. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile mantels. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, B. A. Stewart, 8 Fairview avenue, Piedmont. Location, east Valle Vista. Will contain six rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath room tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$4,250. Architect, none. Owner, H. H. Swalley, 710 Walker avenue, Oakland. Location, northwest corner Hudson and Arbor streets. Will contain seven rooms, bath and sleeping porch. Interior finish, pine, white enamel and hardwoods. Hardwood floors, furnace heat and open fire places. Mantels tile or brick. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$8,000. Architect, Sidney R. Newsom, Nevada Bank Bldg., S. F. Owner, R. B. Bain. Will contain ten rooms, three baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels tile and brick. Automatic water heater. Baths tile. Exterior cement plaster. Plans complete and revised figures being taken.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,000. Architect, Hiram K. Lovell, Dalziel Bldg., Oakland. Owner, F. L. Waye. Location, east Dana north Alcatraz. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,250. Architect, none. Owner, C. J. Prang, 5487 Claremont avenue, Oakland. Location, east California north

Derby. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, H. C. Pfarr, 320 Forest street, Oakland. Location, north Derby west Grant. Will contain five rooms and bath. Interior finish pine. Hardwood floors, open fire place and automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$4,000. Architect, M. I. Diggs, 2114 Bowditch, Berkeley. Owner, J. C. O'Connor. Location, east Carlton south Prospect. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels tile and brick. Bath rooms tile. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$2,250. Architect, none. Owner, W. H. Kerrigan, 5153 Shafter avenue, Oakland. Location, 21 Pacific avenue. Will contain five rooms and bath. Interior finish pine, hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, L. G. Pfarr, 5441 Shafter avenue, Oakland. Location, north 14th street west Shafter. Will contain five rooms and bath. Interior finish pine. Some hardwood floors, open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, G. W. Baumann, 5360 Trask street, Oakland. Location, northeast corner Trask and Maris. Will contain seven rooms and bath. Interior finish pine. Some hardwood floors, open fire place and tile mantel. Automatic water heater. Exterior cement plaster. Work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, Paul Woodburn, 3965 Greenwood, Oakland. Location, east Broadway south Prospect. Will contain seven rooms and bath. Interior will be finished in pine and white enamel. Hardwood floors, open fire places and tile or brick mantels. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$5,000. Architect, none. Owner, H. H. Chorbajain, Fresno. Location, M street between Mono and Ventura. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and the mantels. Bath room tile. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, C. L. Saylor, 1033 Green street, Fresno. Location, Fresno Heights. Will contain six rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior cement and rustic. Plans complete and work by Day Labor.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, D. McKay, 3029 E street, Sacramento. Location, 3105 E street. Will contain six rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work by Day Labor.

Contracts Awarded

SARATOGA, SANTA CLARA CO., CAL.—Residence, 1 and 2 story and base, frame, \$30,000. Architect, Carl Werner, Phelan Bldg., S. F. Owner, Bradford Webster. Contractor, John Rodoni, Saratoga. Contract price, \$30,000.

BEVERLY, LOS ANGELES CO., CAL.—Residence, 2 story and base, frame and brick. Cost not stated. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owner, Roland Bishop. Contractors, Barklew & Gould, 1017 East 21st street, L. A. Contract price not stated. Dwelling will contain 16 rooms and 6 baths.

SCHOOLS

BERKELEY, ALAMEDA CO., CAL.—School painting, \$2,150. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids opened for painting at the California School for the Deaf and Blind show D. Zelinsky, S. F., low at \$2,150. He will probably be awarded the contract. A complete list of the bids appears under the heading of Oakland and Alameda County in this issue.

RICHMOND, CONTRA COSTA CO., CAL.—School, 1 story and base. Class C, \$10,000. Architect's name not given. Owners, City of Richmond. Bids will be received up to November 20th for the construction of the first unit of the Pullman School. The complete building will cost in the neighborhood of \$40,000. Plans can be secured from the Clerk of the Board of Education.

SAN BRUNO, SAN MATEO CO., CAL.—School, 1 story and base, frame. Cost not stated. Architects, Edwards & Norberg, Bank Bldg., Burlingame. Owners, San Bruno School District. The building will contain four class rooms and an assembly hall. Interior finish pine with maple floors. Central heating system. Modern plumbing and electric work. Exterior cement plaster. Plans being prepared.

ROSEVILLE, PLACER CO., CAL.—School lighting fixtures. Cost not stated. Architect, W. H. Weeks, 75 Post street, S. F. Owners, Roseville School District. Bids will be received up to November 20th for furnishing and installing electric fixtures in the new school building.

MUNICIPAL SCHOOL DISTRICT, MERCED CO., CAL.—School addition and out buildings, frame. Cost not stated. Architects, Cowell & Bedesen, Merced.

Owners, Munich School District. Bids will be opened on November 20th for constructing an addition to the present building and building out buildings. Plans can be secured from the architects.

KINGSBURG, FRESNO CO., CAL.—School, 1 story and base, reinforced concrete, \$10,000. Architects, Johnson Bros., Kingsburg. Owners, Kingsburg School District. Bids will be called for at once by the Trustees of Kingsburg Union High School District for the construction of a school building, for which bonds have been sold.

HIALE, ORANGE CO., CAL.—School, 1 story and base, hollow tile, \$55,000. Architects, E. R. Jeffery & F. F. Schaefer, Westley Roberts Bldg., L. A. Owners, Brae School District. Will cover an area of 250 by 176 feet. Interior finish pine with maple floors. Modern school plumbing and a central heating system. Exterior faced with cement plaster. Plans being prepared.

VICTORVILLE, SAN BERNARDINO CO., CAL.—School, 1 story and base, brick or hollow tile, \$30,000. Architect, Lester H. Hibbard, Marsh-Strong Bldg., L. A. Owners, Victorville School District. The architect has just been commissioned to prepare the plans and detailed information is not available. Further mention will be made of the work.

Contracts Awarded

BURBANK, LOS ANGELES CO., CAL.—School, 1 story and base, brick, \$19,797. Architects, Tuttle & Angel, Delta Bldg., L. A. Owners, Burbank School District. Contractors, May Bros., First National Bank Bldg., Glendale. Contract price, \$19,797.

SEATTLE, WASH.—College building, 4 story and base. Class A construction, \$143,254. Architects, Charles Bebb and Carl Gould, Denny Bldg., Seattle. Owners, State of Washington. Contractors, Finne & Gjarde, Northern Bank Bldg., Seattle. Contract price, \$143,251. Contract covers the general construction of the Home Economics Building.

GOSHEN, TULARE CO., CAL.—School 1 story, brick, \$5,000. Architect, Ernest J. Kump, Howell Bldg., Fresno. Owners, Goshen School District. Contractor, Charles D. Sturtevant, Fresno. Contract price, \$5,000.

SEWERS, STREET WORK & WATER SYSTEMS

SAN FRANCISCO—Paving. Cost not stated. Engineer, Assistant State Engineer, Ferry Bldg., S. F. Owners, State of California. Bids will be opened on November 26th for wood block paving on Pier No. 35. Plans can be secured from the office of the Secretary, Ferry Bldg. An official proposal appears in another column of this issue.

SAN MATEO, SAN MATEO CO., CAL.—Street paving and culverts. Cost not stated. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Bids will be opened on November 22 at 8 p. m. for grading, laying therein corrugated iron culverts, and paving with an asphaltic concrete wearing surface 1½ inches thick laid upon a hydraulic cement concrete base 4 inches thick, portions of El Camino Real between San Mateo Creek and the northwesterly limits.

SAN MATEO, SAN MATEO CO., CAL.—Street paving. Cost not stated. En-

gineer City Engineer, San Mateo. Owners, City of San Mateo. At the last meeting of the City Trustees, steps were taken to pave the intersections of cross streets with the county road. The funds for the improvement have been provided and bids will soon be called for.

SAN MATEO, SAN MATEO CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. A majority voted in favor of street paving in additions 1, 2, 3 and 4 together with the Burlingame Grove Tract. The engineer has been directed to prepare the necessary plans and specifications for the work. Bids will be called on the completion of the plans.

DAILY CITY, SAN MATEO CO., CAL.—Street improvements. Cost not stated. Engineer, City Engineer, Daily City. Owners, Daily City. A resolution has been passed by the Board of Trustees declaring its intention to improve portions of Mission Road, Melrose, Myrtle, Garden, Colma Winter and Ocean streets; Knowles, Theta, Vista and Park avenues; Park Avenue North, Park Avenue South, Lake avenue and Orange avenue.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction, \$32,843.75. Engineer, City Engineer, Stockton. Owners, City of Stockton. The lowest bid received for sewer construction covered by resolution No. 334 was submitted by William F. Edwards at \$27,467.24. The engineer's estimate on the work was \$32,843.75. Bids were taken under advisement.

OROVILLE, BUTTE CO., CAL.—Culvert work. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. The County Supervisors at a recent session authorized the construction of a culvert at Camino on the Oroville-Chico road, and to have pipe installed near Crum's ranch on the same road. The installation of a culvert was also authorized upon the Oroville-Forestown road at the McKee place.

WILLOWS, GLENN CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer, Willows. Owners, Town of Willows. The town of Willows will shortly call for bids to complete the paving of the State highway through Willows, eight blocks, four on either end of the street. The eight blocks within the city limits, according to the town board, need only be paved according to State highway specifications.

OROVILLE, BUTTE CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. The Board of Supervisors has decided to readvertise for bids in connection with contemplated repairs on the county road leading from Chico to the Gianella bridge. Bids were to have been opened Saturday, November 6th, but the Board decided to postpone action until November 26th. The work calls for graveling and grading of a portion of the road in the overlow section along the river.

SAN FRANCISCO—Beach esplanade, \$59,975. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. J. D. Hannah submitted the lowest figure for this work and will probably be

awarded the contract. A complete list of the bids appears under the heading of San Francisco in this issue.

SALINAS, MONTEREY CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Salinas. Owners, City of Salinas. Plans are now being completed for the macadamizing of Sasual street in Salinas. The street will be improved from Monterey to California street. Further information may be had from the City Engineer.

EL CENTRO, IMPERIAL CO., CAL.—State highway construction. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be opened on December 6th for constructing Portland cement concrete highway, approximately 12 miles in length, from Dixieland to El Centro. Plans can be secured from the branch offices of the Commission in San Francisco and Los Angeles. An official proposal appears in another column of this issue.

FRESNO, FRESNO CO., CAL.—Arch, concrete, \$2,000. Architects, Glass & Butler, Republican Bldg., Fresno. Owners, City of Fresno. Plans have been completed by Glass & Butler, 3 Republican Bldg., Fresno, for the construction of the arch which will be erected at the southern entrance of Van Ness Boulevard. Bids will be called for in a few days. Further information may be had from the architects.

BAKERSFIELD, KERN CO., CAL.—Highway construction. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Plans of the County Highway Commission for the construction of division 11, section 3 of the Caliente-Kernville highway were accepted by the Board of Supervisors and bids will be received until 10 o'clock a. m. December 9th. The plans of the commission for the highway division 5, section 1-A, McKittrick-Bakersfield road, were also accepted and bids will be received until December 9th at 10:30 a. m.

SAN RAFAEL, MARIN CO., CAL.—Street improvements. Cost not stated. Engineer, City Engineer, San Rafael. Owners, City of San Rafael. At the last meeting of the City Trustees the matter of improving several streets was brought up. A resolution establishing the grade on Pine street was adopted. Specifications for street improvements were adopted as follows: Sixth street from B to H; D from San Rafael avenue to Wolfe avenue; San Rafael avenue from C to D; Clark street its full length from Ross to Greenwood avenue; C street from 3rd to Mahon Creek; G street from 5th to the railroad; Center street from H to J street; Pine from Center to Harcourt; Cijos street from 3rd to 4th; Toll road from 3rd street to the city limits. All of these streets are to be macadamized with an asphalt surfacing, except the town road, which is to have a concrete base, the same as the State highway, the concrete surface to be 20 feet wide with a 3-foot shoulder on either side. The asphalt surface on the macadamized streets is to be a thin coating, which will cost about 1 cent per foot.

MARTINEZ, CONTRA COSTA CO., CAL.—Boulevard construction. Cost not stated. Engineer, County Surveyor

R. R. Arnold, Martinez. Owners, Contra Costa County. Plans have been completed by County Surveyor R. R. Arnold for the construction of the new boulevard to Mount Diablo from the tunnel road in this city. The plans will be brought before the district boulevard commissioners and then go to the Board of Supervisors for approval.

OAKLAND, CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Oakland. Owners, City of Oakland. Bids will be opened on December 2 for work under resolutions as follows: That 64th avenue be paved with oil macadam from the northeastern line of East 14th street to the northeastern line of the Jeannette Von Ah Tract; that Harmon avenue and Bromley avenue from the northwestern line of said tract to the northwestern line of 64th avenue, each be curbed with redwood, guttered with concrete gutters 3 feet wide, and paved with oil macadam; also that cement sidewalks six feet wide be constructed on both sides of Harmon avenue and on the northeastern side of Bromley avenue.

OAKLAND, CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Oakland. Owners, City of Oakland. Bids will be opened on December 2 for the improvement of 27th avenue from the northeastern line of East 22nd street, be graded, curbed with redwood, guttered with concrete gutters 3 feet wide, paved with oil macadam, and sidewalked with cement sidewalks six feet wide; also that the crossing of 27th avenue with East 22nd street, be graded, curbed with redwood, paved with oil macadam, sidewalked with cement sidewalks and culverted with two corrugated iron and concrete culverts each having two branches.

HAYWARD, ALAMEDA CO., CAL.—Street improvement. Cost not stated. Engineer, Town Engineer, Hayward. Owners, Town of Hayward. At the last meeting of the Town Trustees specifications were approved for the improvement of the E and Watkins street crossing. Bids on this work will be called for shortly. The matter of repairing First street from A to the bridge and upper A street from 3rd street to the bridge was referred to the street and building committee and the Town Engineer.

PORTLAND, ORE.—Road construction and repair, \$581,221. Engineer, Roadmaster Yeon, Portland. Owners, Multnomah County. For maintenance and new construction work, Roadmaster Yeon estimates \$588,221 will be necessary in 1916. Provision is made for \$78,661 for the Columbia Highway and \$231,000 for new construction work in various other parts of the county. Among the items included are the following: St. Helens road, regrade 3 miles, \$35,000; Germantown road, grade, macadam, \$15,000; Capitol highway, half mile, paving, \$10,000; Base Line road, extensions, \$50,000; eliminating grade crossings, \$15,000; Sky Line, macadam, \$20,000; Sky Line, 3 miles, \$10,000; Fairmount Boulevard, macadam 3 miles, \$25,000; redress ditches and shoulders, \$8,000; St. Helens road, widen 2 feet, \$3,000; Freyman avenue, grading, \$15,000; signboards, \$2,000; Sandy road, relocate and grade, \$10,000; Sandy cut-off grade, \$10,000. Pe-

tions for other improvements were not included. The largest improvement asked for is the Columbia boulevard extending from St. Johns, the cost of which is estimated at \$18,000 per mile, a total of \$162,000; hard surface Fairview road, 4 miles, \$45,000; paving East 2nd street extension, 5 miles, \$50,000; total \$241,000.

Contracts Awarded

LINDSAY, TULARE CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Lindsay. Owners, City of Lindsay. Contractors, Worswick Street Paving Co., Union National Bank Bldg., Fresno. Contract for five blocks. Cost not stated.

BAKERSFIELD, KERN CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor Bakersfield. Owners, Kern County. Contractors, Clark-Henry Co., Ochsner Bldg., Sacramento. Contract price not stated.

STOCKTON, SAN JOAQUIN CO., CAL.—Sanitary sewers, \$27,467.24. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractor, William F. Edwards, 675 31st street, Oakland. Contract price, \$27,467.24.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Road extension, \$7,000. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractors, Colony Holding Co., San Luis Obispo. Contract price, 25 cents per cubic yard for 28,000 cubic yards.

BAKERSFIELD, KERN CO., CAL.—Highway construction, \$13,464.54. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractor, Robert Shearer, Pacific Electric Bldg., L. A. Contract price, \$13,464.54.

MORGAN HILL, SANTA CLARA CO., CAL.—Street paving. Cost not stated. Engineer, Town Engineer, Morgan Hill. Owners, Town of Morgan Hill. Contractors, Casley & Hamilton, San Jose. Contract price not stated.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street paving and sidewalks. Cost as follows. Engineer, City Engineer, South San Francisco. Owners, City of South San Francisco. Contractors, F. R. Ritchie & Co., Chronicle Bldg., S. P. paving, \$8,074.12; sidewalks, \$7,883.15.

SAN RAFAEL, MARIN CO., CAL.—Road grading and fills, \$3,995. Engineer, County Surveyor, San Rafael. Owners, Marin County. Contractor, P. P. Scilacci & H. Gisel, San Rafael. Contract price, \$3,995.

SAUSALITO, MARIN CO., CAL.—Street improvement. Cost not stated. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Contractors, Carnahan & Mulford, 45 Kearny street, S. F. Contract price not stated.

SACRAMENTO, CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, Clark & Henry Construction Co., Ochsner Bldg., Sacramento. Contract price not stated.

WOODLAND, YOLO CO., CAL.—Street paving. Cost as follows. Engineer, City Engineer, Woodland. Owners, City of Woodland. Contractors, Clark & Henry Construction Co., Ochsner Bldg., Sacramento. Contract price, 11½¢ per square foot and 12½¢ per square foot.

SONORA, TUOLUMNE CO., CAL.—Sewer construction, \$2,825.57. Engi-

neer, Town Engineer, Sonora. Owners, Town of Sonora. Contractor, W. J. Tobin, 735 Filbert street, Oakland. Contract price, \$2,825.57.

STORES AND OFFICES

SAN FRANCISCO—Stores, 1 story and base, brick and frame, \$10,000. Architect, August G. Headman, New Call Bldg., S. F. Owner, Arthur H. Rochford. Location, east Taylor south Washington, covering an area of 30 by 100 feet. Will contain modern market. Tile floors and wainscot. Patent store fronts. Exterior faced with pressed brick. Plans being prepared.

BERKELEY, ALAMEDA CO., CAL.—Stores, 1 story and base, brick, \$7,000. Architect, J. Henry Bohrer, Delger Bldg., Oakland. Owner, J. H. Wright. Location, Telegraph avenue and Ashby. Will contain three stores. Interior finish pine. Modern plumbing and electric work. Patent store fronts. Exterior faced with pressed brick. Work to be done under the superintendence of Alfred Legault, Delger Bldg., who is now taking sub-figures.

OAKLAND, CAL.—Store and lofts alteration, 3 story, brick, \$18,000. Architect, none. Owners, University Investment Co. Location, southwest corner of 14th and Washington streets. The upper floors will be rearranged for lofts. Included in the work is brick, steel, carpentry work, plumbing, plastering, electric work and painting. Plans are complete and the work will be done by Day Labor.

SANTA ROSA, SONOMA CO., CAL.—Office, 1 story, frame, \$2,000. Architects, Turton & Herbert, Santa Rosa Bank Bldg., Santa Rosa. Owners, Commercial Club. Building has been designed for offices of the organization and meeting rooms. Interior finish pine. Central heating system from adjoining bank building. Exterior faced with cement plaster. Plans being prepared.

OAKDALE, STANISLAUS CO., CAL.—Offices, 1 story and base. Class C construction, \$10,000. Architects, Stone & Wright, San Joaquin Bldg., Stockton. Owners, Oakdale Irrigation District. Revised plans are now being prepared for this building. Figures taken some time ago all ran too high and revision of the plans was necessary. Further mention will be made of the work when new bids are called for.

Contracts Awarded

LOS ANGELES, CAL.—Office addition, 3 story and base, Class A construction, \$200,000. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, Pacific Mutual Life Insurance Co. Contractors, C. J. Kubach Co., Contract price, \$200,000.

LOS ANGELES, CAL.—Office building, 3 story and base, reinforced concrete. Cost not stated. Architects, Morgan, Wallis & Morgan, Van Nuys Bldg., L. A. Owner, W. G. Kerckhoff. Contractors, Weymouth & Crowell, 2026 west 9th street, L. A. Contract price not stated.

CALEXICO, IMPERIAL CO., CAL.—Stores and offices, 2 story and base, reinforced concrete. Cost not stated. Architects, Zimmer & Tichenor, El Centro. Owner, M. Harris. Contractors, M. D. Hays Construction Co. Contract price not stated.

George Nelson, C. E.

Engineering	560 Mission St.
Financing	San Francisco, Cal.
Developments	503 Grant Bldg.
Construction	Los Angeles, Cal.

Chester B. Loomis, M. E.

CONSULTING ENGINEER

Power and Pumping Plants
Cost Studies. - Design.
Installation. - Testing
Reports.

419 Wilcox Building

Los Angeles,

California

SEATTLE, WASH.—Stores and offices 1 and 2 story, brick, hollow tile and concrete, \$50,000. Architects, Charles Lieb and Carl Gould, Denny Bldg., Seattle. Owners, Puget Mill Co. Contractors, Butler Contracting Co., Central Bank Bldg., Seattle. Contract price, \$50,000.

THEATRES

ANAHEIM, ORANGE CO., CAL.—Theatre and offices, 2 story and base, brick, \$10,000. Architect, Eugene M. Durfee, Anaheim. Owner, John Cassou. Location, Center street. Will contain motion picture theatre and stores on first floor and offices above. Interior finish pine and hardwood. Patent store fronts. Modern plumbing and electric work. Exterior faced with pressed brick. Plans being prepared.

PLAN NEW RAILROAD IN CENTRAL OREGON.

PORTLAND, ORE.—The first evidence of revival of railway construction on a considerable scale in the Northwest was afforded in Portland by the organization of the Oregon, California & Eastern Railway Company, designed to supply some 400 miles of standard gauge lines for Central Oregon and adjacent territory, at an estimated expenditure of \$7,000,000.

The project, its promoters have announced, promises a new and direct all-rail line directly south through Central Oregon to Nevada, California and the East, saving several hundred miles over the present routes to Reno, Carson City and other Nevada and Northwestern California points. It was said it also would open new and rich trade territory in Central Oregon and Northern California and Nevada.

OFFICIAL PROPOSALS.

NOTICE TO STEEL ROLLING DOOR MANUFACTURERS.

OFFICE OF THE BOARD OF STATE Harbor Commissioners, Union Depot and Ferry House, San Francisco, California.

Sealed proposals or bids will be received at this office at or prior to **11 o'clock a. m., on Friday, November 26, 1915**, for furnishing and installing steel rolling doors on the shed on Pier No. 35, on the water front of the City and County of San Francisco, in accordance with the plans and specifications prepared for these doors by the Chief Engineer and adopted by the Board August 9, 1915, and on file in this office, to which special reference is hereby made.

No bid will be received unless it is made on a blank form furnished from this office. Each bid shall be accompanied by a certified check for an amount equal to Five (5) per cent of the amount of the proposal, to be made payable to the order of the Secretary of the Board, conditioned that if the proposal is accepted and the contract awarded, and if the bidder shall fail or neglect to execute a contract and give the bond required within six days after the award is made, in that case said sum mentioned in said check shall be deemed liquidated damages for such failure and neglect and shall be paid into the San Francisco Harbor Improvement Fund.

The bond required to be not less than one-half of the amount of the bid, with two or more sureties to be approved by the Board of State Harbor Commissioners, and conditioned for the faithful performance by the contractor of all the terms and conditions of said contract according to the true intent and meaning thereof and to the satisfaction of said Board; and said bond shall be effective as provided in an act approved May 1 1911, for the protection of material men, mechanics and laborers.

Bids will not be considered by this Board unless delivered to the Secretary or to the Assistant Secretary at the office of the Secretary, Room 17, Ferry Building, at or prior to **11 o'clock a. m., on Friday, November 26, 1915**, at which time and place the bids will be opened.

The Board reserves the right to reject any or all bids if deemed for the best interest of the State.

Bidders are invited to be present at the opening of the bids.

Plans and specifications of this work to be had at Room 18, Ferry Building, upon depositing \$20.00 for same, which will be returned on return of plans and specifications.

Bidders are requested to mark envelope containing bid: "Bid for Steel Rolling Doors."

J. J. DWYER,
THOMAS S. WILLIAMS,
J. H. MCCALLUM,
Board of State Harbor Commissioners.
JEROME NEWMAN,
Chief Engineer.
LEO V. MERLE, JR.,
Secretary.

FOR CEMENT, SAND AND CRUSHED ROCK.

U. S. Engineer Office, 723 Central Building, Los Angeles, Cal., November 10, 1915.—Sealed proposals for furnishing American Portland cement, sand and crushed rock at San Pedro, Cal., will be received at this office until **11 A. M., December 10, 1915**, and then opened. Information on application. R. R. RAYMOND, Major, Engineers.

NOTICE TO CONTRACTORS.

SEALED proposals will be received by the Board of Trustees of the San Francisco Public Library and Reading Rooms, at the office of the Secretary of the Board, Hayes and Franklin streets, San Francisco, Cal., at **twelve o'clock noon, Monday, November 22, 1915**, for the "Interior Artificial Roman Travertine Stone and Plain and Ornamental Plastering of the main portions" of the San Francisco Public Library Building, in accordance with the plans and specifications on file in the office of George W. Kelham, Architect, 305 Sharon Building.

Each proposal must be accompanied by a certified check or a surety bond, in the sum of ten per cent (10%) of the amount of the bid; made payable to the Board of Trustees of the San Francisco Public Library and Reading Rooms, or the bid will not be considered. When the award of contract is made, all checks will be returned to the respective bidders, except that filed with the accepted proposal or bid, which check will be returned upon the successful bidder signing the contract and filing the required bonds.

The contractor to whom the contract is awarded will be required to furnish a labor and material bond in the sum of twenty-five per cent (25%) of the amount of the contract, also a completion bond in the sum of twenty-five per cent (25%) of the amount of the contract. The bond must be of a Surety Company or of individuals who are satisfactory to the Library Trustees. The right is reserved to reject any and all bids.

Each bid or proposal must be accompanied by sample of both "plastic" and "cast" imitation "Travertine." The samples must be plainly marked with bidder's name, and are to be 2 feet 0 inches by 2 feet 0 inches in size, and made in exact accordance with the specifications for this work.

Plans and specifications may be obtained from the architect, by depositing \$20.00, which sum will be refunded upon the return of the plans and specifications in good condition or before the date and time of the submission of the bids.

By order of the Board of Trustees of the San Francisco Public Library and Reading Rooms.

GEORGE A. MULLIN,
Secretary.

PROPOSALS FOR BUILDING.

BUILDING.—Sealed proposals, in accordance with "Proposals for Three Buildings" will be received at the naval station, Pearl Harbor, Hawaii, and at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m., December 4, 1915**, and then there publicly opened, for constructing one reinforced concrete power house, one reinforced concrete operating building and one wooden double quarters for chief operator at the naval station, Pearl Harbor, Hawaii. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR BUILDING.

BUILDING.—Sealed proposals in accordance with "Proposals for Five Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m., January 4, 1916**, and then there publicly opened, for a power house and an operating building of reinforced concrete and steel construction and three

quarters of wood construction for commanding officer, married operators and bachelor operators at the naval station, Cavite, P. I. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. Proposals will also be received at the naval station, Cavite, P. I., until **4:30 o'clock p. m., January 4, 1916**, and opened at **10 o'clock a. m., January 5, 1916**. H. R. STANFORD, chief of bureau.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 990—Proposals for Iron Castings, Wrought Iron or Steel Pipe, Mule Shoes, Horseshoe Nails, Screws, Cotter's, Tacks, Turnbuckles, Bronze Bars, Brass Chain, Shovels, Manue Forks, Mop Handles, Tool Handles, Brooms, Scrub Brushes, Roof Brushes, Paint Brushes, Snatch Blocks, Tackle Blocks, Lanterns, Buckets, Oil Cans, Lantern Globes, Window Glass, Sash Glass, Steel Tapes, Rules, Plumbbobs, Gate Valves, Hose Couplings, Door Bolts, Locks, Hasps, Hinges, Door Hooks, Furniture Casters, Hose Packing, Asbestos Gaskets, Sash Cord, Chain Line, Twine, Tarpaulins, Sheet piling, Bunting, Railway Flags, Cheesecloth, Oilcloth, Linoleum, Emery Cloth, Sandpaper, Leather Belting, Belt Lacing, Ship's Felt, Cork, Boiler Laging, Crayons, Metal Polish, Beeswax, Candles, Potassium Chlorate, Borax, Lye, Paper and White Oak Lumber.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m., November 26, 1915**, at which time they will be opened in public for furnishing the above mentioned articles. Blanks and general information relating to this circular No. 990 may be obtained from this office, or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

NOTICE TO CONTRACTORS.

OFFICE OF THE BOARD OF STATE Harbor Commissioners, Union Depot and Ferry House, San Francisco, California.

Sealed proposals or bids will be received at this office at or prior to **11 o'clock a. m., on Friday, November 26, 1915**, for furnishing material and constructing wood block pavement on Pier No. 55, on the waterfront of the City and County of San Francisco, in accordance with the plans and specifications prepared therefor by the Chief Engineer and adopted by the Board May 21, 1914, and on file in this office, to which special reference is hereby made. The materials to be used in this work shall consist of the requisite quantities of wood paving blocks, sand and asphalt. All materials will be subjected to a rigid examination and test, and if found defective, undersized, unsuitable or not as specified, will be condemned and must be immediately removed from the work by the contractor at his expense.

No bid will be received unless it is made on a blank form furnished from this office. Each bid shall be accompanied by a certified check for an amount equal to Five (5) per cent of the amount of the proposal, to be made payable to the order of the Secretary of the Board, conditioned that if the proposal is accepted and the contract awarded, and if the bidder shall fail or neglect to execute a contract and give the bond required within six days after the award is made, in that case said sum mentioned in

said check shall be deemed liquidated damages for such failure and neglect and shall be paid into the San Francisco Harbor Improvement Fund.

The bond required to be not less than one-half of the amount of the bid, with two or more sureties to be approved by the Board of State Harbor Commissioners, and conditioned for the faithful performance by the contractor of all the terms and conditions of said contract according to the true intent and meaning thereof and to the satisfaction of said Board; and said bond shall be effective as provided in an act approved May 1, 1911, for the protection of material men, mechanics and laborers.

Bids will not be considered by this Board unless delivered to the Secretary or to the Assistant Secretary at the office of the Secretary, Room 17, Ferry Building, at or prior to 11 o'clock a. m., on Friday, November 26, 1915, at which time and place the bids will be opened.

The Board reserves the right to reject any or all bids if deemed for the best interest of the State.

Bidders are invited to be present at the opening of the bids.

Plans and specifications of this work to be had at Room 18, Ferry Building, upon depositing \$20.00 for same, which will be returned on return of plans and specifications.

Sealers requested to mark envelope containing bid: "Bid for Wood Block Pavement Pier No. 33."

J. J. DWYER,
THOMAS J. WILLIAMS,
J. H. McCALLUM,

Board of State Harbor Commissioners.

JEROME NEWMAN,
Chief Engineer.

LEO V. MERLE, JR., Secretary.

NOTICE TO CONTRACTORS.

PHILIPPINE BUILDING FOR SALE.

SEALED BIDS for the purchase of the Philippine Building and fixtures pertaining thereto on the Grounds of the Panama-Pacific International Exposition will be received from date hereof until 11 A. M., November 26, 1915. Said building contains the following material from the Philippine Islands—approximately 40,000 board feet of hardwoods, 42 palma brava columns, 4,000 square yards sawali and 331 windows and transoms of shell work.

Full details relative to the building and fixtures may be obtained from the Secretary of the Philippine Board at his office in the Philippine Building between the hours of 8 A. M. and 5 P. M.

All bids should be securely sealed and accompanied by a certified check for 10% of the amount of the bid. The envelope should be marked "Bid for purchase of Philippine Building" and should be addressed to The Director-General, Philippine Board, Panama-Pacific International Exposition.

The right is reserved to reject any or all bids.

W. W. BARCLAY,
Director-General,
Philippine Board P. I. E. (*)

BIDS WANTED FOR CONSTRUCTING WIRE FENCE.

OFFICE CONSTRUCTING QUARTERMASTER, Fort Mason, Cal.—SEALED PROPOSALS for constructing wire fence at Fort Barry, Cal., will be received here until 11 A. M., November 26, 1915, and then opened. Further information on application. (*)

PROPOSAL FOR BIDS.

BIDS are requested for the structural steel and steel erection (combined) for the University Library, University of California, Berkeley, Cal.

SEALED BIDS will be received at the Office of the Comptroller, University of California, Berkeley, Cal., at or before 9 A. M., Wednesday, December 1st, for structural steel and steel erection (combined), as per plans and specifications on file and obtainable after 9 A. M., Tuesday, November 16th, at the Cashier's Window in said Office. A deposit of \$50.00 will be required

for each set of plans and specifications taken out, which deposit will be refunded upon return of said plans and specifications, accompanied by a regular bid for the work. No bids will be received unless accompanied by a certified check or bond in favor of the undersigned, equal to 10% of the bid, to secure execution of the contract by the successful bidder.

The right is reserved to reject any or all bids.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA. (*)

WEST VIRGINIA BUILDING.

PROPOSALS FOR THE SALE, WRECKING AND REMOVAL OF THE WEST VIRGINIA STATE BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION, AND FOR THE SALE OF FURNITURE, ETC.

SEALED PROPOSALS for the sale, wrecking and complete removal of the West Virginia State Building at the Panama-Pacific International Exposition at San Francisco, California, are asked by the West Virginia Commission.

TWO PROPOSALS are desired, one to be for the sale, wrecking and complete removal of the building and fixtures, and clearing lot to official grade; and the other for the sale, wrecking and complete removal of the building without fixtures, and clearing lot to official grade.

ALSO, PROPOSALS are desired for the sale of all furniture and hangings contained in the West Virginia Building. The furnishings include eight bed-room suites and a large equipment of reed furniture. Hangings, carpets, etc., are of best quality and as good as new.

Proposals on the above shall be separate and all proposals shall be securely sealed, accompanied by a certified check for ten per cent (10%) of the amount of the proposal, and mailed as follows: "To G. A. Bolden, Resident Secretary, West Virginia Commission, West Virginia Building, Exposition Grounds, San Francisco, California."

Building and furnishings may be inspected at any time between the hours of 11 A. M. and 4 P. M., Sundays excepted.

Proposals will be received up to and including noon of Thursday, November 18th, 1915. The West Virginia Commission reserves right to reject any or all bids.

WEST VIRGINIA COMMISSION,
By G. A. BOLDEN,
Resident Secretary. (*)

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock P. M. on December 4, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefore, to which special reference is made, portions of State highway as follows:

Imperial County from Dixieland to El Centro (VII-imp-13-C) about 12 miles in length, to be paved with Portland cement concrete.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the Division in which the work is situated. The Division Engineers' offices are located at Willets, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the

"Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. BLANINGTON,
CHARLES F. STERN,
California Highway Commission.
ALVIN B. FLETCHER,
Highway Engineer.
WILSON R. ELLIS,
Secretary. (*)

Dated: November 9, 1915.

ROAD.

MARINE RAILWAY.—Sealed proposals indorsed "Proposals for Marine Railway" will be received at the Bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., November 27, 1915, and then and there publicly opened for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Proposals are invited on separate component parts of the complete railway. Plans and specifications may be obtained on application to the Bureau or to the commandant of the naval station named. H. R. STANFORD, chief of Bureau.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 956.—Proposals for the purchase of Miscellaneous Iron and Steel Scrap Offered For Sale by the Panama Canal and Which is no Longer Needed.—Sealed proposals will be received at the office of the general purchasing officer the Panama Canal, Washington, D. C., until 1030 a. m., November 22, 1915, at which time they will be opened in public, for purchasing the above-mentioned articles. Bids and general information relating to this circular (No. 956) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC WORKS of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 24th of November, 1915, for doing the following work, including the furnishing of the necessary labor and materials therefore, to wit:

The construction of the Hetch-Hetchy Railroad.

Progressive payments will be made in the manner set forth in the specifications.

Said work must be done in accordance with the plans and specifications on file in the office of the Board of Public Works, to which reference is hereby made, and must be commenced within fifteen (15) calendar days and completed within one hundred (100) calendar days from the date of the contract to be made and entered into therefore.

The amount of bond for faithful performance of contract has been fixed at two hundred thousand dollars (\$200,000.00).

Thes attention of bidders is also called to Act 2395 of the Legislature of the State of California, entitled "An act to secure the payment of claims of material men, mechanics, or laborers, employed by contractors upon State, Municipal, or other public work," which act provides that every contractor to whom is awarded a contract for the execution of public work in the State of California shall, before entering upon the performance of such work, file a good and sufficient bond in an amount not less than one-half of the total amount payable by the terms of the contract. (Approved March 27, 1897, Statutes 1897, Amended 1914, Statutes 1914.)

All proposals offered shall be accom-

and be cash certified by a responsible bank payable to the order of the Clerk of the Supervisors of said City and County, for an amount not less than ten per centum of the aggregate of the proposal, and no proposal will be considered unless accompanied by such check.

Printed proposal forms will be furnished gratuitously upon application at the office of the City Engineer, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works.
F. J. CHURCHILL, Secretary.

PROPOSAL FOR THE SALE, WRECKING AND REMOVAL OF THE CITY OF NEW YORK BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED BIDS OR ESTIMATES WILL BE received by Morton L. Fouquet, Special Representative of the City of New York, at the City of New York Building, Panama-Pacific International Exposition, until 11 o'clock A. M., on **WEDNESDAY, NOVEMBER 24th, 1915 FOR THE CITY OF NEW YORK BUILDING, INCLUDING THE PLANTING.**

Building to be removed and site restored in accordance with the Rules and Regulations of the Exposition.

Removal of structure not to interfere with the packing and removal of exhibits.

The bidder to enclose with his bid a certified check, drawn to an amount equivalent to 10% of his bid, and to be prepared to furnish a certified check equivalent to the balance of his bid at the opening of the bids on Wednesday, November 24th, at eleven o'clock, A. M.

Bids will be compared and the contract awarded at a lump or aggregate sum.

The right is reserved to reject any or all bids. (*)

PROPOSALS FOR THE SALE, WRECKING AND REMOVAL OF THE FRENCH BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED PROPOSALS for the sale, wrecking and complete removal of the French Building at the Panama-Pacific International Exposition at San Francisco, California, are asked by the French Commission.

PROPOSALS are desired for the sale, wrecking and complete removal of the building and clearing lot to official grade.

Proposals shall be securely sealed, accompanied by a certified check for ten per cent (10%) of the amount of the proposal, and mailed as follows: "P. J. Gregoire, Secretary, French Commission, French Building, Exposition Grounds, San Francisco, California."

Building may be inspected at any time between the hours of 11 A. M. and 4 P. M., Sundays excepted.

Proposals will be received up to and including noon of Friday, November 26th, 1915. The French Commission reserves right to reject any or all bids.

FRENCH COMMISSION,
P. J. GREGOIRE, Secretary. (*)

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until **2 o'clock P. M., on Nov. 29, 1915**, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows: Yolo County, near the easterly side

of the Yolo Fly-pass (III-Vol-6-B), a place under basic 10-foot clear span with reinforced concrete approaches. Total length about 141 feet.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the offices of the Division Engineers at Los Angeles and San Francisco, and at the division in which the work is situated. The Division Engineers' offices are located at WHITIS, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made upon a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
AUSTIN B. FLETCHER,
Highway Engineer.
WILSON R. ELLIS,
Secretary. (*)

Dated: Nov. 1, 1915.

NOTICE TO HOUSE MOVERS.

FOR SALE for immediate removal two frame buildings, No. 29 and No. 71 Bartlett Street, bet. 21st and 22nd Sts. Address: Reid road, 104 Montgomery St., San Francisco. (*)

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Three Buildings" will be received at the naval station, Pearl Harbor, Hawaii, and at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m. November 27, 1915**, and then publicly opened, for constructing one reinforced concrete power house, one reinforced concrete operating building and one wooden double quarters for chief operators at the naval station, Pearl Harbor. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station, named, H. R. STANFORD, chief of bureau.

NOTICE TO CONTRACTORS.

OFFICE CONSTRUCTION QUARTERMASTER, Fort Mason, Cal.—**SEALED PROPOSALS** will be received here until **November 24th, 1915**, and then opened for constructing (including plumbing, heating and lighting). Addition to Nurses Dormitory, Letterman General Hospital. Further information on applications. (*)

PROPOSALS FOR BUILDING REPAIRS.

BUILDING REPAIRS—Treasury Department, Supervising Architect's Office, Washington, D. C.—Sealed proposals will be opened in the office at **3 p. m. November 18, 1915**, for the extension, remodeling, etc., of the U. S. post office at Boise, Idaho. Drawings and specifications may be obtained from the custodian at Boise, Idaho, or at this office, in the discretion of the supervising architect, JAMES A. WETMORE, acting supervising architect.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock, noon, Monday, December 13, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of a building to be known as "Laun-

dry." **Norwalk State Hospital**, near Norwalk, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Said bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on plans and specifications; the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Laundry, Norwalk State Hospital, near Norwalk, California."

(SIGNED) W. F. McCLURE,
State Engineer. (*)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock, noon, Tuesday, December 14th, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of the "Alterations and Additions to Dairy Building," California School for Deaf and Blind, Berkeley, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Said bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on plans and specifications; the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for the Alterations and Additions to Dairy Building, California School for Deaf and Blind, Berkeley, California."

(SIGNED) W. F. McCLURE,
State Engineer. (*)

NOTICE TO CONTRACTORS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., **November 10, 1915**—**SEALED PROPOSALS** will be opened in this office at **3 P. M., December 22, 1915**, for the construction complete (including mechanical equipment and approaches) of the United States post office at Aurora, Neb. Drawings and specifications may be obtained from the custodian of site at Aurora, Neb., or at this office, in the discretion of the Supervising Architect, JAS. A. WETMORE, Acting Supervising Architect. (*)

The Municipal Bond Market is looking up, and the Bond Buyers are looking the "Building and Engineering News" up. A proposal ad for your bonds in our columns will bring competition.

ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

BRIDGES AND BRIDGE TIMBERS—Cost not stated. Engineer's name not given. Owners, Hankow-Canton Railroad. American consular officer reports that tenders will be received until December 7, 1915, by Robert W. Hunt & Co., 2200 Insurance Exchange, Chicago, Ill., and West Street Building, New York, N. Y., for the construction of steel bridges and the furnishing of ridge timbers for the Hankow-Canton Railway, China. Copies of the drawings and specifications may be examined at the bureau or its branch offices. Refer to files Nos 67557 and 68110). An Francisco Branch, New Custom House.

STEEL ROLLING DOORS—Cost not stated. San Francisco. Engineer, Assistant State Engineer, Ferry Bldg., S. F. Owners, State of California. Bids will be opened on November 26th by the State Board of Harbor Commissioners, Ferry Bldg., for furnishing and installing steel rolling doors on Pier No. 35. Plans and specifications to be secured from the office of the Secretary at the Ferry Building. An official proposal appears in another column of this issue.

PAVING—Cost not stated. San Francisco. Engineer, Assistant State Engineer, Ferry Bldg., S. F. Owners, State of California. Bids will be opened on November 26th for wood block paving on Pier No. 35. Plans can be secured from the office of the Secretary, Ferry Building. An official proposal appears in another column of this issue.

POWER DEVELOPMENT—\$11,000,000. San Francisco. Engineer, Engineering Department Pacific Gas and Electric Co., S. F. Owners, Pacific Gas and Electric Co. The State Railroad Commission has authorized the Pacific Gas and Electric Co. to issue to March 1, 1917, \$12,500,000 worth of first preferred stock. With the exception of \$1,147,500, which will be used in reimbursing the treasury, the issue will be used in construction work. The main outlays planned are: For the construction of a concrete dam and spillway to increase storage capacity of Lake Gardiner, Placer County, \$703,116.27, or increasing the capacity of the Hum plant, Placer County, to 10,000 horsepower, \$565,976.78. For the construction of three power houses in the Lake Spaulding District, \$1,110,976.18, or the construction of a three-spool transformer line from the Drum power house to Cordelia substation, \$566,299.33. For the building of a substation at Cordelia and the construction of a power line to the Ridge substation, \$2,036,217.75. For the extension of the Cordelia-San Rafael power line from Schutzen Park across the Golden Gate to Station F, in San Francisco, \$72,913.12. For the construction of an eight inch pipe line to supply Potrero Peninsula to the San Francisco County

line, \$17,938.16. The erection of the eight-story class A office building, and which is now under construction on Sutter street, San Francisco, at a cost of \$113,285, is also included in the appropriation. The remainder of the issue is apportioned in small amounts for construction and extension work of minor import.

APARTMENT HOUSE—3 story and base, frame, \$10,000. San Francisco. Architect, Charles J. Rousseau, 16 Kearny street, S. F. Owner, John G. Kincannon, 215 Montgomery street. Location, south Washington east of Steiner, covering an area of 25 by 92 feet. Will contain six suites of three rooms and bath. Interior finish pine with some elm panels and hardwood floors. Wall beds and hot water system. Tile baths. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—6 story and base, brick and steel, \$85,000. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Gerard Investment Co. Location, southeast Geary and Leavenworth streets, covering an area of 44 by 33½ feet. Will contain 40 suites of two and three rooms. All apartments equipped with private baths and wall beds. Interior finish pine, hardwood and white enamel. Hardwood floors. Steam heat, oil burning system, automatic elevator and hot water system. Bath rooms finished in tile. Marble and tile wainscot. Ornamental plaster. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and segregated figures being taken.

APARTMENT HOUSE—3 story and base, brick and steel, \$15,000. San Francisco. Architect, J. C. Hladik, Monadnock Bldg., S. F. Owner, Mrs. N. C. Burnett. Location, east Hyde north of Ellis, covering an area of 25 by 110 feet. Will contain six suites of three and four rooms. Interior finished in pine and hardwood with some hardwood floors. Steam heat and hot water system. Bath rooms finished in tile. Wall beds. Exterior faced with pressed brick. Plans complete and figures to be taken at once.

APARTMENT HOUSE—3 story and base, frame, \$12,000. San Francisco. Architect, David C. Coleman, Merchants' National Bank Bldg., S. F. Owners, Friedman Bros. Location, west Guerrero north of 20th, covering an area of 46 by 82½ feet. Will contain 12 suites of three and four rooms. Interior finish pine with some elm panels and hardwood floors. Wall beds. Steam heat and hot water system. Exterior covered with cement plaster. Plans complete and segregated figures being taken.

APARTMENT HOUSE AND STORES—4 story and base, brick and steel, \$70,000. Architect's name not given. Owner, Robert Trust, 26th and Howard

street. Location, 26th and Mission streets, covering an area of 100 by 100 feet. Will contain six stores and entrance on first floor. Upper floors arranged for two and three room apartment. Interior finish pine throughout. Some hardwood floors. Steam heat, oil burning system, automatic elevator and hot water system. Bath rooms tile wainscot and composition floors. Patent store fronts. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—3 story and base, frame, \$38,000. San Francisco. Architect, none. Owner, Michael Dempniak, 728 Page street, S. F. Location, northwest corner Vallejo and Leavenworth streets, covering an area of 90 by 57 feet. Will contain two, three and four room apartments. Interior finish pine and hardwood with some hardwood floors. Steam heat and a hot water supply. Bath rooms tile. Wall beds. Exterior covered with cement plaster and shiplap. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$1,000. San Francisco. Architect, Joseph A. Leonard, 85 Cerritos avenue, S. F. Owners, Urban Realty Co. Location, northwest corner Paloma and Ocean avenue. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels tile and brick. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$13,000. San Francisco. Architect, W. H. Crim, Jr., 125 Kearny street, S. F. Owner, Henry R. William. Location, north Vallejo east of Divisadero. Will contain ten rooms, several baths and a basement garage. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors throughout. Furnace heat, hot water system and open fire places. Mantels tile and brick. Bath rooms tile. Exterior covered with cement plaster. Bids in and under advisement.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, Edward E. Young, 251 Kearny street, S. F. Owners, McMullin-von Voorhies Co., 110 Jessie street, S. F. Location, Clarendon Court, S. F. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, white enamel and hardwood. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—5, 2 story and base, frame, \$3,000 each. San Francisco. Architect, none. Owners, MacArthur

Bros., 1560 Fell street, S. F. Location, north 19th west of Douglas. Will contain six and seven rooms and bath. Interior finish pine and hardwood veneer. Hardwood floors. Open fire places and tile and brick mantels. Tile bath rooms. Automatic water heaters. Exteriors covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,000. San Francisco. Architect, none. Owner, John E. McCarthy, 1340 13th avenue, S. F. Location, east San Gabriel south Capistrano. Will contain six rooms and bath. Interior finish pine. Hardwood floors and open fire place. Mantel tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 1 story and base, frame, \$2,000 each. San Francisco. Architect, none. Owners, MacArthur Bros., 1560 Fell street, S. F. Location, north Persia east Naples. Will contain six rooms and bath. Interiors finished in pine throughout. Some hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exteriors rustic and cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$1,900. San Francisco. Architect, none. Owner, A. C. Hurrell, 9 Sharon street, S. F. Location, east 10th avenue south Balboa. Will contain two flats of five and six rooms. Interior finish pine and hardwood with hardwood floors, open fire places, tile mantels and automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, L. B. Ham, 1643 Lake street, S. F. Location, north California west 17th avenue. Will contain two flats of six and seven rooms. Interior finish pine and hardwood floors, open fire places, tile or brick mantels and automatic water heaters. Tile baths. Exterior cement plaster. Plans complete and work by Day Labor.

FLATS—2 story and base, frame, \$7,00. San Francisco. Architect, Al-

bert Lapachet, 110 Sutter street, S. F. Owner's name withheld. Location, Union near Hyde. Will contain two flats of seven rooms and bath. Interior finish hardwood and white enamel, hardwood floors, open fire places, furnace heat and tile mantels. Tile baths. Automatic water heaters. Exterior covered with cement plaster. Plans being prepared.

GARAGE—2 story and base, reinforced concrete, \$35,000. San Francisco. Architect, August G. Headman, New Call Bldg., S. F. Owner, J. K. Bigelow. Location, north Bush between Powell and Mason, covering an area of 87½ by 137½ feet. Fireproof construction with concrete floors and roof slabs. Two inclines. Special electric work and gasoline storage tanks. Exterior faced with cement plaster. Plans complete and figures being taken.

RESTORATION WORK—Concrete construction, \$18,000. San Francisco. Architect, G. A. Applegarth, Spreckels Bldg., S. F. Owners, United States Government. Plans are being completed by the California Historical Society for the complete restoration of the headquarters of the Spanish Commandante of 1775, headquarters of the Mexican Commandante of 1824 and the first headquarters of the American Army of 1846 in the Presidio of San Francisco. The present building used as officers' club and the only adobe building left on the Presidio reservation, is the nucleus around which the society plans to work. A new front, one story in height and 159 feet long and 103 feet deep will be added. It is planned to make the new building one of the highest types of old Mission architecture in the State. Rooms will be provided around an open patio. Congress will be asked for a special appropriation.

HOSPITAL ALTERATIONS—Cost not stated. San Francisco. Architect, Albert Lapachet, 110 Sutter street, S. F. Owners, French Hospital Association. Location, 5th avenue and Geary. Work will consist of extensive alterations to kitchen and kitchen equipment, and the installation of a modern ventilating system. Plans complete and figures being taken.

LIBRARY WORK—Cost not stated. San Francisco. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Bids will be opened by the Library Trustees on November 22 for furnishing artificial travertine stone, plain and ornamental plastering for the new main library building in the Civic Center. Plans can be secured from the office of the architect. An official proposal appears in another column of this issue.

BEACH ESPLANADE—\$59,975. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. J. D. Hannah submitted the lowest figure for this work and will probably be awarded the contract. A complete list of the bids appears under the heading of San Francisco in this issue.

OAKLAND AND ALAMEDA COUNTY

STREET IMPROVEMENT—Cost not stated. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. Bids will be opened on December 2 for work under resolutions as follows: That 6th avenue be paved with oil macadam from the northwestern line of East 14th street to the northeastern line of the Jeannette Von Ah Tract. That Harmon avenue and Bromley avenue from the northwestern line of said tract to the northwestern line of 6th avenue, each be curbed with redwood, guttered with concrete gutters 3 feet wide, and paved with oil macadam; also that cement sidewalks six feet wide be constructed on both sides of Harmon avenue and on the northeastern side of Bromley avenue.

STREET IMPROVEMENT—Cost not stated. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. Bids will be opened on December 2 for the improvement of 27th avenue, from the northeastern line of 22nd street, be graded, curbed with redwood, guttered with concrete gutters 3 feet wide, paved with oil macadam, and sidewalked with cement sidewalks six feet wide; also that the crossing of 27th avenue with East 22nd street be graded, curbed with redwood, paved with oil macadam, sidewalked with cement sidewalks and culverted with two corrugated iron and concrete culverts each having two branches.

STREET IMPROVEMENT—Cost not stated. Hayward, Alameda Co., Cal. Engineer, Town Engineer, Hayward. Owners, Town of Hayward. At the last meeting of the Town Trustees specifications were approved for the improvement of the B and Watkins street crossing. Bids on this work will be called for shortly. The matter of repairing First street from A to the bridge and upper A street from 3rd street to the bridge was referred to the street and building committee and the Town Engineer.

RESIDENCE—2 story and base, frame, \$5,000. Oakland, Cal. Architects, Banning & Stewart, 5215 Broadway. Oakland. Owners, Banning & Stewart. Location, east Belgrave north Napa. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel, hardwood floors. Furnace heat and open fire place. Mantel tile or brick.

CITY BIDS OPENED.

NEW BIDS OPENED FOR CONSTRUCTION OF OCEAN BEACH ESPLANADE. J. D. HANNAH LOW MAN FOR WORK.

Nine sets of bids were opened at Friday's meeting of the Board of Public Works for the construction of the reinforced concrete esplanade. J. D. Hannah submitted the lowest bid at \$59,975 and will probably be awarded the contract. Proposition 1 is for the esplanade per lineal foot and Proposition 2 for reconstructing rubble wall per cubic yard.

C. E. Lamburth submitted the lowest bid when the work was first figured at \$49,900, but asked that he be allowed to withdraw his bid. Following is a complete list of the bids received:

Bidder	Prop. 1	Prop. 2	Prop. 3
J. D. Hannah	\$ 89.50	\$6.00	\$59,975
E. S. Mulford	103.00	6.00	65,750
C. E. Lamburth	104.70	6.00	69,855
Healy Tibbitts Constr. Co.	109.00	5.00	72,350
Contra Costa Constr. Co.	102.00	3.00	67,200
T. J. Shea	100.00	5.00	66,500
Karl Ehrhart	102.00	3.50	67,350
Foster-Vogt & Co.	95.20	4.35	63,420
John Grace	98.00	8.00	66,100

Tile bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, \$3,000. Piedmont, Alameda Co., Cal. Architect, none. Owner, V. N. Strang, 1521 9th street, Alameda. Location, Nova Piedmont. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile mantels. Bath room tile. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,000. Piedmont, Alameda Co., Cal. Architect, none. Owner, A. H. Johanson, 1020 55th street, Oakland. Location, west Greenbank east Lake avenue. Will contain six rooms and bath. Interior finish pine with some elm panels and hardwood floors. Open fire place and tile or brick mantel. Tile bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, \$4,000. Piedmont, Alameda Co., Cal. Architect, Olin S. Grove, 2911 Telegraph avenue, Oakland. Owner, Mrs. Josiva Rose. Location, Manor Drive. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, G. W. Quinn, 108 9th avenue, S. F. Location, west 10th avenue north Bancroft. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, Cost not stated. Berkeley, Alameda Co., Cal. Architect, Eugene K. Martin, 2192 Shattuck avenue, Berkeley. Owner, L. Berovich. Location, Cedar and Arch streets. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile mantels. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

RESIDENCE — 2 story and base, frame, \$3,500. Oakland, Cal. Architect, none. Owner, B. A. Stewart, 8 Fairview avenue, Piedmont. Location, east Valle Vista. Will contain six rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath room tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, \$4,250. Oakland, Cal. Architect, none. Owner, H. M. Swalley, 710 Walker avenue, Oakland. Location, northwest corner Hudson and Arbor streets. Will contain seven rooms,

bath and sleeping porch. Interior finish pine, white enamel and hardwoods. Hardwood floors, furnace heat and open fire places. Mantels tile or brick. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 2 story and base, frame, \$8,000. Piedmont, Alameda Co., Cal. Architect, Sidney B. Newsom, Nevada Bank Bldg., S. F. Owner, R. B. Bain. Will contain ten rooms, three baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels tile and brick. Automatic water heater. Baths tile. Exterior cement plaster. Plans complete and revised figures being taken.

RESIDENCE — 2 story and base, frame, \$3,000. Oakland, Cal. Architect, Hiram K. Lovell, Dalziel Bldg., Oakland. Owner, F. L. Wayer. Location, east Dana north Alcatraz. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,250. Berkeley, Alameda Co., Cal. Architect, none. Owner, C. J. Pfarrang, 5487 Claremont avenue, Oakland. Location, east California north Derby. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,500. Berkeley, Alameda Co., Cal. Architect, none. Owner, H. C. Pfarrang, 720 Forest street, Oakland. Location, north Derby west Grant. Will contain five rooms and bath. Interior finish pine. Hardwood floors, open fire place and automatic water heater. Exterior cement plaster. Plans complete and work by Day Labor.

RESIDENCE — 2 story and base, frame, \$4,000. Oakland, Cal. Architect, M. I. Diggs, 2444 Bowditch, Berkeley. Owner, J. C. O'Connor. Location, east Carlton south Prospect. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels tile and brick. Bath rooms tile. Automatic water heater.

Exterior cement plaster. Plans complete and work by Day Labor.

RESIDENCE — 2 story and base, frame, \$2,250. Piedmont, Alameda Co., Cal. Architect, none. Owner, W. J. Kerrigan, 5153 Shafter avenue, Oakland. Location 21 Pacific avenue. Will contain five rooms and bath. Interior finish pine, hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, L. G. Pfarrang, 541 Shafter avenue, Oakland. Location, north 11th street west Shafter. Will contain five rooms and bath. Interior finish pine. Some hardwood floors, open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

RESIDENCE — 1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, G. W. Bauman, 5360 Trask street, Oakland. Location, northeast corner Trask and Maris. Will contain seven rooms and bath. Interior finished in pine. Some hardwood floors, open fire place and tile mantel. Automatic water heater. Exterior cement plaster. Work by Day Labor.

RESIDENCE — 2 story and base, frame, \$3,000. Oakland, Cal. Architect, none. Owner, Paul Woodburn, 2965 Greenwood, Oakland. Location, east Broadway south Prospect. Will contain seven rooms and bath. Interior will be finished in pine and white enamel. Hardwood floors, open fire places and tile or brick mantels. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

APARTMENT HOUSE ALTERATION — 2 story, frame, \$2,000. Oakland, Cal. Architect, none. Owner, H. T. Sherriff, 1218 6th avenue, Oakland. Location, Athol avenue near Newton. Work will consist of altering two story frame dwelling into two-room apartments. Plans complete and work to be done by Day Labor.

FLATS AND STORE — 2 story and base, frame, \$5,000. Oakland, Cal. Architect, none. Owner, C. Welcher, 8412 East 14th street, Oakland. Location, northwest corner 96th avenue and East 14th street. Will contain stores and flats. Interior finish pine. Open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic. Plans complete and work by Day Labor.

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San Francisco

HOSPITAL DORMITORY AND DAY HALL—2, 2 story. Class A construction. Cost not stated. Oakland, Cal. Architect, Charles Peter Weeks. Mutual Bank Bldg., S. F. Owners, Alameda County. An official proposal calling for bids on this work, which were to have been opened on November 29th, has been rescinded. Further mention will be made when new bids are called.

SCHOOL PAINTING—\$2,150. Berkeley, Alameda Co., Cal. Architect, State Architect George E. McQuigall, Sacramento. Owners, State of California. Bids opened for painting at the California School for the Deaf and Blind show D. Zelinsky, S. F., low at \$2,150. He will probably be awarded the contract. A complete list of the bids appears under the heading of Oakland and Alameda in this issue.

STORES—1 story and base, brick, \$7,200. Berkeley, Alameda Co., Cal. Architect, J. Henry Boehrer, Delger Bldg., Oakland. Owner, J. H. Wright. Location—Telegraph avenue and Ashby. Will contain three stores. Interior finish pine. Modern plumbing and electric work. Patent store fronts. Exterior faced with pressed brick. Work to be done under the superintendence of Alfred Legault, Delger Bldg., who is now taking sub-figures.

STORE AND LOFTS ALTERATION—3 story, brick, \$18,000. Oakland, Cal. Architect, none. Owners, University Investment Co. Location, southwest corner of 14th and Washington streets. The upper floors will be rearranged for lofts. Included in the work is brick, steel, carpentry work, plumbing, plastering, electric work and painting. Plans are complete and the work will be done by Day Labor.

Receive Bids For Painting At Berkeley.

D. Zelinsky Will Probably be Awarded
Contract for Work at State In-
stitution for Deaf and Blind.

(By Special Wire.)

SACRAMENTO, CAL., Nov. 10th, 1915.—The following bids were opened at Sacramento for painting at the Berkeley Institution for the Deaf and Blind. D. Zelinsky of San Francisco presented the low bid at \$2,150 and will probably be awarded the contract. Following is a complete list of the bids received:

Painting at Berkeley.

D. Zelinsky	\$2,150
The Tozer Co.	2,375
Isidor Kissel	2,500
C. J. Frisk	2,640
W. T. Baker	2,700
Schneider-Shoefelt & Jones ..	2,740
J. Llewlyn	2,900
C. B. Sohig	3,360
Mayer Walk and John Metzger ..	3,450
Robert Swan	3,480
Elling A. Hansen	3,675
Fairwell & Nelson	3,860
Ferd F. Christ	3,988
Vincent J. Donovan	4,900

SAN JOSE AND THE SANTA CLARA VALLEY

BRIDGE—Steel and concrete. Cost not stated. Santa Cruz, Santa Cruz Co., Cal. Engineer, County Surveyor, Santa Cruz. Owners, Santa Cruz County. Bids were opened for the furnishing of material and for the construction of the bridge over the Pajaro River at Chittenden, the cost of which is to be borne by Santa Cruz and San Benito counties. The following bids were received: The Midland Bridge Co., Kansas City, Mo., \$4,957 and \$1,379 for construction; Halston Iron Works, 20th and Indiana, S. F., \$5,170; Dyer Bros., 17th and Kansas, S. F., \$4,200; Clinton Bridge Works, Crocker Bldg., S. F., \$5,094; Security Construction Co., 38th and Alameda, Los Angeles, \$5,654. All bids were taken under advisement.

STREET PAVING AND CULVERTS—Cost not stated. San Mateo, San Mateo Co., Cal. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Bids will be opened on November 22 at 8 p. m. for grading, laying there-in corrugated iron culverts, and paving with an asphaltic concrete wearing surface 1½ inches thick laid upon a hydraulic cement concrete base 4 inches thick, portions of El Camino Real between San Mateo Creek and the northwesterly limits.

STREET PAVING—Cost not stated. San Mateo, San Mateo Co., Cal. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. At the last meeting of the City Trustees, steps were taken to pave the intersections of cross streets with the county road. The funds for the improvements has been provided and bids will soon be called for.

STREET PAVING—Cost not stated. San Mateo, San Mateo Co., Cal. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. A majority voted in favor of the street paving additions 1, 2, 3 and 4 together with the Burlingame Grove Tract. The engineer has been directed to prepare the necessary plans and specifications for the work. Bids will be called on the completion of the plans.

STREET IMPROVEMENTS—Cost not stated. Daly City, San Mateo Co., Cal. Engineer, City Engineer, Daly City. Owners, Daly City. A resolution has been passed by the Board of Trustees declaring its intention to improve portions of Mission road, Melrose street, Myrtle street, Garden street, Colma street, Winter street, Ocean street, Knowles avenue, Theta Avenue, Vista avenue, Park avenue, north, Park avenue south, Lake avenue and Orange avenue.

SCHOOL—1 story and base, frame. Cost not stated. San Bruno, San Mateo Co., Cal. Architects, Edwards & Norberg, Bank Bldg., Burlingame. Owners, San Bruno School District. The building will contain four class rooms and an assembly hall. Interior finish pine with maple floors. Central heating system. Modern plumbing and electric work. Exterior cement plaster. Plans being prepared.

STREET PAVING—Cost not stated. Salinas, Monterey Co., Cal. Engineer, City Engineer, Salinas. Owners, City of Salinas. Plans are now being completed for the macadamizing of Sasual

street in Salinas. The street will be improved from Monterey to California street. Further information may be had from the City Engineer.

Contracts Awarded.

BRIDGE—Concrete and timber, \$1,895. Hollister, San Benito Co., Cal. Engineer, County Surveyor, Hollister. Owners, San Benito County. Contractor, E. J. Spaulding, Hollister. Contract price, \$1,895.

STREET PAVING—Cost not stated. Morgan Hill, Santa Clara Co., Cal. Engineer, Town Engineer, Morgan Hill. Owners, Town of Morgan Hill. Contractors, Casley & Hamilton, San Jose. Contract price not stated.

STREET PAVING AND SIDEWALKS—Cost as follows. South San Francisco, San Mateo Co., Cal. Engineer, City Engineer, South San Francisco. Owners, City of South San Francisco. Contractors, F. R. Ritchie & Co., Chronicle Bldg., S. F. paving, \$8,074.12; sidewalks, \$7,883.15.

RESIDENCE—1 and 2 story and base, frame, \$39,000. Saratoga, Santa Clara Co., Cal. Architect, Carl Werner, Pheasant Bldg., S. F. Owner, Bradford Webster. Contractor, John Rodoni, Saratoga. Contract price, \$39,000.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

STREET IMPROVEMENTS—Cost not stated. San Rafael, Marin Co., Cal. Engineer, City Engineer, San Rafael. Owners, City of San Rafael. At the last meeting of the City Trustees the matter of improving several streets was brought up. A resolution establishing the grade on Pine street was adopted. Specifications for street improvements were adopted as follows: Sixth street from B to H; D from San Rafael avenue to Wolfe avenue; San Rafael avenue from C to D; Clark street its full length from Ross to Greenwood avenue; C street from 3rd to Mahon Creek; G street from 5th to the railroad; Center street from H to J street; Pine from Center to Harcourt; Cljos street from 3rd to 4th; Toll road from 3rd street to the city limits. All of these streets are to be macadamized with an asphalt surfacing, except the town road, which is to have a concrete base, the same as the State highway, the concrete surface to be 20 feet wide with a 3-foot shoulder on either side. The asphalt surface on the macadamized streets is to be a thin coating which will cost about 1 cent per foot.

BOULEVARD CONSTRUCTION—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, County Surveyor R. R. Arnold, Martinez. Owners, Contra Costa County. Plans have been completed by County Surveyor R. R. Arnold for the construction of the new boulevard to Mount Diablo from the tunnel road in this city. The plans will be brought before the district boulevard commissioners and then go to the Board of Supervisors for approval.

MAUSOLEUM—1 story, reinforced concrete, \$300,000. Sunset View Cemetery, Contra Costa Co., Cal. Architect's name not given. Owners, Pacific Mausoleum Co., Union Savings Bank Bldg., Oakland. Will contain 1,000 crypts, 509 niches for urns and chapel. Con-

struction fireproof. Art glass, modern plumbing and electric work. Ornamental iron. Exterior faced with cement plaster. Plans complete and work to be carried on under Day Labor system by J. Flood Walker, 303 East 14th street, Santa Ana.

FENCING—Cost not stated. Fort Barry, Marin Co., Cal. Engineer, Constructing Quartermaster, Fort Mason. Owners, United States Government. Bids will be opened on November 26th for wire fencing at Fort Barry. Plans can be secured from the Constructing Quartermaster. An official proposal appears in another column of this issue.

SCHOOL—1 story and base. Class C \$10,000. Richmond, Contra Costa Co., Cal. Architects name not given. Owners, City of Richmond. Bids will be received up to November 20th for the construction of the first unit of the Pullman School. The complete building will cost in the neighborhood of \$40,000. Plans can be secured from the Clerk of the Board of Education.

OFFICE—1 story, frame, \$2,000. Santa Rosa, Sonoma Co., Cal. Architects, Turton & Herbert, Santa Rosa Bank Bldg., Santa Rosa. Owners, Commercial Club. Building has been designed for offices of the organization and meeting rooms. Interior finish pine. Central heating system from adjoining bank building. Exterior faced with cement plaster. Plans being prepared.

Contracts Awarded.

ROAD GRADING AND FILL—\$3,995. San Rafael, Marin Co., Cal. Engineer, County Surveyor, San Rafael. Owners, Marin County. Contractors, P. F. Sciaccia & H. Gisel, San Rafael. Contract price, \$3,995.

STREET IMPROVEMENT—Cost not stated. Sausalito, Marin Co., Cal. Engineer, Town Engineer, Sausalito. Owners, Town of Sausalito. Contractors, Carnahan & Mulford, 45 Kearny street, S. F. Contract price not stated.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

BRIDGE—Reinforced concrete, \$6,000. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. In response to a petition presented, the County Supervisors have directed that a bridge be constructed at the Santa Maria crossing on the road leading from Nipomo to Santa Maria; also that the road be repaired where necessary at a cost not to exceed \$6,000. The work will be done by the county.

BRIDGE AND CULVERTS—Reinforced concrete. Cost not stated. Hanford, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. At the last session of the Board of Supervisors, plans and specifications for bridges and culverts on Highway No. 1, divisions A and B, were accepted, and the County Clerk instructed to advertise for bids for their construction. This portion of the county improved highway is that running north and west from this city

to Hardwick, and north five miles from the fair ground road three miles west of this city. Further information may be had from the County Engineer at Hanford.

BRIDGE—Reinforced concrete. Cost not stated. Corcoran, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. The County Supervisors have authorized Supervisor McClellan to construct a bridge over the Tule River on what is known as Dairy avenue, running south of Corcoran.

BRIDGES—Reinforced concrete. Cost as follows. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. Contracts were let for the construction of five bridges over Cross Creek on the Goshen-Traver division of the State Highway in Tulare County at the last meeting of the County Supervisors. The contracts were awarded to the following: Parlier Construction Co. bridge No. 1, \$1,512; bridge No. 3, \$3,355; bridge No. 5, \$3,388; Noble, Sullivan & Noble, bridge No. 2, \$2,072; Manning Bros., Fresno, bridge No. 4, \$2,270.

ARCH—Concrete, \$2,000. Fresno, Fresno Co., Cal. Architects, Glass & Butner, 3 Republican Bldg., Fresno, for the construction of the arch which will be erected at the southern entrance of Van Ness Boulevard. Bids will be called for in a few days. Further information may be had from the architects.

HIGHWAY CONSTRUCTION—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Plans of the County Highway Commission for the construction of division 11, section 3 of the Caliente-Kernville highway were accepted by the Board of Supervisors and bids will be received until 10 o'clock a. m. December 9th. The plans of the commission for the highway of division 5, section 1-A, McKittick-Bakersfield road, were also accepted and bids will be received until December 9 at 10:30 a. m.

IRRIGATION WORK—Concrete drops. Modesto, Stanislaus Co., Cal. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Thurston & Co., Mechanics' Institute Bldg., S. F., presented the lowest figure for drops in lateral No. 3 at \$20,956.95 and will probably be awarded the contract.

IRRIGATION WORK—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Chief Engineer P. C. Herrmann of the Modesto Irrigation District was authorized to draw plans and specifications for the Weldly fill on lateral No. 1, four miles east of Modesto, to take the place of a wooden flume now doing service, by the Board of Directors of the Modesto Irrigation District at a recent meeting. Authorization was also given for drawing plans for concrete headgates for laterals No. 4 and 5.

RESIDENCE—2 story and base, frame, \$5,000. Fresno, Fresno Co., Cal. Architect, none. Owner, H. H. Chorbajain, Fresno. Location, M street between Mona and Ventura. Will contain eight rooms, bath and sleeping porch. Interior finish pine and hardwood with white enamel. Hardwood floors. Open fire places and tile mantels. Bath room

tile. A tile water closet. Exterior covered with cement plaster. Plans being prepared.

RESIDENCE—1 story and base, frame, \$2,000. Fresno, Fresno Co., Cal. Architect, none. Owner, C. L. Saylor, 1035 Green street, Fresno. Location, Fresno Heights. Will contain six rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior cement and rustic. Plans complete and work by Day Labor.

BRIDGE—Reinforced concrete. Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. At the last meeting of the supervisors bids were ordered advertised for a bridge on the Brundage Lane road over the central branch of Kern Island canal, to be opened on December 7th at 10 a. m.

JAIL—1 story, reinforced concrete. Cost not stated. Dinuba, Tulare Co., Cal. Architect, none. Owners, Town of Dinuba. A new three-cell building will be constructed in Dinuba. The county will pay half the cost of the proposed building. Further information may be had from the City Clerk at Dinuba.

IRRIGATION WORK—Cost not stated. Turlock, Stanislaus Co., Cal. Engineer's name not given. Owners, Turlock Irrigation District. At the last meeting of the Directors of the Turlock Irrigation District the following improvements to the district were considered. The extension of lateral 8 and the construction of a new side gate in the Ceres main, at the head of the Yeiser ditch.

SCHOOL ADDITION AND OUT BUILDINGS—Frame. Cost not stated. Munich School District, Merced Co., Cal. Architects, Cowell & Bedeser, Merced. Owners, Munich School District. Bids will be opened on November 30th for constructing an addition to the present building and building out buildings. Plans can be secured from the architects.

SCHOOL—1 story and base, reinforced concrete, \$40,000. Kingsburg, Fresno Co., Cal. Architects, Johnson Bros., Kingsburg. Owners, Kingsburg School District. Bids will be called for at once by the Trustees of Kingsburg Union High School District for the construction of a school building for which bonds have already been sold.

OFFICES—1 story and base, Class C construction, \$10,000. Oakdale, Stanislaus Co., Cal. Architects, Stone & Wright, San Joaquin Bldg., Stockton. Owners, Oakdale Irrigation District. Revised plans are now being prepared for this building. Figures taken some time ago all ran too high and revision of the plans was necessary. Further mention will be made of the work when new bids are called for.

Contracts Awarded

IRRIGATION CANAL WORK—Cost not stated. Oakdale, Stanislaus Co., Cal. Engineer's name not given. Owners, Oakdale Irrigation District. Contractor, Edward O'Malley, 180 Jessie street, S. F. Contract taken on percentage basis.

HIGHWAY CONSTRUCTION—\$13,164.54. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractor, Robert Shearer, Pacific Electric Bldg., L. A. Contract price, \$13,164.54.

BRIDGE—Reinforced concrete, \$4,725. Merced, Merced Co., Cal. Engineer, County Surveyor A. E. Cowell, Merced. Owners, Merced County. Contractors, Angle & Bibler, Dos Palos. Contract price, \$4,725.

PASSENGER STATION—1 and 2 story reinforced concrete, \$13,000. Visalia, Tulare Co., Cal. Architect, Engineer Department Southern Pacific Co., Flood Bldg., S. F. Owners, Southern Pacific Co. Contractor, E. E. Ether-ton, Monadnock Bldg., S. F. Contract price, \$13,000.

SCHOOL—1 story, brick, \$8,000. Goshen, Tulare Co., Cal. Architect, Ernest J. Kump, Lowell Bldg., Fresno. Owners, Goshen School District. Contractor, Charles D. Sturtevant, Fresno. Contract price, \$8,000.

STREET PAVING—Cost not stated. Lindsay, Tulare Co., Cal. Engineer, City Engineer, Lindsay. Owners, City of Lindsay. Contractors, Worswick Street Paving Co., Union National Bank Bldg., Fresno. Contract for five blocks. Cost not stated.

ROAD CONSTRUCTION—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractors, Clark-Henery Co., Ochsner Bldg., Sacramento. Contract price not stated.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

HOSPITAL STORAGE BARN—Frame \$4,447.70. Stockton, San Joaquin Co., Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. E. W. Book of Stockton submitted the lowest bid at \$4,447.70 for the construction of a hay storage and feed barn at Stockton. A complete list of the bids will be found under the heading of Sacramento, Stockton and Northern California.

LIBRARY—2 story and base. Class A construction, \$90,000. Sacramento, Cal. Architect, Loring P. Rixford, Sharon Bldg., S. F. Owners, City of Sacramento. Architect Rixford's plans have been approved in competition with 56 other sets of plans for the new library building. A complete description of the building and competition will be found under the heading of Sacramento and Northern California in this issue.

BRIDGE CONSTRUCTION—Steel and concrete. Cost not stated. Chico, Butte Co., Cal. Engineer, County Surveyor, Chico. Owners, Butte County. To prevent any overflow of water over the holdings of the Leland Stanford University, arrangements have been made to lengthen the new bridge forty feet that will span Butte Creek on the State Highway. The bridge will be 240 feet in length, entirely of steel and concrete construction. Further mention of this work will be made.

BRIDGE CONSTRUCTION—Cost not stated. Sacramento, Cal. Engineer's name not given. Owners, Yolo County. Jesse Poundstone, superintendent of

Reclamation District 108, met with Yolo representatives and the State Reclamation Board in Sacramento and arranged for the building of a bridge across Sycamore Slough in Yolo County. The Reclamation Board has formally granted permission to the Yolo Supervisors to drive piling for the strengthening of the old bridge, but later it was made known that the county favored a new bridge, and as a result of this understanding the Reclamation Board rescinded its former action permitting the repair of the old bridge. The new bridge will permit the passage of dredgers. The site of the proposed new structure is but a short distance from the old bridge. The right-of-way connecting it with the county road will be furnished by the reclamation district.

CULVERT—Reinforced concrete. Cost not stated. Auburn, Placer Co., Cal. Engineer, County Surveyor, Auburn. Owners, Placer County. Supervisor Geisendorfer has been given authority to construct a concrete culvert over a creek crossing the Colfax and Forest Hill road by the Board of Supervisors.

BRIDGES—Reinforced concrete. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor Lunning, Red Bluff. Owners, Tehama County. At the last meeting of the County Supervisors the matter of building two bridges at Los Molinas was brought before the Board. After consideration the Board ordered County Surveyor Lunning to prepare plans and estimates for the proposed structure. Further information will be given when the plans are complete.

BRIDGE REMOVAL—Cost not stated. Marysville, Yuba Co., Cal. Engineer, County Surveyor L. B. Cook, Marysville. Owners, Yuba County. County Surveyor L. B. Cook has plans prepared for the removal of the old D street bridge, and the Clerk of the Supervisors has been instructed to advertise for bids on the work. The work has been advertised under two plans. The first plan is that the contract shall be to take down the old bridge and transport it to the county hospital grounds, where it can be used by the county for repairing the other bridges in the county. The other plan is to sell it entirely to the highest bidder, who will be allowed to use the material in the old bridge as he sees fit.

BRIDGE—Reinforced concrete, \$5,000. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Recommendation has been made by the City Board of Park Directors that all bids for the construction of the concrete bridge in Del Paso Park be rejected. This was done at the request of Director Frank Atkinson, who said he believed a lower bid could be received. H. W. Terrell was the lowest bidder. His bid was \$2,850 on the City Engineer's plan, and \$4,100 on the plan of Jenkins & Wells. The Engineer's estimate was \$3,300. Terrell outbid Jenkins & Wells on their own plans, but Atkinson told the Board he believed the bid could be bettered.

SEWER CONSTRUCTION—\$32,843.75. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Own-

ers, City of Stockton. The lowest bid received for sewer construction covered by resolution No. 524 was submitted by William F. Edwards at \$27,467.24. The engineer's estimate on the work was \$32,843.75. Bids were taken under advisement.

CULVERT WORK—Cost not stated. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. The County Supervisors at a recent session authorized the construction of a culvert at Camino on the Oroville-Chico road, and to have pipe installed near Crum's ranch on the same road. The installation of a culvert was also authorized upon the Oroville-Forbestown road at the McKee place.

STREET PAVING—Cost not stated. Willows, Glenn Co., Cal. Engineer, Town Engineer, Willows. Owners, Town of Willows. The Town of Willows will shortly call for bids to complete the paving of the State highway through Willows, eight blocks, four on either end of the street. The eight blocks within the city limits, according to the town board, need only be paved according to State highway specifications.

ROAD IMPROVEMENT—Cost not stated. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. The Board of Supervisors has decided to readvertise for bids in connection with contemplated repairs on the county road leading from Chico to the Gianella bridge. Bids were to have been opened Saturday, November 6th, but the Board decided to postpone action until November 20th. The work calls for graveling and grading a portion of the road in the overflow section along the river.

STORAGE DAM—Concrete. Cost not stated. Eureka, Humboldt Co., Cal. Engineer, E. J. Burke, Eureka. Owners, Cottage Gardens Nurseries Co. Contractors, Elsemore & Jacobs, 431 G street, Eureka. Contract price not stated. Stanfort & Lax, Eureka, tool house and machine room. Cost not stated.

RESIDENCE—1 story and base, frame, \$2,500. Sacramento, Cal. Architect, none. Owner, D. McKay, 2629 E street, Sacramento. Location, 3105 E street. Will contain six rooms and bath. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work by Day Labor.

PURIFIER—\$6,000. Marysville, Yuba Co., Cal. Engineer, Engineering Dept. Pacific Gas and Electric Co., S. F. Owners, Pacific Gas and Electric Co. The Pacific Gas and Electric Co., with a view of bettering its local service, has under way the construction of a new purifier at its plant on 4th street, near the levee.

SCHOOL LIGHTING FIXTURES—Cost not stated. Roseville, Placer Co., Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, Roseville School District. Bids will be received up to November 20th for furnishing and installing electric fixtures in the new school building.

SANITARY SEWERS—\$27,467.24. Stockton, San Joaquin Co., Cal. Engi-

neer, City Engineer, Stockton. Owners, City of Stockton. Contractor, William F. Edwards, 675 31st street, Oakland. Contract price, \$27,167.24.

Contracts Awarded

STREET IMPROVEMENT—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, Clark & Henery Construction Co., Ochsner Bldg., Sacramento. Contract price not stated.

STREET PAVING—Cost as follows. Woodland, Yolo Co., Cal. Engineer, City Engineer, Woodland. Owners, City of Woodland. Contractors, Clark & Henery Construction Co., Ochsner Bldg., Sacramento. Contract price, 11½¢ per square foot and 12½¢ per square foot.

SEWER CONSTRUCTION—\$2,825.57. Sonora, Tuolumne Co., Cal. Engineer, Town Engineer, Sonora. Owners, Town of Sonora. Contractor, W. J. Tobin, 735 Filbert street, Oakland. Contract price, \$2,825.57.

Bids For State Job At Stockton.

E. W. Hook Low on Hay Storage and Feed Barn for State Hospital at Stockton. No Contract Awarded.

(By Special Wire.)

SACRAMENTO, CAL., Nov. 8th, 1915—The following bids were opened by the State Department of Engineering for the construction of a hay storage and feed barn at the Stockton State Hospital. E. W. Book of Stockton submitted the lowest figure at \$4,447.70. All figures were referred to the State Architect's Office.

Hay Storage and Feed Barn.

E. W. Book.....	\$4,447.70
Wade & Carlson.....	4,740.00
C. A. Day Co.....	4,845.00
R. W. Moller.....	5,200.00
Morrison Bros.....	5,279.00
N. P. Mortenson.....	5,396.00
Geo. W. Makin & Son.....	5,440.00
Chirhart & Nysted.....	5,450.00
Fred H. Field.....	5,464.00
Louis Cereghino & Son.....	5,684.00
Monson Bros.....	5,775.00
Pacific Constr. Co.....	5,987.00
James Mulcahy.....	6,187.00
L. G. Burgren & Son.....	6,672.00

LOS ANGELES AND SOUTHERN CALIFORNIA

STATE HIGHWAY CONSTRUCTION

—Cost not stated. El Centro, Imperial Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be opened on December 6th for constructing Portland cement concrete highway, approximately 12 miles in length, from Dixieland to El Centro. Plans can be secured from the branch offices of the Commission in San Francisco and Los Angeles. An official proposal appears in another column of this issue.

IRRIGATION GATES AND BRIDGES

—Cost not stated. Santa Ana, Orange Co., Cal. Engineer, H. Clay Kellogg, Santa Ana. Owners, Newberg Protec-

tion District. Chief Engineer H. Clay Kellogg has been instructed by the directors of the Newberg Protection District to prepare plans for gates and bridges in accordance with the district's recent agreement with the Willows Land Company's and at Rice's Point. Further mention will be made of this work when plans are complete.

RESIDENCE—2 story and base, frame and brick. Cost not stated. Beverly, Los Angeles Co., Cal. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owner, Roland Bishop, Contractors, Barkeley & Gould, 1017 East 21st street, L. A. Contract price not stated. Dwelling will contain 16 rooms and 6 baths.

BRIDGES—4, reinforced concrete, \$50,000 to \$60,000. Santa Barbara, Santa Barbara Co., Cal. Engineers, Mayberry & Parker, Pacific Electric Bldg., L. A., associated with Fred Johnston, Santa Barbara. Owners, Santa Barbara County. The engineers have been commissioned to prepare plans for four reinforced concrete bridges to be constructed on the State highway in Santa Barbara County.

CULVERT—Reinforced concrete. Cost not stated. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. Bids will be received by the Board of Supervisors up to 11 a. m. of November 22, 1915, for the construction of the Gardner culvert on Telephone road, about 1½ miles west of Satcoy. The approximate quantities are as follows: 46 yards of class B concrete, 3,700 lbs of reinforcing steel, 62 ft of corrugated iron pipe, 80 ft of guard fence, 135 yds of earth fill.

MAUSOLEUM—1 story. Class A construction. Cost not stated. Monrovia, Los Angeles Co., Cal. Architect's name not given. Owners, Monrovia Mausoleum Co., represented by T. W. Dryden, Story Bldg., L. A. Will contain 200 crypts, urns and chapel. Interior finish marble. Modern plumbing and electric work. Exterior faced with cement plaster. Plans complete and figures being taken.

MAUSOLEUM—1 story. Class A construction, \$50,000. Whittier, Los Angeles Co., Cal. Architect, J. J. Frauenthal, Story Bldg., L. A. Owners, Whittier Heights Cemetery Association. Will contain 200 crypts, urns and chapel. Interior finish marble. Plumbing, electric work and art glass. Exterior faced with cement plaster. Work to be done by Day Labor under the direction of Frank B. Gibson, Story Bldg., L. A.

WAREHOUSE—1 story and base, reinforced concrete. Cost not stated. Los Angeles, Cal. Architect, Albert C. Martin, Higgins Bldg., L. A. Owner, J. C. Hills, Pasadena. Location, Alpine and San Fernando streets, covering an area of 100 by 100 feet. Fireproof construction, reinforced concrete walls, floors and roof slabs. Hollow tile interior partitions, metal window sash and frames. Two elevators, automatic sprinkler system. Exterior faced with cement plaster. Plans being prepared.

ORPHANS HOME GROUP—1 and 2 story, reinforced concrete, \$75,000. Covina, Los Angeles Co., Cal. Architect, John F. Blee, Union League Bldg., L. A. Owners, Masonic Orphans' Home. The

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architect has just been selected to prepare plans for these buildings and details of construction have not been made public. Further mention will be made when plans are complete.

RAILROAD CONSTRUCTION—Cost not stated. Riverside, Riverside Co., Cal. Engineer, Engineering Dept. Santa Fe, L. A. Owners, Santa Fe Railroad Co. The Santa Fe Railroad is making preparations to carry out the orders of the State Railroad Commission with reference to the rebuilding the inland route of its line from Murrieta on to San Diego. The work will be started to Murrieta then to Elsinore and on to Highgrove.

SCHOOL—1 story and base, hollow tile, \$35,000. Brae, Orange Co., Cal. Architects, E. R. Jeffery & F. R. Schaefer, Westley Roberts Bldg., L. A. Owners, Brae School District. Will cover an area of 250 by 176 feet. Interior finish pine with maple floors. Modern school plumbing and a central heating system. Exterior faced with cement plaster. Plans being prepared.

SCHOOL—1 story and base, brick or hollow tile, \$30,000. Victorville, San Bernardino Co., Cal. Architect, Lester H. Hubbard, Marsh-Strong Bldg., L. A. Owners, Victorville School District. The architect has just been commissioned to prepare the plans and detailed information is not available. Further mention will be made of the work.

THEATRE AND OFFICES—2 story and base, brick, \$40,000. Anaheim, Orange Co., Cal. Architect, Eugene M. Durfee, Anaheim; Owner, John Cassou. Location, Center street. Will contain motion picture theatre and stores on first floor and offices above. Interior finish pine and hardwood. Patent store fronts. Modern plumbing and electric work. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

BRIDGE—Reinforced concrete, \$4,836. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. Contractor, J. P. Hunter, L. A. Contract price, \$4,836. George Nowalk, Santa Paula. Was awarded the contract for river protection work at \$4,485. Engineer's estimate, \$5,000.

ROAD EXTENSION—\$7,000. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. Contractors, Colony Holding Co., San Luis Obispo. Contract price 15 cents per cubic yard for 25,000 cubic yards.

MOVING EARTH—Cost as follows. Santa Ana, Orange Co., Cal. Engineer, H. Clay Kellogg, Santa Ana. Owners, Newberg Protection District. Contractor, J. C. Farnsworth, Santa Ana. Contract price, 15 cents per yard. 2,700 yards.

GRAVING AND CULVERTS—\$20,000. Ventura, Ventura Co., Cal. Engineer, County Surveyor, Ventura. Owners, Ventura County. Contractor, B. E. Black, Ventura. Contract price, \$20,000.

WAREHOUSE—1 story and base, reinforced concrete, \$25,000. El Centro, Imperial Co., Cal. Architect, Don M. Wells, 124 North 7th street, El Centro. Owners, Delta Mercantile Co., Contractors, John Harnish Co., Stinson Bldg., L. A. Contract price, \$25,000.

SCHOOL—1 story and base, brick, \$19,797. Burbank, Los Angeles Co., Cal. Architects, Tuttle & Angel, Delta Bldg., L. A. Owners, Burbank School District. Contractors, May Bros., First National Bank Bldg., Glendale. Contract price, \$19,797.

OFFICE ADDITION—5 story and base. Class A construction, \$200,000. Los Angeles, Cal. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, Pacific Mutual Life Insurance Co. Contractors, C. J. Kubach Co. Contract price, \$200,000.

OFFICE BUILDING—8 story and base, reinforced concrete. Cost not stated. Los Angeles, Cal. Architects, Morgan, Walls & Morgan, Van Nuys Bldg., L. A. Owner, W. G. Kerckhoff. Contractors, Weymouth & Crowell, 2026 West 9th street, L. A. Contract price not stated.

STORES AND OFFICES—2 story and base, reinforced concrete. Cost not stated. Calexico, Imperial Co., Cal. Architects, Zimmer & Tichenor, El Centro. Owner, M. Harris. Contractors, M. D. Hays Construction Co. Contract price not stated.

PORTLAND AND OREGON

ROAD CONSTRUCTION AND REPAIR—\$58,221. Portland, Ore. Engineer, Roadmaster Yeon, Portland. Owners, Multnomah County. For maintenance and new construction work, Roadmaster Yeon estimates \$58,221 will be necessary in 1916. Provision is made for \$73,661 for the Columbia Highway and \$231,000 for new construction work in various other parts of the county. Among the items included are the following: St. Helens road, regrade 3 miles, \$35,000; Germantown road, grade, macadam, \$15,000; Capitol highway, half mile, paving, \$10,000; Base Line, road extension, \$50,000; eliminating grade crossings, \$15,000; Sky Line, macadam, \$20,000; Sky Line, 3 miles, \$10,000; Fairmont Boulevard, macadam, 3 miles, \$26,000; regrade ditches and shoulders, \$8,000; St. Helens road, widen two feet, \$3,000; Freyman avenue, grading, \$15,000; signboards, \$2,000; Sandy Road, relocate and grade, \$10,000; Sandy cut-off grade, \$10,000. Petitions for other improvements were not included. The largest improvement asked for is the Columbia Boulevard extending from St. Johns, the cost of which is estimated at \$18,000 per mile, a total of \$162,000; hard surface Fairview road, 4 miles, \$45,000; paving East 82nd street extension, 5 miles, \$80,000; total, \$241,000.

LABOR TEMPLE—3 story and base. Class A construction, \$100,000. Portland, Ore. Architects, Houghtaling & Bougan, Henry Bldg., Portland. Owners, Labor Temple Association. Location Stout and Morrison and Washington streets, covering an area of 11,200 square feet. Will contain offices, meeting rooms and social rooms. Interior finish pine. Steam heat and hot water system. Exterior faced with pressed brick and terra cotta. Plans being prepared.

HOSPITAL—4 story and base. Class A construction, \$100,000. Portland, Ore. Architect not selected. Owners, Multnomah County. The County Commission will appropriate \$400,000 in the

1916 budget for the erection of a county hospital building. A structure to cost \$400,000 has been discussed and plans for such a structure were prepared by Bridges & Webber, local architects, several years ago. The present building is inadequate and a fire trap, according to reports of physicians of the county.

SEATTLE AND WASHINGTON

APARTMENT HOUSE—5 and 6 story and base, brick and steel, \$75,000. Seattle, Wash. Architect, Louis Baeder, White Bldg., Seattle. Owner, Ernest Carstens. Location, southwest corner Boren avenue and Pine street, covering an area of 53 by 120 feet. Will contain 57 apartments of two, three and four rooms. Interior finish pine and hardwood with some hardwood floors. Steam heat, oil burning system, vacuum cleaning, hot water supply and automatic elevator. Bath rooms tile. Wall beds. Exterior faced with pressed brick. Plans complete and figures to be taken at once.

COLLEGE BUILDING—4 story and base. Class A construction, \$143,254. Seattle, Wash. Architects, Charles Bebb and Carl Gould, Denny Bldg., Seattle. Owners, State of Washington. Contractors, Finne & Garde, Northern Bank Bldg., Seattle. Contract price, \$143,254. Contract covers the general construction of the Home Economics Building.

Contracts Awarded

STORES AND OFFICE—1 and 2 story brick, hollow tile and concrete, \$50,000. Seattle, Wash. Architects, Charles Bebb & Carl Gould, Denny Bldg., Seattle. Owners, Puget Mill Co. Contractors, Butler Contracting Co., Central Bank Bldg., Seattle. Contract price, \$50,000.

CHINA PLANS INDUSTRIAL PROGRESS.

[London and China Telegraph, Oct. 18.]

The Chinese Ministry of Agriculture and Commerce has decided to include an additional sum of \$15,000,000 in the budget estimates for the next year for the purpose of pushing the development of industrial and commercial undertakings. This sum is proposed to be apportioned as follows: (1) The establishment and equipment of a model industrial factory, \$6,000,000; (2) the establishment of various kinds of working depots for experimental purposes, \$1,000,000; (3) subsidies and rewards for the encouragement of industrial and commercial enterprises, mining operations, fishery, and cattle-breeding business, \$4,000,000; (4) initial expenses for the improvement of agricultural methods, \$5,000,000; (5) initial expenses for the improvement of products for export, \$500,000; (6) provision of funds for the training of experts in various branches of the industrial business. [These amounts represent silver currency, or about one-half the equivalent of United States gold.]

A Chinese merchant named Chow Wen-chin has petitioned the Ministry of Agriculture and Commerce for permission to establish a sugar refinery in Peking, to be conducted on foreign lines. It is said that the petition has been granted, and that the work of building will commence immediately.—Commerce Reports,

Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

SAN FRANCISCO COUNTY.

No.	Owner	Contractor	Am't.
1174	Baneda	Greenback	700
1177	Collins	Powder	400
1178	Balentine	Sealan	500
1179	Winchester	Novelty	400
1180	Gray	Novelty	400
1181	O'Looney	Brandt	100
1182	Kennedy	Kennedy	400
1183	Eisenbach	Higginson	6000
1184	Eisenbach	Higginson	6000
1185	Glazier	Glazier	9500
1186	Ray Fong	Porter	500
1187	Hayes Park	Flaherty	500
1188	Jacobsen	Wade	450
1189	Lapham	Lapham	2750
1190	Clark	Trost	1000
1191	Levison	Spring	493
1192	Same	Same	622
1193	Bacigalupi	Del Favero	4690
1194	Malloch	Malloch	4000
1195	Herman	Bateman	1796
1196	Peterson	Peterson	400
1197	Scott	Scott	400
1198	McMullin	Noorhies	5000
1199	Evers	Evers	750
1200	Urban Bldg	Owner	4000
1201	Coswell	Farrell	10478
1202	Same	Anderson	7380
1203	Daisley	Higginson	25800
1204	Nurok	Brueck	2600
1205	Rincon	Houle	1500
1206	Sherry	Carlson	11903
1207	Welsh	Welsh	20000
1208	de Trieste	Fassio	
1209	Levitt	Levitt	1500
1210	Ham	Ham	5000
1211	Dempnak	Dempnak	38000
1212	Grannis	Grannis	6000
1213	Hedgen	Lindgren	2500
1214	Wilkin	Roller	1450
1215	Hirsch	Moller	1729
1216	Musco	Gardner	2000
1217	Howard	Howard	850
1218	Schloss	Hofmeister	3000
1219	Same	Same	2000
1220	Same	Same	3000
1221	Mahoney	Sjogren	9120
1222	Pacific G. & E.	Moore	12250
1223	Adams	Adams	400
1224	Ruse	Anderson	600
1225	McCarthy	McCarthy	2000
1226	Nichols	Jones	400
1227	Canhu	Atlas	400
1228	Jonas	Robinson	800
1229	Martinez	Sabate	800
1230	Flaherty	Johnson	500
1231	Keough	Keough	400
1232	Boitano	Boitano	400
1233	Wall	Wilhelm	400
1234	Bethune	Bethune	400
1235	Chambers	Novelty	400
1236	Sourian	Zinkand	1040
1237	Brady	Hunshet	400
1238	Kincannon	Kincannon	10000
1239	McAuliffe	Gaspard	9550
1240	Waterman	Atlas Bldg	1185
1241	Marenzi	Polati	2500

REPAIRS

1176	NE CALIFORNIA AND POLK.
	Repair plastering.
Owner.....	Mrs. E. Banedesta.
Architect....	None.
Contractor....	Greenback Plastering Co., 15 Kearny, San Francisco.
	COST, \$700

ALTERATIONS

1177	NO. 2816 GREENWICH. Alter front.
Owner.....	John T. Collins, 12 Downey San Francisco.
Architect....	None.
Contractor....	W. P. Fowler, Premises.
	COST, \$100

FRAME DWELLING

(3178) E ELEVENTH AVE 175 S Morgagn. One-story and basement frame dwelling.

Owner.....L. Balentine, 519 11th Ave.,
San Francisco.

Architect....None.

Contractor....J. Scanlan, 2168 Geary,
San Francisco.

COST, \$500

ELECTRIC SIGN

(3179) NO. 76 THIRD. Electric sign.

Owner.....Winchester Hotel, Prem.
Architect....None.

Contractor....Novelty Elec. Sign Co.,
165 Eddy, San Francisco.

COST, \$400

ELECTRIC SIGN

(3180) NE GEARY & DIVISADERO. Electric sign.

Owner.....N. Gray & Co., Premises.
Architect....None.

Contractor....Novelty Elec. Sign Co.,
165 Eddy, San Francisco.

COST, \$400

BRICK GARAGE

(3181) S SUTTER 50 E Steiner. One-story brick garage.

Owner.....Martin O'Looney, 896
Steiner, San Francisco.

Architect....None.

Contractor....Brandt & Stevens, 612
Hearst Bldg., S. F.

COST, \$400

ADDITION

(3182) NO. 1524 TREAT AVE. Add 1 room to cottage.

Owner.....Jos. F. Kennedy, Premises
Architect....L. M. Weismann, 532 Pacific Bldg., San Francisco.

Day's work.....COST, \$400

FRAME DWELLING

(3183) E CHERRY 40 N Sacramento. Two-story and basement frame dwlg.

Owner.....Eisenbach Co., 408 Flatiron Bldg., San Francisco.

Architect....Falch & Knoll, Examiner Bldg., San Francisco.

Contractor....Higginson Co., Humboldt Bank Bldg., S. F.

COST, \$6000

NOTE:—Job started.

FRAME DWELLING

(3184) E CHERRY 70 N Sacramento. Two-story and basement frame dwlg.

Owner.....Eisenbach Co., 408 Flatiron Bldg., San Francisco.

Architect....Falch & Knoll, Examiner Bldg., San Francisco.

Contractor....Higginson Co., Humboldt Bank Bldg., S. F.

COST, \$6000

NOTE:—Job started.

MACHINE SHOP

(3185) W. VALENCIA 195 S 18th. One-story and basement Class "C" machine shop.

Owner.....Richard Glazier, 3372 17th,
San Francisco.

Architect....Henry C. Smith, 785 Market, San Francisco.

Day's work.....COST, \$9000

NOTE:—Job started.

ALTERATIONS

(3186) NO. 1602 GEARY. Alter grill.

Owner.....Kay Fong Co., Lessee, 818 Clay, San Francisco.

Architect....None.

Contractor....Geo. H. Porter, 1175 Geary
San Francisco.

COST, \$500

CONCRETE FOUNDATION

(3187) E CAYUGA 300 N Onondago. Concrete foundation.

Owner.....Hayes Park Laundry.
Architect....None.

Contractor....W. Flaherty, 126 Hillcrest Drive, San Francisco.

COST, \$500

ALTERATIONS

(3188) NO. 75 LESEE. Alter dwelling.

Owner.....J. Jacobsen, 2023 Market,
San Francisco.

Architect....None.

Contractor....Wade & Carlson, 1010 Chenery, San Francisco.

COST, \$150

FRAME DWELLING

(3189) E TWELFTH AVE 50 S Cabrillo. Two-story and basement frame dwelling.

Owner.....A. R. Lapham, 511 12th Ave., San Francisco.

Architect....None.

Day's work.....COST, \$2750

ALTERATIONS

(3190) W TREAT AVE 100 N 14th. Alter warehouse into stable.

Owner....Clark Draying Co.

Architect....None.

Contractor....Robt. Trost, 26th and Howard, San Francisco.

COST, \$1000

ALTERATIONS

(3191) NE GOLDEN GATE AVE AND Buchanan E 137-6XN 119-6. Outside lathing and plastering for alterations to buildings.

Owner.....Emma Levison.

Architect....Theodore J. Hois.

Contractor....Harry J. Spring, 1246 26th Ave., San Francisco.

Filed Nov. 8, '15. Dated Nov. 6, '15.

Scratch coat on outside of buildings.....\$249.00

Completed and accepted.....124.50

Usual 35 days.....124.50

TOTAL COST, \$498.00

Bond, \$249. Sureties, P. Koelnig and Richard Irvine, Limit, 15 days. Forfeited, \$10. Specifications only filed.

(3192) INSIDE LATHING & PLASTERING on above.

Contractor....Harry J. Spring, 1246 26th Ave., San Francisco.

Filed Nov. 8, '15. Dated Nov. 6, '15.
 1st coat on \$311.00
 Completed and accepted..... 155.50
 Usual 35 days..... 155.50
TOTAL COST, \$622.00
 Bond, \$311. Sureties, P. Koenig and
 Richard Irvine. Limit, 20 days. Forfeited.
 Specifications only filed.

FRAME STORE AND FLATS
 (3193) COM. AT PT 113 S FROM SW
 Union and Grant Ave th — 65 th
 along E Hannan Place 24-6 E 65 N
 24. All work for two-story and basement
 frame store and flats.

Owner.....Teresa Bacigalupi, 1269 1st
 Ave., San Francisco.
 Architect...H. C. Baumann, Hearst
 Bldg., San Francisco.
 Contractor...Del Favero & Pordon,
 1839 Mason, San Francisco.
 Filed Nov. 8, '15. Dated Oct. 29, '15.
 Roof on \$ 900
 Brown coated 900
 Completed and accepted..... 900
 Usual 35 days..... 1900

TOTAL COST, \$4600

Bond, \$2300. Sureties, G. Canoe and
 Angelo Petri. Limit, 90 days. Forfeited,
 none. Plans and specifications filed.

FRAME RESIDENCE

(3191) LOT 7 BLK 12 Forest Hill. All
 work for one-story and basement
 frame residence.
 Owner.....Johanna J. Malloch.
 Architect...None.
 Contractor...J. S. Malloch, 110 Jessie,
 San Francisco.

Filed Nov. 8, '15. Dated Nov. 8, '15.
 Payments not given.....
TOTAL COST, \$4000
 Bond, none. Limit, 100 days. Forfeited,
 none. Plans and specifications filed.

FRAME DWELLING

(3191) E FORTY-SECOND AVE 125
 S Lincoln Way (H) S 25xE 120 O L
 622. All work except electric fix-
 tures and shades for one-story and
 basement frame dwelling.
 Owner.....Frank Herman, 1218 42nd
 Ave., San Francisco.

Architect...None.
 Contractor...C. E. Bateman, 1321 45th
 Ave., San Francisco.
 Filed Nov. 8, '15. Dated Nov. 8, '15.
 Foundation in and basement
 frame up \$300
 Entire frame up..... 325
 Enclosed and plaster on..... 350
 Completed and accepted..... 375
 Usual 35 days..... 446
TOTAL COST, \$1796

Bond, none. Limit, 60 days. Forfeited,
 none. Plans and specifications filed.

FRAME STUDIO

(3196) N CALIFORNIA 105 W Baker
 (rear). One-story frame studio.
 Owner.....Mrs. C. K. Peterson, 3028
 California, San Francisco.
 Architect...None.
 Day's work..... COST, \$400

ADDITION

(3197) NO. 1241 SEVENTH AVE. Add
 to dwelling.
 Owner.....M. D. Scott, Premises.
 Architect...None.
 Day's work..... COST, \$400

FRAME DWELLING

(3198) BLK 2983, 25 feet of Lot 25 and

10 feet Lot 26. Two-story and base-
 ment frame dwelling.

Owner.....McMullin-von Voorhies Co.,
 110 Jessie, San Francisco.
 Architect...E. E. Young, 251 Kearny,
 San Francisco.

Day's work..... COST, \$5000

ALTERATIONS

(3199) NO. 2774 DIAMOND. Alter
 theatre.

Owner.....Edw. M. Evers, 839 Chen-
 ery, San Francisco.

Architect...None.
 Day's work..... COST, \$750

FRAME DWELLING

(3200) NW PALOMA 50 SW Ocean Ave
 Two-story and basement frame dwlg.

Owner.....Urban Realty Improve-
 ment Co., 85 Cerritos Ave.,
 San Francisco.

Architect...Jos. A. Leonard, 85 Cer-
 ritos Ave., San Francisco.

Day's work..... COST, \$4000

BRICK WORK, ETC.

(3201) SW FOLSOM AND TWENTY-
 sixth W 170 S 150-9 1/4 m or 1 S 86 deg
 35 min E 175 m or 1 N 173. Brick
 work and terra cotta partitions for
 three-story and basement Class "C"
 school.

Owner.....Board Trustees of Cogswell
 Polytechnical College
 by Lange & Bergstrom,
 Sharon Bldg., S. F.

Architect...Fredk. H. Meyer, Bankers'
 Investment Bldg., S. F.

Contractor...Farrell & Reed, 709 Mis-
 sion, San Francisco.

Filed Nov. 9, '15. Dated Oct. 22, '15.
 On 1st of each month..... 75%
 Usual 35 days..... 25%
TOTAL COST, \$10,478

Bond, limit, forfeit, plans and specifi-
 cations, none.

(3202) MILL WORK ON ABOVE.

Contractor...Anderson Bros. Planing
 Mill & Mfg. Co., 2399
 Powell, San Francisco.

Filed Nov. 9, '15. Dated Oct. 26, '15.
 Payments same as above.....

TOTAL COST, \$7380

Bond, limit, forfeit, plans and specifi-
 cations, none.

FRAME APARTMENTS

(3203) W TAYLOR 98-9 N Washing-
 ton N 42-6xW 127-6. All work for
 three-story and basement frame
 apartments.

Owner.....Mrs. Isabelle Daisley.
 Architect...Falch & Knoll, Hearst
 Bldg., San Francisco.

Contractor...Higginson Co., Inc., Hum-
 boldt Bank Bldg., S. F.

Filed Nov. 10, 15. Dated Oct. 20, '15.
 Frame up \$6450
 Brown coated 6450
 Completed and accepted..... 6450
 Usual 35 days..... 6450
TOTAL COST, \$25,800

Bond, \$12,900. Sureties, J. H. McCallum
 and E. O. Benner. Limit, 120 days.
 Forfeited, \$5. Plans and specifications
 filed.

ALTERATIONS

(3204) SW CALIFORNIA AND HELEN
 20 on California and 57-6 on Helen.
 All work for alterations and addi-
 tions to frame building.

Owner.....J. Nurok, 1325 California,
 San Francisco.

Architect...Theo. W. Lenzen, Hum-
 boldt Bank Bldg., S. F.

Contractor...M. Brueck, 600 Charter
 Oak, San Francisco.

Filed Nov. 10, '15. Dated Nov. 8, '15.

Building raised and set on founda-
 tions and entire basement com-
 pleted \$650
 Inside walls and ceilings covered 650
 Completed and accepted..... 650
 Usual 35 days..... 650

TOTAL COST, \$2600

Bond, \$1300. Sureties, Jas. R. Quinn
 and A. F. Bomeau. Limit, 60 days.
 Forfeited, none. Plans and specifications
 filed.

FRAME COTTAGE

(3205) SW FITZGERALD AVE (30th
 Ave South) 125 SE Ingals (1) SE 125
 xSW 100 Ptn Lot 7 Blk 538, Bay View
 Hd. As'n. Concrete, carpentry,
 plumbing and plastering for four-
 room and basement frame cottage.

Owner.....T. F. and Refugio Rincon.
 Architect...None.

Contractor...D. Houle, 660 Market,
 San Francisco.

Filed Nov. 10, '15. Dated Nov. 6, '15.

Frame up \$375
 Brown coated 375
 Completed 375
 Usual 35 days..... 375

TOTAL COST, \$1500

Bond, none. Limit, 70 days. Forfeited,
 none. Plans and specifications filed.

BRICK DWELLING

(3206) NE LAKE AND TWENTY-
 second Ave E 57-6xN 100. All work
 except plumbing, electric work, heat-
 ing, painting, trimming, shades, gas
 and electric fixtures for two-story
 Class "C" brick dwelling.

Owner.....John H. Sherry, Clay and
 Davis, San Francisco.

Architect...Nathaniel Blaisdell, 255
 California, San Francisco.

Contractor...N. A. Carlson, 936 Potrero
 Ave., San Francisco.

Filed Nov. 10, '15. Dated Nov. 1, '15.
 1st tier of joists set and rough
 flooring laid \$2750.00
 Roofed 2750.00
 Lathed and plastered..... 2750.00
 Completed and accepted..... 2927.50
 Usual 35 days..... 3726.00

TOTAL COST, \$14,903.50

Bond, \$7452. Sureties, A. L. Rowley
 and A. N. Kunst. Limit, 120 days from
 recording. Forfeited, \$20. Plans and
 specifications filed.

APARTMENTS

(3207) SE GEARY AND FIFTEENTH
 Ave E 50xS 73-8. All work for 11

apartments of 3 and 4 rooms.

Owner.....James Welsh, 549 13th
 Ave., San Francisco.

Architect...None.
 Contractor...James Welsh & Co.

Filed Nov. 10, '15. Dated Nov. 10, '15.

Rafters on \$5000
 Brown coated 5000
 Completed 5000
 Usual 35 days..... 5000

TOTAL COST, \$20,000

Bond, none. Limit, 90 days from Nov.
 5. Forfeited, none. Plans and specifi-
 cations, none.

CONCRETE WORK

(3208) NE VAN NESS AVE AND Mc-
 Allister 120x109. Concrete work for
 building.

Owner.....Mrs. Hannah de Trieste.
Architect...L. C. Hadick, Monadnock
Bldg., San Francisco.
Contractor...V. Fassio and C. O. Nelson,
331 Guerrero, S. F.
Filed Nov. 10, '15. Dated Nov. 8, '15.
75% of poured yardage to be paid
when each story and basement
poured..... 25%
Usual 35 days.....
TOTAL COST, \$125 per cu yard mixed
and poured.
Bond, none. Limit, 60 days. Forfeit,
\$20. Plans and specifications, none.

FRAME SHOP
(3209) S FIFTEENTH 130 W Guerrero
One-story frame shop.
Owner.....L. Levitt, 106 30th, S. F.
Architect...None.
Day's work..... COST, \$1500

FRAME FLATS
(3210) N CALIFORNIA 75 W 17th Ave
Two-story and basement frame (2)
flats.
Owner.....L. B. Tam, 1643 Lake, S. F.
Architect...None.
Day's work..... COST, \$5000

FRAME APARTMENTS
(3211) NW LEAVENWORTH AND
Vallejo. Three-story and basement
frame apartments.
Owner.....Michael Dempniak, 728
Page, San Francisco.
Architect...None.
Day's work..... COST, \$38,000

FRAME RESIDENCE
(3212) E STEINER 35-2 1/2 S Jackson.
Three-story and basement frame
residence.
Owner.....Mrs. Sophie Grannis, 1955
Franklin, San Francisco.
Architect...E. E. Young, 251 Kearny,
San Francisco.
Contractor...Fred R. Grannis, 1955
Franklin, San Francisco.
COST, \$6000

FRAME WAREHOUSE
(3213) W RITCH 150 N Townsend.
One-story frame warehouse.
Owner.....L. A. Hedges, Trustee A.
Hedges, 1608 Golden Gate
Ave., San Francisco.
Architect...None.
Contractor...Lindgren Co., 954 Monad-
nock Bldg., San Francisco.
COST, \$2500

ALTERATIONS
(3214) NO. 571 LIBERTY. Alter dwell-
ing into flats.
Owner.....Mrs. Wilkin, Premises.
Architect...None.
Contractor...Edwin E. Rolier, 767 27th,
San Francisco.
COST, \$1450

FRAME STORE
(3215) W THIRD 54 S Folsom. One-
story frame store.
Owner.....L. Hirsch, 949 Kearny,
San Francisco.
Architect...None.
Contractor...It. W. Moller, 185 Steven-
son, San Francisco.
COST, \$1729

FRAME FLATS
(3216) SW BAY AND MIDWAY. Two-
story and basement frame (2) flats.
Owner.....M. Musseo, 22 Midway,
San Francisco.

Architect...H. D. Mitchell, 628 Mont-
gomery, San Francisco.
Contractor...K. C. Gardner, 335 Ray-
mond Ave., San Francisco.
COST, \$2000

ADDITION
(3217) E CHURCH 111 S Market. Add
30 feet to frame theatre.
Owner.....Mrs. H. Howard, Belmont,
California.
Architect...E. E. Young, 251 Kearny,
San Francisco.
Day's work..... COST, \$850

FRAME RESIDENCE
(3218) W TWENTY-SEVENTH AVE
171-S S Geary W 120xS 23-4. All
work except furnishing and install-
ing of electric fixtures and shades
for two-story and basement frame
residence.
Owner.....Ben Schloss, 42 Beale,
San Francisco.
Architect...August G. Headman, New
Call Bldg., S. F.
Contractor...Hofmeister & Berdahl, 708
Webster, San Francisco.
Filed Nov. 11, '15. Dated Nov. 3, '15.
Frame up.....\$400
White coated..... 400
Standing finish up..... 750
Completed and accepted..... 700
Usual 35 days..... 750
TOTAL COST, \$3000
Bond, \$4500. Sureties, J. J. Deasy and
J. E. Davenport. Limit, 90 days. For-
feit, \$5. Plans and specifications filed.

FRAME RESIDENCE
(3219) W TWENTY-SEVENTH AVE
148-4 S Geary W 120xS 23-4. All
work except furnishing and installa-
tion of electric fixtures and shades
for two-story and basement frame
residence.
Owner.....Ben Schloss, 42 Beale,
San Francisco.
Architect...August G. Headman, New
Call Bldg., San Francisco.
Contractor...Hofmeister & Berdahl, 708
Webster, San Francisco.
Filed Nov. 11, '15. Dated Nov. 3, '15.
Frame up.....\$100
White coated..... 400
Standing finish up..... 750
Completed and accepted..... 700
Usual 35 days..... 750
TOTAL COST, \$3000
Bond, 1 bond for three contracts.
Limit, 90 days. Forfeit, \$5. Plans and
specifications filed.

FRAME RESIDENCE
(3220) W TWENTY-SEVENTH AVE
123 S Geary W 120xS 23-4. All
work except furnishing and installa-
tion of electric fixtures and shades
for two-story and basement frame
residence.
Owner.....Ben Schloss, 42 Beale,
San Francisco.
Architect...August G. Headman, New
Call Bldg., San Francisco.
Contractor...Hofmeister & Berdahl, 708
Webster, San Francisco.
Filed Nov. 11, '15. Dated Nov. 3, '15.
Frame up.....\$100
White coated..... 400
Standing finish up..... 750
Completed and accepted..... 700
Usual 35 days..... 750
TOTAL COST, \$3000
Bond, 1 bond for three contracts.
Limit, 90 days. Forfeit, \$5. Plans and
specifications filed.

FRAME APARTMENTS

(3221) N GREEN 153-S W Octavia N
137-6xW 29-6. All work except paint-
ing, shades, wall beds, grates and
light fixtures for three-story frame
apartments.
Owner.....Delia B. Mahoney, 1830
Green, San Francisco.
Architect...August Nordin, Mills Bldg
San Francisco.
Contractor...Sjogren Bros., 3058 Army,
San Francisco.

Filed Nov. 11, '15. Dated Nov. 11, '15.
Enclosed by sheathing and rustic
and roof completed.....\$2400
Ready for lathing and rough
plumbing in..... 1480
Interior plastered 2 coats and ex-
terior standing finish on..... 1480
Completed and accepted..... 1480
Usual 35 days..... 2280
TOTAL COST, \$9120
Bond, \$4566. Surety, The Actua Acci-
dent & Liability Co. Limit, 90 days.
Forfeit, \$10. Plans and specifications
filed.

CARPENTRY WORK

(3222) S SUTTER 115-9 E Powell S
127-6xW 45-6. Carpenter work, and
mill work for eight-story Class "A"
building.
Owner.....Pacific Gas & Electric Co.,
445 Sutter, San Francisco.
Architect...Edgar A. Mathews, 251
Post, San Francisco.
Contractor...Moore & Burlingame,
Shaion Bldg., S. F.
Filed Nov. 11, '15. Dated Nov. 10, '15.
Window frames in front of build-
ing in and interior finish above
6th floor done.....\$2350
Interior finish of 4th, 5th and
6th floors in..... 3400
Completed and accepted..... 3716
Usual 35 days..... 3670
TOTAL COST, \$12,266
Bond, \$6500. Surety, New Amsterdam
Casualty Co. Limit, reasonable dili-
gence. Forfeit, none. Plans and spec-
ifications filed.

BRICK STORE

(3223) NO. 57 MARKET. One-story
brick store.
Owner.....Jos. Adams, Premises.
Architect...None.
Day's work..... COST, \$1400

ALTERATIONS

(3224) NOS. 2462-66 THIRD. En-
large toilets and install boilers in
dwellings.
Owner.....Ruse Estate.
Architect...None.
Contractor...Andersen & Ringrose, 320
Market, San Francisco.
COST, \$600

FRAME DWELLING

(3225) E SAN GABRIEL 150-54 S
Capistrano. Two-story and basement
frame dwelling.
Owner.....John E. McCarthy, 1340
13th Ave., San Francisco.
Architect...None.
Day's work..... COST, \$2000

FRAME GARAGE

(3226) NE EUCLID & JORDAN AVES.
One-story frame garage.
Owner.....Jas. Michols, Sacramento.
Architect...None.
Contractor...Paul Jones, 150 Jessie,
San Francisco.
COST, \$400

STEAM HEATING
(3227) NO. 1015 LEAVENWORTH.
Steam heating and radiators.
Owner.....P. Canbu, Premises.
Architect...None.
Contractor...Atlas Heating & Ventilating Co., 4th and Freelon, San Francisco.
COST, \$400

METAL SIGNS
(3228) MARKET, POWELL & EDDY.
Erect sheet metal signs.
Owner.....Milton Jonas, Premises.
Architect...None.
Contractor...O. M. Robinson, 57 Minna, San Francisco.
COST, \$800

ALTERATIONS
(3229) NO. 278 UNION. Raise and alter dwelling.
Owner.....F. Martinez, 1324 Montgomery, San Francisco.
Architect...None.
Contractor...C. L. Sabate, 2140 Jones, San Francisco.
COST, \$300

GARAGE
(3230) NOS. 1216-18 SANCHEZ. Garage in basement.
Owner.....J. W. Flaherty, Premises.
Architect...None.
Contractor...Johnson & Hatland, 1513 Church, San Francisco.
COST, \$500

ALTERATIONS
(3231) NO. 267 FIFTEENTH AVE. Alter dwelling and garage.
Owner.....W. J. Keough, Premises.
Architect...None.
Day's work. COST, \$400

ALTERATIONS
(3232) NO. 445 FILBERT. Alter for stairs, porches, etc.
Owner.....A. Boitano.
Architect...Paul F. De Martin, 2123 Powell, San Francisco.
Day's work. COST, \$400

ALTERATIONS
(3233) W O'FARRELL 27-6 E Powell. Alter entrance.
Owner.....Wall Estate, 4 Eddy, S. F.
Architect...Cunningham & Politeo, 1st National Bank Bldg., S. F.
Contractor...A. Wilhelm, 180 Jessie, San Francisco.
COST, \$400

ALTERATIONS
(3234) NO. 4323 TWENTIETH. Alter garage.
Owner.....Mrs. H. A. Bethune, Prem.
Architect...None.
Day's work. COST, \$400

ELECTRIC SIGN
(3235) NO. 1735 O'FARRELL. Electric sign.
Owner.....Oak I. Chambers, Premises.
Architect...None.
Contractor...Novelty Elec. Sign Co., 165 Eddy, San Francisco.
COST, \$400

ALTERATIONS
(3236) W TENTH AVE 175 N Anza N 25xW 120. All work except wall, bed, finish hardware, shades and light fixtures for alteration to one-story frame cottage.

Owner.....Louis D. and Fannie Sourian, 1375 Clay, S. F.
Architect...None.
Contractor...Edw. Zinkand, 434 10th Ave., San Francisco.
Filed Nov. 12, '15. Dated Nov. 8, '15.
Raised and under pinned.....\$260
Rough plaster on.....260
Completed.....260
Usual 35 days.....260
TOTAL COST, \$1040

Bond, none. Limit, 80 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS
(3237) NO. 4535 NINETEENTH. Alter dwelling.
Owner.....Otto Brimly, Premises.
Architect...None.
Contractor...G. Hunseth, 4515 19th, San Francisco.
COST, \$400

FRAME APARTMENTS
(3238) S WASHINGTON 106-3 E Steiner. Three-story and basement frame (6) apartments.
Owner.....John G. Kincannon, 215 Montgomery, S. F.
Architect...Charles J. Rousseau 46 Kearny, San Francisco.
Day's work. COST, \$10,000

FRAME APARTMENTS AND STORES
(3239) SE TWENTIETH & BRYANT E 76xS 12. All work for three-story frame apartments and stores.
Owner.....Jno. C. McAuliffe, 327 17th Ave., San Francisco.
Architect...Falch & Knoll, Hearst Bldg., San Francisco.
Contractor...E. C. Gaspard & Co., 17th and Kansas, San Francisco.
Filed Nov. 12, '15. Dated Nov. 11, '15.
Roof boards on.....\$1637.50
Rough plaster on.....1637.50
Completed and accepted.....1637.50
Usual 35 days.....1637.50
TOTAL COST, \$6550.00

Bond, \$3275. Sureties, C. E. Reinhart and H. L. Reinhart. Limit, 100 days. Forfeit, none. Plans and specifications filed.

STEAM AND WATER HEATING
(3240) NW GEARY AND COMMONwealth Ave W 103xN 100 W A 645. Steam and water heating apparatus for apartment building.

Owner.....Erna A. Waterman, 183 Jordan Ave., San Francisco
Architect...C. O. Clausen, Hearst Bldg San Francisco.
Contractor...Atlas Heating & Ventilating Co., 4th and Freelon, San Francisco.

Filed Nov. 12, '15. Dated Nov. 6, '15.
Roughing in done.....\$295
Completed and accepted.....590
Usual 35 day.....300
TOTAL COST, \$1185
Bond, \$600. Sureties, E. V. Lacey and J. B. Reite. Limit, forfeit, none. Plans and specifications filed.

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED
Nov. 5, 1915—W BRYANT 127 S Alameda. The Rainier Brewing Co to Fibrestone & Roofing Co, Nov. 3; Reed & White, Nov. 1; Monarch Iron Works.....Nov. 3, 1915

Nov. 5, 1915—LOT 18 BLK 3, Holly Park Tract. Thomas McCormick to whom it may concern..Nov. 5, 1915
Nov. 5, 1915—N CORTLAND AVE 4194 W Bennington Ave W 25-5½x 77. John Benitou to J Narbebury.....Nov. 3, 1915
Nov. 5, 1915—N LOMBARD 106 W Grant Ave W 30xN 87-6. Paolino Nardi to G Ferrone and G Ghezzi.....Nov. 5, 1915
Nov. 5, 1915—NW TWENTY-THIRD Ave and Geary. Roman Catholic Archbishop of S F to A Lynch.....Oct. 26, 1915
Nov. 5, 1915—E FORTY-SIXTH AVE 175 N Judah N 50xE 120. Lazar Aydukovich to whom it may concern.....Oct. 29, 1915
Nov. 5, 1915—LOT 18 BLK 3 Holly Park Tract. Thos McCormick to whom it may concern.....Nov. 5, 1915
Nov. 5, 1915—SW MARY 40 NW Natoma NW 40xSW 76-2. James Conlin Co to Mulcahy Bros.....Nov. 3, 1915
Nov. 6, 1915—E SEVENTEENTH AV 57-4½ S Rivera E 100xS 25. Bessie G Hayden to whom it may concern.....Oct. 2, 1915
Nov. 6, 1915—N McALLISTER 112-6 W Scott W 25xN 137-6. T I O'Brien to Vincent J Donovan.....Oct. 29, 1915
Nov. 6, 1915—W DOLORES 51-6 S Jersey S 25xW 94. W A Loewe to Jas F Conlan, Nov. 4; H L Petersen.....Nov. 4, 1915
Nov. 8, 1915—S JUDAH 32-6 W 22nd Ave W 25xS 100. P Koelnig to whom it may concern.....Nov. 4, 1915
Nov. 8, 1915—E TWENTY-THIRD Ave 75 N California N 75xE 32-6. John V Stiefel to whom it may concern.....Nov. 1, 1915
Nov. 8, 1915—E ANDERSON 150 N Powhattan Ave N 25xE 70; Lot 835 Gift Map No. 3. Babetta and John C Schmidt to whom it may concern.....Nov. 8, 1915
Nov. 8, 1915—SE SCOTT & LOMBARD S 100xE 27-6. G Guisti to Montani & Stefanini.....Nov. 8, 1915
Nov. 9, 1915—SW CALIFORNIA & Mason W 77-6xS 60. S W Morrishead to S Miletin.....Oct. 30, 1915
Nov. 9, 1915—E ELEVENTH AVE 125 S Geary S 100xE 120. Marietta Dyar to whom it may concern.....Nov. 9, 1915
Nov. 9, 1915—NW BAKER and Vallejo W 55xN 90. John O Gantner to Frederick W Snook Co, Nov. 3; Brockhage, Foley & Green, Nov. 3; D Zelinsky.....Nov. 3, 1915
Nov. 10, 1915—E BROMPTON AV, extended 129.41 N Bosworth N 14 deg 31 min 10 sec E 42.55 th S 74 deg 15 min E 111.59 S 16 deg 31 min 46 sec W to a line Lot 9 Bk 13 Mission and 30th street Extn Hd. 41.83 N 74 deg 36 min 44 sec W 110.11 ptn Lot 5 and all Lot 6 Bk 6729. Assessor's Map. Gulsepp Trifiro to whom it may concern.....Nov. 1, 1915
Nov. 10, 1915—W BRYANT 127 S Alameda. Rainier Brewing Co to Holloway Expanded Metal Co, Nov. 1; H W Johns-Manville Co, Nov. 1; Guilfoyle Cornice Works.....Nov. 1, 1915
Nov. 10, 1915—W SIXTEENTH AVE 200 S Lake S 25xW 120. J M Peters to whom it may concern.Oct. 25, 1915
Nov. 10, 1915—E SCOTT bet. Green and Union 50x135; No. 2830 Scott. Maude James Graves to Pioneer

Plate & Window Glass Co., Nov. 6;
J I Kissell.....Nov. 1, 1915
ov. 10, 1915—W FOURTH AVE 200
S Clement S 25xW 120. I C Connor
to whom it may concern.....Nov. 5, 1915
ov. 11, 1915—SE MASON AND
Chestnut E 68xS 25 A Schivo and
A Nestori to S Lagomarsino.....
.....Nov. 10, 1915
ov. 11, 1915—E SEVENTEENTH AV
50 N California 24-5x57-6. Jesse
M and Eugenie Dado to E A
Schkade.....Nov. 10, 1915
ov. 11, 1915—SE PAGE & GOUGH
E 162-2½xS 120. Geo B Somers to
Larsen-Sampson Co.....Nov. 5, 1915
ov. 12, 1915—W VALENCIA 195 S
18th S 45xW 100. Richard J
Giazler to Hansbrough-Johnston
Co.....Nov. 10, 1915
ov. 12, 1915—NO. 2970 BROADWAY.
Florence H Ehrman to Forerder
Cornice Works.....Nov. 6, 1915
ov. 12, 1915—NW WASHINGTON &
Webster — 92-4½ W 27-6 S 92-4½
E 27-6. John H Schroder to L C
Woodridge.....Nov. 10, 1915
ov. 12, 1915—E SEVENTEENTH
Ave 300 S Lincoln Way S 75x120.
Chas & Florence Mitchell to whom
it may concern.....Nov. 1, 1915

LIENS FILED

San Francisco

ov. 5, 1915—W PRENTISS 125 N
Jarboe N 25xW 70. George Ryan
vs S R Cole and Ben W Abbott.....\$64.33
ov. 6, 1915—NE COLUMBUS AVE
& S Chestnut E 163-11 S 137-6 W
49-5½ NW 178-11½. Capitol Sheet
Metal Works vs Lewis Packing Co
and Rouda & Spivock.....\$77
ov. 8, 1915—S CHESTNUT AND NE
Columbus Ave E 105 S 50 W 63.37
NW to beg. Woods, Huddart &
Greco vs Rouda & Spivock and
Lewis Packing Co.....\$511.70
ov. 10, 1915—NO. 450 PARIS, N Paris
300 S Persia S 25xN 100. W M
French vs A and Caroline Chelini
and L C Smith.....\$162.50
ov. 10, 1915—E MISSION aa widened
25 N Richmond Ave N 25xW 100.
G L Woerner vs Mendel and Eather
Rosenstein, The Mutual Amusement
& Inv Co & H Levin.....\$350
ov. 10, 1915—N NINETEENTH 151-4
W Douglass N 114xW 51-4. Frank
R Ritchie & Co vs Margaret Cana-
van.....\$217.95
ov. 12, 1915—E TWENTY-EIGHTH
Ave 175 N Geary N 25xW 120. Ver-
mont Marble Co vs G E, Gertrude
E Cruden, Laura Dahl and Emil
Dahl.....\$85
ov. 12, 1915—N SACRAMENTO 27-6
W Cushman E 27-6xN 70. E J
Heegel and E F Parker (as F J
Heegel & Co) vs West Chamberlain
and Harry Chamberlain.....\$445

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

ov. 11, 1915—SE BRANNAN 275 NE
Sixth ..NE 137-6xSE 250. Norman
B Jlvmore & Co, Pacific Motor
& Eng Co by Tra Henry Rossback
to John Deere Plow Co.....
ov. 6, 1915—SW ELLIS & LARKIN
S 49xW 37-6. Munster & Born-
holdt to Mary C Kennedy and

Joseph B Kennedy.....
Nov 6, 1915—W NINETEENTH AVE
100 S Lake S 27-6xW 120. James
Cantley, McNear Brick Agency to
S F Bldg Company.....

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Amt.
2370	Peppin	Peppin	1450
2371	Peppin	Peppin	1450
2372	Peppin	Peppin	1450
2373	Peppin	Peppin	1450
2374	Costa	Moniz	450
2375	Glenn	McPhee	500
2377	Pfrang	Pfrang	2500
2378	Auzerais	Sommarstrom	10000
2379	Fraga	Kennedy	2500
2380	Pinkerton	Barker	400
2385	Waye	Waye	3000
2386	Pac Hardware	Jones	400
2387	French Bakery	Owner	2000
2388	Carleton	Carleton	1600
2389	Randolph	Randolph	750
2390	Barbeiro	Phillips	400
2391	Univ Invest	Owner	15000
2392	Westerman	Rogers	2000
2393	Connor	O'Connor	1500
2396	Strang	Strang	1200
2397	Iliohan	Iliohan	2000
2398	Pereira	Pereira	400
2399	Schomig	Schomig	1200
2400	Stewart	Stewart	3500
2401	Swallow	Swalley	3250
2402	Grube	Archer	1500
2403	Oakland	Christensen	32000
2406	Moffit	Kann	3400
2407	Erickson	Woodard	125
2408	Taylor	Legris	125
2409	Rousseau	Virgin	1140
2410	Johnson	Johnson	1800
2412	Banning	Stewart	5000
2413	S F Co	Harris	310
2409	Shredded Wheat	Zimmer	954
2415	Koerber	Blakely	500
2416	Baumann	Baumann	2500
2417	Nason	Reichel	500
2418	Marquis	Marquis	1800
2419	Welchoff	Welchoff	5000
2420	Woodburn	Woodburn	3000
2421	Battenhouse	Hill	500
2422	Parsons	Sadler	500
2429	Rose	Rose	4000
2430	Bray	United Bldrs	1000
2432	Pulcifer	Shrader	400
2433	Magnolia	Sneel	500
2434	Nethkin	Nethkin	1000
2435	Rowdy	Faulkes	400
2436	Quinn	Quinn	2500
2437	Taylor	Legris	1925
2438	Pac Gas	Norman	

DWELLING.

(2379) W 102ND AVE 75 N Orange,
Oakland. One-story 4-room dwlg.
Owner.....J. B. Peppin, San Leandro.
Architect...None.
Day's work.....COST, \$1450

DWELLING

(2371) W 102ND AVE 106 N Orange,
Oakland. One-story 4-room dwlg.
Owner.....J. B. Peppin, San Leandro.
Architect...None.
Day's work.....COST, \$1450

DWELLING

(2372) W 102ND AVE 137 N Orange,
Oakland. One-story 4-room dwlg.
Owner.....J. B. Peppin, San Leandro.
Architect...None.
Day's work.....COST, \$1150

DWELLING

(2373) W 102ND AVE 44 N Orange,
Oakland. One-story 4-room dwlg.
Owner.....J. B. Peppin, San Leandro.
Architect...None.
Day's work.....COST, \$1450

DWELLING

(2374) W TWENTY-NINTH AVE 75
N E-8th, Oakland. One-story 3-room
dwelling.
Owner.....Manuel Costa, 807 29th
Ave., Oakland.
Architect...None.

Contractor...Carlos Moniz, 964 23rd
Ave., Oakland.
COST, \$450

ALTERATIONS

(2375) NO. 1306 BROADWAY, Oak-
land. Alter cafe to real estate office.
Owner.....Minnerva Glenn.
Architect...None.
Contractor...A. J. McPhee, 2144 E-27th,
Oakland.
COST, \$500

DWELLING

(2377) N FORTY-FOURTH 95 W
Shafter Ave., Oakland. One-story 3-
room dwelling.
Owner.....L. G. Pfrang, 5441 Shafter
Ave., Oakland.
Architect...None.
Day's work.....COST, \$2500

APARTMENTS

(2378) S E-SIXTEENTH 50 W 3rd
Ave., Oakland. Three-story 18-room
apartments.
Owner.....Llewellyn Auzerais, E-
16th and 3rd Ave., Oakland
Architect...None.
Contractor...Sommarstrom Bros., 202
E-12th, Oakland.
COST, \$10,000

STORE AND FLATS

(2379) S E-FOURTEENTH 150 W 17th
Ave., Oakland. Two-story 7-room
store and flat.
Owner.....J. F. Fraga, 1616 E-12th,
Oakland.
Architect...None.
Contractor...E. H. Kennedy, 1516 E-
12th, Oakland.
COST, \$2500

ADDITION

(2380) NO. 3017 HOPKINS, Oakland.
Addition.
Owner.....Alice M. Pinkerton, Salt
Lake City, Utah.
Architect...None.
Contractor...J. W. Barker, 3660 39th
Ave., Oakland.
COST, \$400

(2385) E DANA 350 N Alcatraz Ave.,
Oakland. Two-story 6-room dwlg.
Owner.....F. L. Waye, 5223 Oak
Grove Ave., Oakland.
Architect...Hiram King Lovell, Dal-
ziel Bldg., Oakland.
Day's work.....COST, \$3000

ELEVATOR

(2386) NO. 1220 WASHINGTON, Oak-
land. Elevator.
Owner.....Pacific Hardware & Steel
Co., 7th & Townsend, S. F.
Architect...None.
Contractor...V. Jones, 225 Broadway,
Oakland.
COST, \$400

BAKE OVEN

(2387) NO. 515 CLAY, Oakland. Bake
oven.
Owner.....French Bakeries Co., Prem.
Architect...None.
Day's work.....COST, \$2000

DWELLING

(2388) S WELD 350 E 69th Ave., Oak-
land. One-story 5-room dwelling.
Owner.....S. Carleton, 2023 69th Ave.,
Oakland.
Architect...None.
Day's work.....COST, \$1600

DWELLING

(2389) N ALCATRAZ AVE 400 E Telegraph Ave., Oakland. One and one-half-story 4-room dwelling.
Owner.....E. G. Randolph, 158 Alcatraz Ave., Oakland.

Architect...None.
Day's work. COST, \$750

ALTERATIONS

(2390) NO. 3437 HAVEN, Oakland.
Alterations.
Owner.....Joe Barbeiro, 3438 Hollis, Oakland.
Architect...None.
Contractor...Antoine Phillips, 2831 Helen, Oakland.

COST, \$400

ALTERATIONS

(2391) SW FOURTEENTH & WASHINGTON, Oakland. Alter three-story frame and brick store and lodging house into store and loft building.
Owner.....University Investment Co.
Architect...None.
Day's work. COST, \$18,000

DWELLING

(2392) S SIXTY-FIFTH 300 E Adeline Oakland. One-story 5-room dwelling
Owner.....W. H. Westerman, 789 65th, Oakland.
Architect...None.
Contractor...Chas. Rogers, 5426 Boyd Ave., Oakland.

COST, \$2000

DWELLING

(2394) E CARLTON 140 S Prospect Ave., Oakland. Two-story 8-room dwelling.
Owner.....J. C. O'Connor, 5314 Bryant Ave., Oakland.
Architect...M. I. Diggs, 2444 Bowditch Ave., Berkeley.
Day's work. COST, \$4500

DWELLING

(2396) NO. 18 ARBOR DRIVE, being Lot 73 Nova Piedmont, Piedmont. Two-story 7-room dwelling.
Owner.....V. N. Strang, 1521 9th, Alameda.
Architect...None.
Day's work. COST, \$3000

FRAME DWELLING

(2397) W GREENBANK AVE 107 E Lake Ave., Piedmont. One-story frame dwelling.
Owner.....A. H. Hiohan, 1028 55th, Oakland.
Architect...None.
Day's work. COST, \$2000

ALTERATIONS

(2398) NO. 4143 BROADWAY, Oakland.
Alterations.
Owner.....M. E. Pereira, Premises.
Architect...None.
Day's work. COST, \$400

DWELLING

(2399) W EIGHTY-EIGHTH AVE 350 S E-11th, Oakland. One-story four-room dwelling.
Owner.....A. Schomig, 4529 Tennyson Oakland.
Architect...None.
Day's work. COST, \$1200

DWELLING

(2400) E VALLE VISTA 300 S Sunny-

slope, Oakland. Two-story 6-room dwelling.

Owner.....B. A. Stewart, 8 Fairview Ave., Piedmont.
Architect...None.
Day's work. COST, \$3500

DWELLING

(2401) NW HUDSON AND ARBOR Ave., Oakland. One and one-half-story 7-room dwelling.
Owner.....H. M. Swalley, 710 Walker Ave., Oakland.
Architect...None.
Day's work. COST, \$4250

DWELLING

(2402) E FORTIETH AVE 145 N Mera, Oakland. One-story five-room dwelling.
Owner.....W. C. Grube, 1829 40th Ave Oakland.
Architect...None.
Contractor...Archer & Stanley, Okd.

COST, \$1500

CONCRETE LIBRARY

(2403) FORTY-EIGHTH & FOOTHILL Blvd., Oakland. One-story and basement reinforced concrete library.
Owner.....City of Oakland.
Architect...W. H. Weeks, 75 Post, San Francisco.
Contractor...C. Christensen, 287 Wayne Ave., Oakland.

COST, \$32,000

CLASS "A" THEATRE

(2406) ELEVENTH AND FRANKLIN, Oakland. Excavation and backfilling and bulkheading work for Class "A" theatre.

Owner.....James Moffit Estate Co.
Architect...None.
Contractor...Clinton Constr Co. of California, Mutual Bank Bldg., San Francisco.
Sub-Contractor...Joseph Kann, 517 Market, Oakland.

Filed Nov. 8, '15. Dated Oct. 22, '15.
10th of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$3400
Bond, \$1700. Surety, National Surety Co. Limit, forfeit, plans and specifications, none.

FRAME DWELLING

(2407) LOT 21 Map Nova Piedmont, Piedmont. All work for one-story and basement frame dwelling.
Owner.....George Erickson, Oakland.
Architect...C. O. Clausen, Hearst Bldg San Francisco.

Contractor...E. W. Woodard, Oakland.
Filed Nov. 8, '15. Dated Nov. 5, '15.
Frame up 1/4
Brown coated 1/4
Completed and accepted..... 1/4
Usual 35 days..... 1/4
TOTAL COST, \$4282
Bond, none. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

DWELLING

(2408) PTN LOT 20 Map Bray Tract, Oakland. All work for one-story 5-room dwelling.
Owner.....J. B. Taylor, Oakland.
Architect...None.
Contractor...L. H. Legris, 612 44th, Okd.
Filed Nov. 9, '15. Dated Nov. 9, '15.
Frame up 1/4
Brown coated 1/4

Completed and accepted..... 1/4
Usual 35 days..... 1/4
TOTAL COST, \$1925
Bond, none. Limit, 60 days after Nov. 1. Forfeit, \$1. Plans and specifications filed.

HARDWOOD FLOORS

(2409) NW GRAND AVE AND PARK View Terrace NE 100.95 NW 40.56 NE 98.55 SE 97.67, Oakland. All work for hardwood floors for apartments.
Owner.....Charles J. and Carrie B. B. Rousseau, S. F.
Architect...Chas. J. Rousseau, 46 Kearny, San Francisco.
Contractor...A. F. Virgil, Oakland.
Filed Nov. 9, '15. Dated Oct. 30, '15.
50% completed \$250
Completed and accepted..... 50
TOTAL COST, \$1140

Bond, none. Limit, as soon as possible. Forfeit, none. Plans and specifications, none.

DWELLING

(2410) W TWENTY-FIRST AVE 115 S E-30th, Oakland. One-story five-room dwelling.
Owner.....Ben H. Johnson, 2014 E-30th, Oakland.
Architect...None.
Contractor...Ben O. Johnson & Sons, 2014 E-30th, Oakland.

COST, \$1800

DWELLING

(2412) E BELGRAVE 196 N Napa, Oakland. Two-story 7-room dwlg.
Owner.....Banning & Stewart, 5215 Broadway, Oakland.
Architect...None.
Day's work. COST, \$5000

T & G ROOF

(2413) WEST OAKLAND YARDS, Oakland. All work for tar and gravel roof.
Owner.....Southern Pacific Co.
Architect...None.
Contractor...B. S. Harris.
Filed Nov. 10, '15. Dated Oct. 26, '15.
15 days after completed and accepted \$225.80
Usual 35 days..... 85.00
TOTAL COST, \$310.80
Bond, none. Limit, 30 days. Forfeit, none. Plans and specifications, none.

VACUUM CLEANING

(2414) LOTS 8 TO 24 INCL. and Ptn Lots 4, 5, 6, 7, 25, 26, 27, 28, 29, 30, 31 and 32 Map R J McMullin's Sbdvn of Blk 576, Oakland. All work for vacuum cleaning machine and apparatus.
Owner.....Pacific Coast Shredded Wheat, Co.
Architect...Hobart & Cheney, Crocker Bldg., San Francisco.
Contractor...E. L. B. Zimmer, 536 13th, Oakland.
Filed Nov. 10, '15. Dated Nov. 3, '15.
Completed 75%
Usual 35 days..... 25%
TOTAL COST, \$984
Bond, \$500. Sureties, W. S. Peters and Geo. Hood. Limit, 2 weeks. Forfeit, none. Specifications only filed.

ALTERATIONS

(2415) NO. 5488 COLLEGE AVE., Oakland. Alterations.
Owner.....T. C. Koerber.
Architect...None.

Contractor...W. T. Blakely, 3229 E-23d, Oakland.

COST, \$500

DWELLING

(2416) NE THASK AND MAVIS, Oakland. One-story 7-room dwelling.

Owner.....G. W. Baumann, 5360 Trask, Oakland.

Architect...None.

Day's work.

COST, \$2500

GARAGE

(2417) N LOWER ROAD 194 W Cross Roads, Oakland. Garage.

Owner.....Arthur Nason, Premises.

Architect...None.

Contractor...Paul R. Reichel, 1626 Josephine, Berkeley.

COST, \$500

DWELLING

(2418) E FORTY-FIRST 180 S Carlington, Oakland. Two-story 6-room dwelling.

Owner.....E. M. Marquis, 2827 Russell Berkeley.

Architect...None.

Day's work.

COST, \$1800

STORES AND FLATS

(2419) NW NINETIETH AVE & E-14th, Oakland. Two-story 11-room stores and flats.

Owner.....C. Welchhoff, 8412 E-14th, Oakland.

Architect...None.

Day's work.

COST, \$5000

DWELLING

(2420) E BROADWAY 80 S Prospect Drive, Oakland. Two-story 7-room dwelling.

Owner.....Paul Woodburn, 3965 Greenwood Ave., Oakland.

Architect...None.

Day's work.

COST, \$3000

ALTERATIONS

(2421) NO. 3427 PIEDMONT AVE., Oakland. Alterations.

Owner.....F. W. Battenhouse, Prem.

Architect...None.

Contractor...J. R. Hill, 1729 Brush, Okd.

COST, \$500

DWELLING

(2422) W CAMPBELL 50 N 13th, Oakland. One-story 4-room dwelling.

Owner.....E. W. Parsons, 1303 1/2 Campbell, Oakland.

Architect...None.

Contractor...Sadler & Gimmoms, 3933 Magnolia, Oakland.

COST, \$1200

FRAME DWELLING

(2429) E MANOR DRIVE, Piedmont. Two-story 8-room frame dwelling.

Owner.....Mrs. Rosiva Rose, 5801 Dover, Oakland.

Architect...O. S. Grove, 2911 Telegraph Ave., Berkeley.

Day's work.

COST, \$1000

ALTERATIONS

(2430) NO. 319 BONITA AVE., Piedmont. Alter residence.

Owner.....Mr. Bray.

Architect...None.

Contractor...United Home Bldrs., 1762 Broadway, Oakland.

COST, \$1000

REPAIRS

(2432) NO. 4220 MONTGOMERY, Oakland. Repairs.

Owner.....H. W. Pulcifer, Union Svgs Bank Bldg., Oakland.

Architect...None.

Contractor...J. F. Shrader, 520 16th, Oakland.

COST, \$400

REPAIRS

(2433) NOS. 918-924 WEBSTER, Oakland. Repairs.

Owner.....P. Magnolia.

Architect...F. D. Voorhees, Central Bank Bldg., Oakland.

Contractor...D. J. Sneed.

COST, \$500

DWELLING

(2434) E THIRTY-NINTH AVE 50 N Kanning, Oakland. One-story four-room dwelling.

Owner.....H. Nethkin, 3753 Brown Ave., Oakland.

Architect...None.

Day's work.

COST, \$1000

REPAIRS

(2435) NO. 626 FRANKLIN, Oakland. Fire repairs.

Owner.....Henry Rewdy, Oakland.

Architect...None.

Contractor...John R. Faulkes, 3828 E-14th, Oakland.

COST, \$100

DWELLING

(2436) W 167TH AVE 124 N Bancroft, Oakland. One-story 6-room reinforced concrete dwelling.

Owner.....G. W. Quinn, 758 9th Ave., San Francisco.

Architect...None.

Day's work.

COST, \$2500

DWELLING

(2437) E THIRTY-THIRD AVE 135 N Farnam, Oakland. One-story five-room dwelling.

Owner.....J. B. Taylor, Premises.

Architect...None.

Contractor...L. H. Legris, 612 14th, Okd

COST, \$1295

WELL, ETC

(2438) SW FIRST AND GROVE W 225 xs 250, Oakland. All work for digging well, case and install cement work.

Owner.....Pacific Gas & Electric Co., 13th and Clay, Oakland.

Architect...None.

Contractor...H. W. Norman, 1932 Broadway, Oakland.

Filed Nov. 12, '15. Dated Nov. 11, '15.

Completed 75%

Usual 35 days..... 25%

TOTAL COST, \$3.50 per lin. ft.

Bond, \$350. Surety, Fidelity & Deposit Co. Limit, 21 days, Forfeit, plans and specifications, none.

Building Contracts Awarded
Berkeley.

No.	Owner	Contractor	Amt.
2376	Short	Crow	400
2381	Dunn	Cederberg	4724
2382	Zimmerling	Ahnfeld	1918
2385	Pfrang	Pfrang	2250
2384	Olson	Olson	1300
2384	Pfrang	Pfrang	2500
2395	McLennan	Garden	13808
2401	Tompkins	Mason	2500
2405	Hill	Hill	500
2411	Wetzell	Wetzell	1000

2437 Walbold Kollmer 1000

2439 Gasner Van Sant 12108

ADDITION

(2376) N WOOLSEY 300 E Shattuck Ave., Berkeley. Addition.

Owner.....J. T. Short, 2122 Woolsey, Berkeley.

Architect...None.

Contractor...A. Crow, 2118 Woolsey, Berkeley.

COST, \$100

ALTERATIONS

(2281) NO. 2545 TELEGRAPH AVE., being Lots 10, 11 and 12 Blk "U" Leonard Tct, Berkeley. Alterations and additions to frame dwelling.

Owner.....Margaret A. Dunn, Bkly.

Architect...Chas. W. McCall, Central Bank Bldg., Oakland.

Contractor...A. Cederberg and A. H. Anderson, 1033 Poplar St., Oakland.

Filed Nov. 6, '15. Dated Nov. 6, '15.

Frame up and enclosed.....\$1400

Plastered and beach board in place 1050

Completed and accepted..... 1050

Usual 35 days..... 1224

TOTAL COST, \$1424

Bond, \$2362. Surety, New England Equitable Insurance Co. Limit, 75 days. Forfeit, none. Plans and specifications filed.

DWELLING

(2382) NW LINCOLN AND CALIFORNIA, Berkeley. One-story 5-room dwelling.

Owner.....Fred Zimmerling, S. E.

Architect...None.

Contractor...Henry Ahnefeld, 3005 King Berkeley.

COST, \$1918

DWELLING

(2383) E CALIFORNIA 96 N Derby, Berkeley. One-story 5-room dwlg.

Owner.....C. J. Pfrang, 5487 Claremont Ave., Oakland.

Architect...None.

Day's work.

COST, \$2250

DWELLING

(2384) W MATHEWS 210 N Oregon, Berkeley. One-story 5-room dwlg.

Owner.....Arvid E. Olson, 721 10th, Berkeley.

Architect...None.

Day's work.

COST, \$1900

DWELLING

(2395) N DERBY 175 W Grant, Berkeley. One-story 5-room dwelling.

Owner.....H. C. Pfrang, 320 Forest, Oakland.

Architect...None.

Day's work.

COST, \$2500

FRAME DWELLING, ETC.

(2395) LOTS 6 AND 7 BLK "E" Claremont fronting on Belrose Ave., Berkeley. All work except electric fixtures for two-story and basement frame dwelling and garage.

Owner.....Mrs. Samuel B. McLennan, 2813 Parker, Berkeley

Architect...R. G. McLoughlin, Sheldon Bldg., San Francisco.

Contractor...Frank M. Garden & Co., 25 Kearny, San Francisco.

Filed Nov. 5, '15. Dated Nov. 5, '15.

Between 1st and 10th of each month

Usual 35 days..... 25%
TOTAL COST, \$13,805
 Bond, \$6904. Surety, Massachusetts
 Bonding & Insurance Co. Limit, 100
 days. Forfeit, none. Plans and spec-
 ifications filed.

DWELLING

(2404) E JOSEPH AVE 120 N Hopkins,
 Berkeley. Two-story 6-room dwlg.
 Owner.....P. T. Tompkins, 2526 Du-
 rant Ave., Berkeley.
 Architect...None.
 Contractor..Mason-McDuffie Co., Shat-
 tuck and Addison, Bkly.
COST, \$2500

STORE

(2405) N DWIGHT 75 W College, Ber-
 keley. One-story 3-room store.
 Owner.....E. Hill, 2208 Allston Way,
 Berkeley.
 Architect...None.
 Day's work..... **COST, \$500**

DWELLING

(2411) E PERALTA 480 N Gilman,
 Berkeley. One-story 4-room dwlg.
 Owner.....L. A. Wetzel, 1209 Peralta
 Berkeley.
 Architect...None.
 Day's work..... **COST, \$1000**

DWELLING

(2431) W MARIPOSA 500 S Los An-
 geles, Berkeley. Two-story 7-room
 dwelling.
 Owner.....Rother & Wolbold, First
 National Bank Bldg., Bkly.
 Architect...None.
 Contractor..Jacob Kollmer, 2813 Stuart,
 Berkeley.
COST, \$4000

FRAME RESIDENCE

(2439) NE DWIGHT WAY AND
 Prospect N 100 E 100 S 105 W 100.3,
 Berkeley. Brickwork, carpenter,
 concrete, electric, excavating, filling
 and grading, glazing, hardware, lath
 and plaster, ornamental iron, paint-
 ing and sheet metal work for two-
 story and basement and attic frame
 residence.
 Owner.....Horace Gushee Co., Bkly.
 Architect...Bakewell & Brown, 251
 Kearny, San Francisco.
 Contractor..Van Sant-Houghton Co.,
 503 Market, San Francisco.
 Filed Nov. 12, '15. Dated Nov. 9, '15.
 On 15th of each month..... 75%
 Usual 35 days..... 25%
TOTAL COST, \$12,405
 Bond, \$6204. Surety, New England
 Equitable Insurance Co. Limit, April
 10, 1916. Forfeit, \$20 per day after
 May 1. Plans and specifications filed.

Building Contracts Awarded**Alameda**

2423	Rorwick	.....Dufour	450
2424	Cowart	.....Cowart	2000
2425	Blanchard	.....Young	600
2426	Schneider	.....Brown	1000
2427	Tucker	.....MacRea	500
2428	Hammond	.....Rockingham	1900

GARAGE

(2423) NO. 1530 PARU, Alameda.
 Garage.
 Owner.....C. P. Rowick, 2326 Santa
 Clara Ave., Alameda.
 Architect...None.
 Contractor..Wm. Dufour, Alameda.
COST, \$450

DWELLING

(2424) NO. 818 OAK, Alameda. One-
 story 6-room dwelling.
 Owner.....Z. T. Cowart, 3275 Central
 Ave., Alameda.
 Architect...None.
 Day's work..... **COST, \$2000**

DWELLING

(2425) NO. 2520 CLEMENT AVE., Ala-
 meda. One-story 3-room dwelling.
 Owner.....Dora Blanchard, 2526
 Clement Ave., Alameda.
 Architect...None.
 Contractor..J. H. Young, 2530 Clement
 Ave., Alameda.
COST, \$600

ALTERATIONS

(2426) NO. 626 HAIGHT AVE., Ala-
 meda. Alterations.
 Owner.....Mrs. C. Schneider, Prem.
 Architect...None.
 Contractor..C. A. Brown, 2317 Alameda
 Ave., Alameda.
COST, \$1000

ALTERATIONS

(2427) NO. 1432 PARK, Alameda.
 Alterations.
 Owner.....Tucker Investment Co.,
 1504 Park, Alameda.
 Architect...None.
 Contractor..C. W. MacRae, 2315 En-
 cinal Ave., Alameda.
COST, \$500

DWELLING

(2428) W VERSAILLES AVE 126 S
 Central Ave., Alameda. One-story 5-
 room dwelling.
 Owner.....H. M. Hammond, 2109
 Pacific Ave., Alameda.
 Architect...None.
 Contractor..J. H. Rockingham, 2306
 San Jose Ave., Alameda.
COST, \$1900

COMPLETION NOTICES**ALAMEDA COUNTY.****RECORDED****AMOUNT**

Nov. 4, 1915—N DURANT AVE \$158
 W Piedmont Way N 75.58 W 50 S
 79.24 E 50.15, Bkly. Frank J Wood-
 ward to Cederborg & Anderson...
Oct. 26, 1915
 Nov. 4, 1915—LOT 20, Emmons Tract,
 Ala. G W Emmons Co to Banning
 & Stewart.....Oct. 30, 1915
 Nov. 8, 1915—W 18 LOT 31 and E 14
 Lot 22 Map Redivision Montgom-
 ery Tract, etc., Okd. Lillian E
 Emery to J Henry Boehrer and
 Alfred Legault.....Nov. 5, 1915
 Nov. 8, 1915—N SIXTEENTH 230 W
 West W 30xN 103-9, Okd. Dora
 Krokner to J Henry Boehrer and
 Alfred Legault.....Nov. 5, 1915
 Nov. 8, 1915—E THOMAS 178 N Napa
 N 39x100, Okd. E L Higgins to
 whom it may concern.....Nov. 4, 1915
 Nov. 8, 1915—NE PENNIMAN AVE &
 SE 38th Ave SE 30xNE 100.24, Okd.
 Lawrence and Lena Waters to
 Allan & Coleman.....Nov. 6, 1915
 Nov. 8, 1915—SE CLAREMONT AVE and
 The Uplands, Bkly. Mrs J T
 Donahue by James W Plachek to
 Frank Button.....Nov. 3, 1915
 Nov. 8, 1915—SE FORTY-FOURTH &
 Grove 50x90, Okd. Marie Depole
 to L G Geary.....Nov. 1, 1915
 Nov. 9, 1915—LOT 3 Map Boyd Place

Bkly. E L Jenks to whom it may
 concern.....Nov. 8, 1915
 Nov. 9, 1915—SE E-FOURTEENTH
 and 96th Ave S 100xNE 25, Oakland.
 Robert Philip to L A Williams &
 Son.....Oct. 19, 1915
 No. 9, 1915—LOT 31 BLK P Harmon
 Tract, Bkly. Frank Ramsey to
 whom it may concern.....Nov. 9, 1915
 Nov. 10, 1915—LOT 42 BLK "F,"
 Northbrae Terrace, Bkly. James A
 and Cora M Wiggs to F R Peake
 Co.....Nov. 6, 1915
 Nov. 11, 1915—LOT 48 Map Crocker
 Highlands, Okd. Piedmont Heights
 Bldg Co to L A Rose.....Nov. 10, 1915
 Nov. 12, 1915—N HOPKINS 230 E The
 Alameda 37½x110, Bkly. H Hiller
 by F R Peake to H Carlson.....
Nov. 11, 1915
 Nov. 12, 1915—LOTS 68 AND 69 SW
 10 Lot 70 and SW 10 Lot 71 Map
 Rosa Lee Tract, Okd. Joseph and
 Mary Plittner to whom it may
 concern.....Nov. 12, 1915
 Nov. 12, 1915—LOTS 10, 11, 12 AND 13
 Blk 136 on S Tenth 200 E Oak,
 Okd. Eugene Schmidt to E A
 Schmidt.....Nov. 12, 1915
 Nov. 12, 1915—W CASTRO, if extend-
 ed, S 80 S First W 456.03xS 200,
 Okd. Pacific Gas & Electric Co to
 Western Pipe & Steel Co of Cali-
 fornia.....Nov. 6, 1915

LIENS FILED**ALAMEDA COUNTY.**

Nov. 6, 1915—LOTS 64 AND 65 BLK
 11 Map No. 4 Regents Park Albany.
 Walter Mork vs John Larson. \$24.60
 Nov. 6, 1915—W 120 LOT 7 AND W
 25 Lot 6 Blk 2036, Rowland Tract,
 Okd. Hammond Lumber Co vs
 Eugenia Tiscorina and A Duncan...
\$50.58
 Nov. 8, 1915—40 HORSE POWER
 Rambler Ambulance State License
 No. 11475. Clinton L Walker vs
 F A Weast.....\$180
 Nov. 8, 1915—LOT 32 BLK "B" Map
 Central Terrace, Okd. Inland Floor
 Co vs B C Swaggert and W A
 White.....\$87
 Nov. 10, 1915—SE THIRTY-FIFTH
 Ave 95.40 NE Douglas NE 35.10 SE
 111.86 SW 25 NW 14.17 SW 10 NW
 100, Okd. John F Millerick vs
 Mary and John Doe Frautzen and
 Jane and John Doe.....\$104
 Nov. 12, 1915—LOT 28 BLK 80 Kel-
 lersberger's Map of City of Oak-
 land. G W Valpey vs Thomas and
 Lily Fennell.....\$37
 Nov. 12, 1915—SW SACRAMENTO &
 Francisco W 80xS 100, Berkeley.
 Rousseau & Rousseau, Inc vs E M
 Reagh.....\$150
 Nov. 12, 1915—S TENTH 100 E Oak
 E 100xS 100, Okd. Alfred J Weber
 vs E A Schmidt.....\$38.50

BUILDING CONTRACTS.**SANTA CLARA COUNTY.****FRAME BUILDING**

5 ACRES OF LAND about 3 miles from
 Almaden on the Almaden Road, Santa
 Clara County. All work for one-story
 frame building.
 Owner.....Annie Gilleran.
 Architect...J. Ostrander.
 Contractor..A. Ostrander, 57 Clifton
 Ave., San Jose.

Filed Oct. 14, '15. Dated Oct. 14, '15.
 Floor laid\$419
 When completed 468
 Usual 35 days 313
TOTAL COST, \$1200
 Bond, \$615. Sureties, R. Wallace and
 M. F. Hopkins. Limit, forfeit, none.
 Plans and specifications filed.

COMPLETION NOTICES.

MARIN COUNTY.

RECORDED ACCEPTED
 Nov. 9, 1915—MILL VALLEY. Lillian
 K Hodghead to Nettie Mae Feider..
Oct. 30, 1915

LIENS FILED.

MARIN COUNTY.

RECORDED AMOUNT
 Nov. 8, 1915—SAN ANSELMO. E K
 Wood Lumber Co vs Joelle Ross
 Allen and Frank H Allen.....\$20.52

BUILDING CONTRACTS.

FRESNO COUNTY.

DWELLING
 LOTS 4, 5, 6 BLK 101, Fresno. Dwelling
 Owner.....H. Chorbajian, 858 I St.,
 Fresno.
 Architect...None.
 Day's work..... COST, \$4000

DWELLING
 LOTS 6, 7, 8 BLK 2, Palm Villa Tract,
 Fresno. Dwelling.
 Owner.....Fresno Home Builders, 922
 J St., Fresno.
 Architect...None.
 Contractor..Lee R. Duncan, 922 J St.,
 Fresno.
 COST, \$3000

DWELLING
 LOTS 16 AND 17 BLK 8, Fresno Hghts.,
 Fresno. Dwelling.
 Owner.....C. L. Saylor, 1035 Green
 St., Fresno.
 Architect...None.
 Day's work..... COST, \$1750

DWELLING
 LOTS 1 TO 4, North Park. Fresno.
 Dwelling.
 Owner.....Frank Belles, 917 J St.,
 Fresno.
 Architect...None.
 Contractor..C. V. Smith, 1371 Del Mar
 St., Fresno.

ADDITION
 LOTS 21 AND 22 BLK 15, Fresno. Ad-
 dition.
 Owner.....D. Paul.
 Architect...None.
 Contractor..J. Soriano, 1520 Calaveras
 St., Fresno.
 COST, \$885

DWELLING
 LOTS 9, 10 PTN LOT 11, Alta Vista Trct,
 Fresno. All work except electrical
 work for dwelling.
 Owner.....A. G. Wishon, 340 Forth-
 camp St., Fresno.
 Architect...Conates & Traver, Rowell
 Bldg., Fresno.
 Contractor..Frowbitt & Shields, 425
 Rowell Bldg., Fresno.
 Filed Nov. 4, '15. Dated

Foundations in\$1560
 Up to 2nd floor..... 1560
 Roof framed 1560
 Roof on 1560
 Plastered 1560
 Ready for painting..... 1560
 Completed 1625
 Usual 35 days..... 3662
TOTAL COST, \$14,647

Bond, \$7323. Surety, California Casu-
 alty Co. Limit, 100 working days.
 Forfeit, \$10. Plans and specifications
 filed.

DRILLING WELL.

SEC 35 19-15, Fresno. All work for
 drilling oil well No. 16.
 Owner.....Kern Trading & Oil Co.
 Architect...None.
 Contractor..Federal Drilling Co.
 Filed Nov. 8, '15. Dated Oct. 20, '15.
 Contractor to receive 50% of money
 earned during previous month on
 the 10th day of succeeding month.
 Usual 35 days..... 50%
 COST, \$3.80 per ft. drilled and casting
 set.
 Bond, \$5200. Surety, National Surety
 Co. Limit, forfeit, none. Plans and
 specifications filed.

GARAGE

LOTS 30, 31 AND 32 BLK 52, Fresno.
 All work for garage.
 Owner.....John Scheld.
 Architect...None.
 Contractor..F. J. Stone, 2007 Mariposa
 St., Fresno.
 COST, \$3980

OIL STATION

BLK 4, DEAN ADDITION, Fresno. All
 work for oil station.
 Owner.....Shell Oil Co., 343 Sansome
 St., San Francisco.
 Architect...None.
 Contractor..Gutleben Bros., New Call
 Bldg., San Francisco.
 COST, \$1000

COMPLETION NOTICES.

FRESNO COUNTY.

RECORDED ACCEPTED
 Nov. 10, 1915—LOTS 14, 15, 16 BLK
 82, Fresno. J T Tipper to R F
 Feichin.....Nov. 10, 1915

LIENS FILED.

FRESNO COUNTY.

RECORDED AMOUNT
 Nov. 5, 1915—LOTS 189 TO 192, Perrin
 Col, Fresno. Valley Lumber Co vs
 David Boos\$246

BUILDING CONTRACTS.

SACRAMENTO COUNTY.

ALTERATIONS

S 82 FEET 9 IN. OF W AND S 30 FT.
 of N 77 ft. 9 in. Lot 8, G. H. 11th
 and 12th Sts., Sacramento. Alter
 two-story frame building.
 Owner.....Mary J. Huelsman, Admx
 of Est. Peter J. Huelsman,
 dec'd, 721 11th St., Sacra-
 mento.
 Architect...None.
 Contractor..A. W. Norris, 109 21st St.,
 Sacramento.

Filed Nov. 8, '15. Dated Nov. 8, '15.
 COST, \$2400

BRICK FOUNDATION

NO. 1714 Q ST., on S ¼ Lot 4 BLK Q.
 It, 5th and 6th Sts., Sacramento. New
 brick foundation and remodel In-
 terior of frame dwelling.
 Owner.....Robert Melfale, 526 Q St.,
 Sacramento.
 Architect...None.
 Contractor..M. F. Terra, 2315 9th St.,
 Sacramento.
 COST, \$300

FRAME RESIDENCE

NO. 3105 E ST., on Lot 191 Casa Loma
 Terrace, Sacramento. One-story 6-
 room frame residence.
 Owner.....B. McKay, 3029 E St., Sacra-
 mento.
 Architect...None.
 Day's work..... COST, \$2400

FRAME DWELLING

MCCULLOUGH AVE., on Lot 1228 in
 Wright & Kimbrough Tract No. 25,
 Sacramento. One-story 6-room frame
 dwelling.
 Owner.....P. R. Jores, 917 19th St.,
 Sacramento.
 Architect...None.
 Contractor..W. R. Saunders, 2801 I St.,
 Sacramento.
 COST, \$2000

ALTERATIONS

NO. 301 M ST., Sacramento. Alterations
 remove rear and west wall of bldg.
 Owner.....N Sakiyama, 413 P St.,
 Sacramento.
 Architect...None.
 Contractor..Siller Eros., 1614 12th St.,
 Sacramento.
 Filed Nov. 10, '15. Dated Nov. 10, '15.
 COST, \$1160

REPAIRS

NO. 325 I ST., on Lot 5 Blk H, 1. 5th
 and 6th Sts., Sacramento. Repair
 brick building near depot.
 Owner.....Southern Pacific Co., Prem.
 Architect...None.
 Day's work..... COST, \$400

REPAIRS

NO. 2100 J ST., Sacramento. Repair
 dwelling.
 Owner.....E. L. Southworth, Prem.
 Architect...None.
 Contractor..M. D. Smith.
 COST, \$400

ALTERATIONS

NO. 301 M ST., on W ½ S 60 feet Lot 8
 Blk 14, M, 3rd & 1th Sts., Sacramento.
 Remodel front and interior of two-
 story brick building.
 Owner.....Nippon Trading Co., Lessee
 Premises.
 Architect...None.
 Contractor..Siller Bros., 1614 12th St.,
 Sacramento.
 COST, \$1160

LIENS FILED.

SACRAMENTO COUNTY.

RECORDED AMOUNT
 Nov. 8, 1915—W 20 FT. LOT 5 AND
 E ½ Lot 6, G. H. 13th and 14th Sts.,
 Sacramento. W P Fuller & Co vs
 C W and H C Johnson, J M E Mor-
 rill and C O McFarland.....\$629.12

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W. D. Manville, News Editor.

November 24, 1915

Leading Articles in this Issue:

The Status Of Chinese Railways.

By Charles Davis Jamison, M. AM. Soc. C. E., Supervising Engineer and Architect to the Imperial Chinese Board of Foreign Affairs (Wai Wu Pu), Peking China.

Drafting Department in the City of Los Angeles

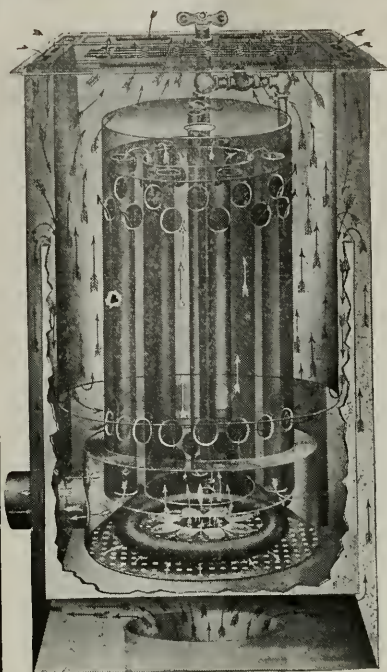
By J. R. Prince, Chief Draftsman.

Crane Exhibit at the Panama-Pacific Exposition

Staff Article

Editorial

Letters to the Editor.



FLOOR FURNACE STYLE B
Size 14½ in. square by 2 ft. high
Has 8-in. Fresh Air Intake with Damper.
Has 3-in. Outlet Vent
Fits in space between floor joists
Hangs from Register which lays flush with floor.

Style

A. Floor Furnace with fresh air intake on side. For use in buildings having sufficient fresh air circulation under same. For artificial gas only.

B. Floor Furnace with fresh air intake at bottom. For use in buildings where it is desirable to obtain air directly from outside of cellar or basement. For artificial gas only.

NOTE—Style A and B are built alike except for position of fresh air intake.

C. Wall Furnace with fresh air intake at bottom. For artificial gas only.

D. Wall Furnace with fresh air intake at back. For artificial gas only.

NOTE—Style C and D are built alike except for position of fresh air intake.

Prices and Information on Natural Gas Furnaces Furnished on Application.

Unit Plant Hot Blast Furnaces

On Display, Booth 33

Collective Gas Exhibit

Manufacturers' Building
Panama-Pacific International Exposition
San Francisco.
Manufactured under Patents, and Patents pending, by

UNIT GAS HEATING CO., Successors to
Central Hardware Co., Inc.
Los Angeles, Cal.

ARCHIE I. BLOCK, 647 Mission St., S. F.
Sales Agent for Northern Cal.

Unit Plant Hot Blast Furnace

Delivers the Heat

A Complete Answer to the Heating Question.

Instantaneous—Furnishes an instantaneous and continuous supply of
Sanitary—fresh warm air free from gas fumes, odors, smoke or dust.

Hygienic—Maintains an even temperature necessary to health and comfort.

Scientific—Built like a real hot air furnace reduced in size.

Convenient—Operated from inside of room, saving many steps to cellar.

Simple—Any child 10 years of age can operate, turn the key and apply match.

Economical—Wall furnace burns 10 cubic feet and floor furnace 20 cubic feet of gas per hour.

Efficient—Each furnace will heat from 2 to 5 rooms or from 3,000 to 9,000 cubic feet of space.

Fireproof—Has four thicknesses of metal and three air spaces of one inch each between fire and wood; fire is 20 inches from floor.

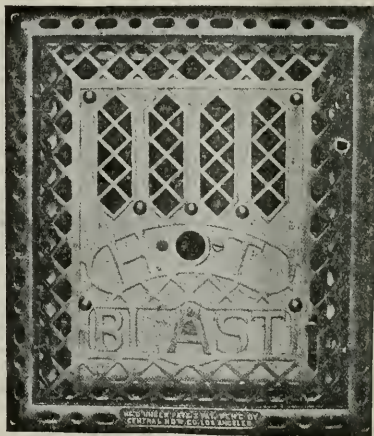
Up to Date—Uses exclusively the Johnson Hot Blast Burner, recognized as the most efficient ever constructed.

Durable—Is made from best grade of metal to be obtained.

Finish—Register electro plated Flemish Brass. The finish that lasts.

Installation—Can be installed by any gas appliance dealer, plumber, tinsmith or hardware merchant at nominal cost.

Retail Prices—Wall Furnace, any style, \$22.50
Floor Furnace, any style, \$30.00
Installations and fittings extra.



WALL FURNACE STYLE C

Size of Wall Furnace front is 11x19 inches, with a recessed portion of 14x17x4 inches between studding. Recessed portion has a 2-inch vent opening at top and a fresh air intake 6x12 inches at bottom operated with damper in front. Both vent and fresh air intake pipes go between studding.

Our Claim

With
Our
Unit Plant
Hot Blast
Floor
And Wall
Furnaces
You
Can
Furnish
Your
Customers
Auxiliary
Or
General
Heating
Results
Gas
With
Gas
In
Competition
With
Coal or Oil

Our Guarantee

Workmanship

Materials

Guaranteed

For One Year

No Gas Odors,

Smoke or

Products

Of Com-

bustion

Will Come

Into

Rooms

Heated

Fresh

Pure Air

Coming in,

All Bad Air

Goes Out

We Will

Refund

Money Paid

For

Any of Our

Unit Plant

Furnaces

Which Does

Not Prove

Efficient

According to

Our

Statements

Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
of the Pacific Coast.

Issued Weekly, \$3.00 per year

San Francisco, November 24, 1915

Fifteenth Year, No 47

The Status Of Chinese Railways.*

By Charles Davis Jameson, M. AM. Soc. C. E., Supervising Engineer and Architect to the Imperial Chinese Board of Foreign Affairs
(Wai Wu Pu), Peking, China.

A short account of railway history in China is necessary to an understanding of the present status of Chinese railways.

The first definite plan for a railway in China was a petition by the foreign merchants in Shanghai, mostly English and Americans, dated July 20, 1863, to the then Governor of the Province of Kiangsu, H. E. Li Hung Chang, asking for the sole right to build and operate a railway from Shanghai on the sea to Soochow, the capital of the Province, sixty miles due west. The petition was not granted, Li maintaining that railways to be beneficial to China must be owned and operated by Chinese. Not until many years later was China prepared for the reception of foreign ideas. In 1864, Sir McDonald Stephenson, an eminent British engineer, arrived in China, on his own initiative, to impress the advantages of railways on China. He located on paper an ideal railway system for China as a new and undeveloped country. Knowing but little of China or its peoples, he did not realize that China was old, densely populated, with well defined trade routes, and that no expert was necessary to locate main trunk lines. They were obvious to even a casual student of China's trade and geography. Sir McDonald Stephenson's scheme was received with thanks and all courtesy by the Chinese Government, pigeonholed, and never disinterred.

The next scheme was the Woosung Railway, from Shanghai on the Huangpu River to Woosung at its mouth, a distance of twelve miles. To circumvent the Chinese objections, the right of way was purchased by Jardine Matheson and Company on which to build an ordinary road. The embankment was built, and in January, 1876, rails and rolling stock for a narrow-gauge, light railway arrived in Shanghai and on June 30, the road was opened for traffic for a distance of five miles. Only July 1 everyone was invited to travel free for two days. All went well. The people were delighted and traffic was beyond expectation, but the Chinese authorities wanted no foreign railway. On August 3, a coolie, evidently bent on suicide, was run over and killed and the running of trains was stopped. Eventually the Chinese

Government bought the railway, payment to be made in three semi-annual payments. On December 1, 1876, the road was opened again and operated the entire distance to Woosung until the last payment was made. Then the Chinese took possession, demolished the road, shipped rails and rolling stock to Formosa, where they rusted away on the beach, and erected a small temple to the Queen of Heaven upon the site of the Shanghai Railway Station.

During 1887 to 1893 there was constructed on the Island of Formosa, then a part of China, some sixty miles of metre-gauge railway, by the Chinese. The alignment and grades were such as to prohibit economical loads and speed, and the construction was of inferior quality. At this point the work was stopped by orders from Peking, and the railway gradually went to pieces until the taking over of Formosa by the Japanese in 1896.

The Kaiping Railway.

Li Hung Chang became Viceroy of Chihli about 1870; soon afterwards there was organized the China Merchant Steam Navigation Company, with a fleet of coast steamers, Chinese capital and under Chinese management. The officers of the steamers were British. Much coal was needed and only Japanese coal was available. China's vast coal deposits were mined only by Chinese methods, with a small output, and none were available for the supply of ocean steamers. This led to the formation in 1878, of the Chinese Engineering and Mining Company and to the opening and operating of the Kaiping coal fields by foreign methods with Chinese capital and management. This deposit lies near Tangshan, about half way between Shanhai Kwan and Taku at the mouth of the Pei River leading to Tientsin, the port of Peking. These two companies were organized and managed by Tong King Sing with the support of His Excellency Li Hung Chang, Viceroy. To Mr. Tong, however, should be given full credit for originating and carrying to completion this advanced policy, which ultimately gave China a railway system.

The Kaiping coal mines at Tangshan were twenty-nine miles from the nearest point of delivery on the sea, and railways were proposed, sanctioned by the Throne, and C. W. Kinder, M. I. C. E., K. M. G., etc., was appointed engineer. The Imperial Sanction was re-

voked, and a canal to connect with the Pehtang River was decided upon. This canal could not reach the mines by seven miles, and a tramway with mule power was constructed. Thanks to the insistence of Mr. Kinder, the gauge was 4 feet $\frac{1}{2}$ inches, the standard gauge, thus saving China from the curse and expense of the metre gauge. The tramway and canal were finished in 1881. Still fighting for steam motive-power, Mr. Kinder began to build a locomotive from scraps, the boiler and cylinders from a portable winding engine, wheels bought as old iron, and the frame from channel iron borrowed from the mining company. The cost of construction was £75. By persistence and the influence of His Excellency Li, permission was granted to finish the "monster," and on June 9, 1881, the one hundredth anniversary of the birth of George Stephenson, this locomotive was christened the "Rocket of China" and at once put to daily use; opposition ceased, and the next year two shunting engines were purchased.

Thus was inaugurated China's railway system. In 1887 the railway was completed from Tangshan, via Tongku, to Tientsin; in 1894, from Tangshan to Shanhai Kwan, and in 1897, from Tientsin to Peking. The Government of China had, by 1898, realized two points regarding the introduction of railways: First, the absolute necessity of railways, and, second, the impossibility of procuring Chinese capital for the building of railways. The Chinese would not subscribe because of lack of confidence in the Chinese Government, much of this feeling being due to experience.

The Chinese Government still stood fast that foreigners should own no railways in China and that the main trunk lines, at least, should belong to the central government. The result was "The Railway Concessions."

The concessions granted to Russia in Manchuria, to the Germans in Shantung and to the French in southwestern China are on a different basis from the many concessions granted to syndicates proper; principally, because to the Russian, German and French, the railway was not the end desired, but merely a means to the end, and that end colonization.

The terms of the ordinary concession were more or less as follows. China granted to the syndicate as a contractor, the right to build a definite rail-

*Paper presented at the International Engineering Congress, San Francisco, September, 1915.



way. The Chinese Government issued gold bonds at 5 per cent interest to cover the cost of construction and equipment, the par value of the bond being 100. The syndicate under-wrote the bonds at 90 and sold them to the public at as high a price as possible. The syndicate constructed the line and was allowed 5 per cent upon the actual cost. As fast as completed, the syndicate had a first mortgage on the railway and equipment. The syndicate was trustee for the bondholder and operated the finished line jointly with the Chinese, the foreign element, however, predominating. A small percentage of the net profits, after deduction of interest and sinking fund, went to the Chinese. The conditions under which the bonds could be redeemed were agreed upon, etc.

In Peking, 1898 was the year of concession hunters. The whole world was represented. Some represented bona fide syndicates. Many represented hopes and were hunting for both concession and syndicate.

Then was seen the difference between the methods of the continental and the Anglo-Saxon. They were all there with any amount of good money behind them. The English and American would not sign until every detail of the agreement was satisfactory. The Belgian or French would sign almost any agreement that gave them the absolute right to the work and then

fought out the details later. The continentals then, and ever since, have had their share of the railway concessions, and they have done the work they agreed to. The British, also, have done most excellent work in all the railways they have built. An American syndicate was granted a concession for the Hankow-Canton Railway, did but little work, and later was bought out by the Chinese Government at a "remunerative" figure and the line is now being built by British money and British engineers.

All the railways of China, with the exception of a few short lines usually for some special purpose, are government owned and government run. They are all under the Ministry of Communication (Chao Tung Pu) located in Peking. On all the railways having a foreign indebtedness, certain positions are filled by foreigners (chief engineer, resident engineers, chief accountant, traffic manager, chief of the mechanical department, etc.), with necessary foreign assistants. The nationality of these foreign employees, in every case, follows the nationality of the syndicate furnishing the capital, except in subordinate positions. From this, one can see the small opportunities there are in China for Americans in railway employment. American participation in the construction of Chinese railways has been, to say the least, unfortunate, and, of course, the non-participation of Americans in this work has

militated strongly against the purchase of American rolling stock, locomotives and railway material.

In regard to the present status of railways in China, there are some six thousand two hundred miles in operation and between eight and nine thousand miles under construction, location, or for which definite agreements between the Chinese Government and foreign syndicates have been signed, for either financing and constructing, or for merely financing. Less than three hundred miles of this amount comes to America. The accompanying railway map of China shows the railways in operation, construction, and proposed. The names of the different nationalities along these lines, such as British, Belgian, French, etc., indicate the nationality of the syndicate furnishing the necessary capital.

The freight rates in China are high—what the traffic will bear and often a little more. In North China coal is \$2.95 for three hundred miles.

Peking-Mukden Railway.

Freight charges per picul (133 pounds) and per ton per mile: First class per picul ½ cent, per ton 5 cents per mile; 2nd class per picul 1-3 cent, per ton 3½ cents per mile; 3rd class per picul ¼ cent, per ton 1½ cents per mile; dangerous per picul 5 to 7½ cents.

The following list shows the more important lines for which agreements have been made:

Miles

Peking-Kalgan.

Construction began October, 1903.
 Capital Expenditure . . . \$10,769,820.00
 This capital was all derived from the surplus earning of the Peking Mukden line.
 Engineer in Chief of construction, Jeme Tien-yu. Present Engineer in Chief, K. Y. Kwong.
 This line was located, constructed and is now operated entirely by Chinese.

Canto-Hankow.

Construction was begun by an American syndicate, which did a very slight amount of work and abandoned the enterprise on receiving compensation from the Chinese of \$5,700,000 gold, in January, 1904.

This line is now being constructed under English and Chinese engineers and with British capital. Mileage, 700 miles.

Shanghai-Nanking.

Construction began in 1904.
 Mileage—203 miles.
 Cost of construction . . . \$26,755,270.00
 Source of capital—British-Chinese Corporation.
 Receipts for year 1912 . . . \$ 2,675,942.00
 Expenditures . . . 1,704,794.00

Canton-Kowloon.

Construction began—British section, 1906; Chinese section, 1908.
 Source of capital—Chinese section, Government of Hongkong; British section, British-Chinese corporation.
 Cost of Const.—British . . . \$13,284,425.00
 Cost of Const.—Chinese . . . 12,534,277.00
 Mileage—British 22 miles.
 Mileage—Chinese 89½ miles.

Open to traffic: British section, October 1, 1910. Chinese section, October, 1911. British section, 5 tunnels—150 feet, 7,212 feet, 329 feet, 170 feet, 923 feet. All double track except No. 2; 51 bridges, all double track.

PRELIMINARY DRAINAGE WORK IS BEING DONE.

Engineer Don J. Zumwalt, who has a crew of surveyors at work on Klamath marsh, in the northern part of Klamath County, Ore., has stated the preliminary work in the drainage of the marsh is progressing nicely. The work is being done under supervision of the Klamath Drainage District, and is for the purpose of determining how much of the land actually can be drained and what the cost will be.

The Klamath Drainage District, composed of forty owners of Klamath marsh land, expects soon to issue bonds for the work of reclamation.

SOUTHERN SIERRAS CO. GETS A BIG CONTRACT.

The Southern Sierras Power Company has secured a contract to furnish 2,000 horse-power to the big new cement plant of the Southwestern Portland Cement Company at Victorville for a period of 20 years.

The daily capacity of the new plant being constructed at Victorville will be 2,000 barrels. The plant is located one mile west of Victorville, near the Mojave River. The raw material is quarried six miles north of Victorville, transported over their own standard gauge line and connected with the main line of the Santa Fe system at

their plant location. Their deposit of raw material is considered one of the finest in the world, with an almost unlimited quantity. L. D. Gilbert, chief engineer of the Southwestern Portland Cement Company, designed the plant, which is to be the most modern of its kind in existence.

The Southwestern Portland Cement Company plant is about four miles south of the Golden State. Portland Cement Company of Oro Grande, which is also operated by electricity furnished by the Southern Sierras Power Company with a connected load of 1500 horse power.

NORTHERN COUNTRIES HOWL FOR HIGHWAYS.

The State Highway Commission is in a quandary. Counties in all parts of the State are clamoring for roads and the commission has no funds to build them. The \$18,000,000 bond issue is completely played out—that is the portion that has not been expended is appropriated for roads which the surveys have been made for, and bids called for. For the most part, the money has been used for the trunk line system from the Oregon line down through the State. A small portion has been spent for main laterals.

Representatives of five northern counties are gnashing their teeth and claiming they did not get a square deal from the Highway Commission. They say they supported the \$18,000,000 issue and didn't get their share of highways even though they offered to buy bonds.

Another bond issue of \$15,000,000 will be on the ballot next year and if the people turn it down State highway work will just about be halted.

RAILROAD GETS LAND.

A section of land comprising a total of eighty-nine town lots, through the center of the town of Blythe, has been granted to the California Southern Railroad for its tracks and depot, according to an announcement from that place. The right of way is along Commercial street for a distance of about a quarter of a mile and is granted with the understanding that the railroad will erect a substantial depot and rush to completion the remainder of its line between Blythe and Blythe Junction in the Palo Verde Valley.

Blythe is the only town in the valley and is the trading center of a large agricultural district. It has at present a population of about 700, together with stores, a bank and two cotton gins. The near approach of the railroad is said to have created a considerable demand for lots in the town.

REPORT OF MAGNESITE.

The annual statement of the United States Geological Survey on the production of magnesite in 1914, now available for distribution, shows an increase over 1913 of 17 per cent, 11,293 short tons of crude magnesite, valued at \$134,223, having been produced or sold and treated in the United States during the year.

Kerin-Hunchun, joint Chinese-Japanese	210
Kai Yuan - Hailuogchen (Branch South Manchuria) Japanese . .	110
Kungehulling - Itungechow (Branch South Manchuria), Japanese . . .	50
Shansi Railway, Tatung-Taiyuan-Ping yao-Pochow-Tung Kwan-Chenktu (Szechuan), Belgian . .	960
X. W. Trunk Line, Hsichangow-1910; Shan fu 350; Tung Kwan 85; Honan fu 150; Kaifeng 140; Hsuechow 175; Tsing Kiang pu 120; Hsichow 70; Belgian	3,000
Chenking-Teichow, German . . .	110
Hsiling yang Shasi, German . . .	207
Hsiling yang Kuang sul, German . .	130
Kaoml-Yihsen, German	200
Yenchow Tsaochow Kaifeng, German	230
Yunnan fu-Chungtu fu, La Banque Industrielle de Chine, French . .	450
Sin yang-Pukow, British-Chinese Corporation	300
Shasi-Hsing-yi, via Changteh-Yuenchow-Kwei yang, British . .	800
La Banque Industrielle de Chine, French: Sino-French, 60,000,000 francs, Harbor at Pukow: 60,000,000 francs, Yangtze Bridge at Hankow: Railway, Yam-chow (near Pakhoi via Nanning, Pose, Hsing to Yunnan fu)	550

The following notes from the latest available data show the cost of construction, operation and revenues of some of the railways in operation:

CHINESE GOVERNMENT RAILWAYS.

Peking-Mukden.

Developed from the Kaiping tramway, constructed 1880-1 by C. W. Kinner, C. M. G., M. I. C. E., who also completed the Peking-Mukden line.
 Capital—Anglo-Chinese . . . \$49,971,571.43
 Cost of construction—
 Lines open for traffic . . 12,246,706.47
 Expenditure capital works from revenue . . \$,938,970.27
 Mileage—607 miles.
 Receipts for year 1912 . . . \$12,183,638.51
 Gauge—4 feet, 8½ inches.
 Expenditure for year 1912 . . 3,820,657.23
 No. of passengers—3,495,707.
 Tons of Freight—2,450,393.
 Passenger receipts . . . \$ 5,257,591.89
 Freight receipts . . . 6,850,353.37
 Ratio of expenditure to receipts, 28.90 per cent.

Peking-Hankow.

(Belgian-French)

Construction began in 1898.
 Cost of construction . . . \$87,956,765.22
 Mileage—755 miles.
 Gauge—4 feet, 8½ inches.
 Receipts for year 1912 . . . \$13,557,713.00
 Expenditures 5,246,300.00
 Open to traffic in 1905.

Tientsin-Pukow—Northern Section.

(German)

Construction commenced July 1, 1905.
 Capital—German \$5,010,000
 Plus temporary loan 912,272
 Mileage—453.15 miles.
 Gauge—4 feet, 8½ inches.
 Cost of construction—Ap . . . \$5,000,000

Tientsin - Pukow—Southern Section.

(English)

Construction begun February, 1909.
 Capital—British-Chinese Corporation \$ 2,817,738.00
 Mileage—265 miles.
 Gauge—4 feet, 8½ inches.

Drafting Department of the City of Los Angeles.*

By J. R. Prince, Chief Draftsman.

The area of the city prior to May 22, 1915, was 107.62 square miles. This has now been more than doubled by the recent annexation of San Fernando Addition containing 169.89 square miles; Palms Addition containing 7.3 square miles and Bairdstown Addition containing 3.4 square miles. These last areas are approximate only, but are as near as can be figured from the data now available. The total area of the city is therefore 288.21 square miles.

The greatest length from north to south on a straight line is 44 miles; the greatest breadth from east to west is 29 miles. The length of the boundary line is approximately 212 miles. Comparing the above area with that of New York City; the U. S. Census Bureau gives the land area of New York City as 286 square miles. Deducting 1.46 square miles, the approximate water area of Los Angeles harbor between the pierhead lines (the area of the outer harbor not being included) from the total area of 288.21 square miles gives a land area of 286.75 square miles, which is a little more than that of New York City. The population of this enormous area according to the Los Angeles Directory Company is only 529,000, while that of New York City is five and a quarter millions.

District Maps.

A special effort has been made during the year to complete the district maps on a 100 foot scale of all the city prior to the recent annexations.

Twenty-eight maps have been completed and traced; five of which lie in the Wilmington and San Pedro districts. Five others are in course of preparation and will be completed in the near future. We, therefore, now have 100 foot scale maps of practically all of the city prior to the annexations of this year.

Opening and Widening Streets, Parks, Etc.

There has been a falling off in orders for the opening and widening of streets, acquisitions of land for park and library purposes over the last few years.

Orders pending prior to July 1, 1914 62
New proceedings taken up during the year 29
Final decrees entered 22
Total proceedings now pending in different stages of completion... 69

Among the more important proceedings for the opening and widening of streets may be cited Long Beach avenue from 20th street to Slauson avenue, a distance of about two miles. An attempt was first made for this opening in 1910, but was abandoned on account of protests. This proceeding has now progressed to the stage of the delivery of the condemnation maps to the City Attorney.

Surveys and maps have been prepared for the extension of Canyon Drive through Brush Canyon, and for

a winding scenic road over the estate of J. S. Spires (deceased), connecting with the roads in Griffith Park. It is hoped that all the land required will be obtained by deed without resort to condemnation.

Surveys and maps have been prepared of the present traveled road known as Los Feliz Road from a point about 1800 feet north of the Old Patent Boundary to Ivanhoe, a distance of about one mile. This old road has been traveled for many years, but no complete dedication has been made. This matter was taken up by the county and road papers were filed on March 17, 1893, for the purpose of securing a road forty feet in width, but was never completed. Preliminary steps have also been taken to extend Alessandro street from its intersection with this old road to San Fernando road; this however will require a bridge over the Los Angeles River. This road is much needed and should be secured in the near future.

Surveys and preliminary locations have been made for a boulevard from the intersection of the west city boundary with the first street south of 25th street, known as Wilmington road at Harbor City, to a point in the Wilmington and San Pedro road, approximately 1900 feet southerly of the intersection of Vermont avenue and West First street, Wilmington. This will give an important new highway between Wilmington, San Pedro and Redondo. A suggestion has also been made to connect the same with West Seventh street, Wilmington, thereby opening up a new main road to Long Beach. The total length of the first location is about 2.6 miles. The land required will all probably be obtained without resort to condemnation.

Proceedings were instituted for the acquisition of land for public park purposes in the Short Line Villa Tract at Sierra Vista, under an order of the City Council, dated April 15, 1913. The ordinance of intention describing the land proposed to be condemned was prepared and presented to the City Council, who duly adopted the same, but never became effective.

An order was also received for the condemnation of land proposed to be acquired for public park and playground purposes, known as Glassell and Verdugo Road Park, extending from San Fernando Road for about one half mile northerly, between the tracks of the Los Angeles Railway Company and the Salt Lake Railway Company. An ordinance describing the land to be condemned was duly presented to the City Council, but on account of protests has been deferred until the latter part of this year.

The widening of Vermont avenue to a width of 120 feet, between Sixth street and Los Feliz Road has met with considerable opposition on account of the heavy assessments which

would have to be levied to pay the awards allowed by the courts for the land taken. I understand that the City Council has agreed to the abandonment of the proceedings provided the property owners pay 50 per cent of the costs to date.

Nothing further has been done with the widening of West First street to a width of 90 feet, from Lake Shore avenue to Vermont avenue, nor with the opening and widening of Temple street to the same width from Vermont avenue to the west city boundary.

The proceedings for the opening of Broadway from Tenth street to Pico street have reached the stage of collection of the assessments, and the proceedings for the opening of Broadway from Pico street to Washington street, are before the Superior Court to determine the awards.

The proceedings for the condemnation of the land to be acquired for Silver Lake Park Way are still tied up in the courts. A decision is looked for at the October term of the Supreme Court. If, however, this proves to be unfavorable, the only solution seems to be an amendment to the City Charter.

Proceedings for the condemnation of the land proposed to be acquired for Arroyo Seco Park Way are held in abeyance, but will come up before the City Council for further consideration on August 18th of this year.

Final decrees of condemnation have been entered as follows:

Land as an acquisition to Exposition Park, being the numbered lots north of 39th street between Hoover street and Menlo avenue, Alley east of Main street from Washington street to 21st street, Canal street from West 6th street to West 7th street (Wilmington), Dayton avenue from Avenue 20 to Pasadena avenue, Edward avenue from Moss avenue to Anita avenue, Griffin avenue from Zonal avenue to Charlotte avenue, Hoover street from 9th street to San Marino street, Lillian Way from Waring avenue to Melrose avenue, Maubert avenue from Sunset Boulevard to Los Feliz avenue, McKinley avenue from 40th street to Slauson avenue, Pasadena avenue from Marmon Way to York Boulevard, Peccan street to Las Vegas street, Sixth avenue from Pico street to Dorchester avenue, Seventy-fourth street from Moneta street to Figueroa street, Seventy-fifth street from Moneta avenue to Figueroa street, Seventy-sixth street from Moneta avenue to Figueroa street, West 7th street from Canal street to Main street (Wilmington), Western avenue entrance to Griffith Park, Library site at First street and Chicago street, Library site at 45th street and Central avenue, Library site at Yorkman street and Avenue 26, Right of way for sewer purposes through I. R. List property.

Vacation of Streets, Alleys, Etc.
Orders pending for the vacation of streets and alleys prior to July 1, 1914 14
New orders taken up during fiscal year 32
Orders closed and completed during the year 10
Proceedings now pending 36

Vrooman Act.

There have been prepared and delivered to the Board of Public Works 330 Vrooman Act diagrams for the improvement and sewerage of streets,

*From Report of City Engineer of the City of Los Angeles, 1914-1915.

making in duplicate a total of 660 separate maps, an increase of 17 per cent over last year. In addition to these, 10 diagrams for improvement work under the Act of 1913 have been delivered. Many of these maps covered very large districts, making it necessary to divide the maps into three or four sheets.

There have also been prepared in addition to the above 51 diagrams for contract work now running.

There have also been prepared 470 tracings for the purpose of making blue prints for transmission to the City Council for approval of assessment districts.

Three hundred and seventy-three jobs for street improvement work were figured, constituting 2636 separate bids. In addition to these 310 final estimates were made.

New Sub-divisions.

Fifty-three new sub-division maps were referred to this department for checking and approval, and against 100 for the year 1913-1914. Several of these maps were located in territory where no official surveys had been made. It was, therefore, necessary to do considerable field work in order to check the same, especially those in the vicinity of the lands bordering on the Los Angeles River bed. The city receives no direct compensation for this work, but it is of material advantage when platting district maps.

Ornamental Lighting.

Nineteen assessment maps for ornamental lighting of streets have been prepared, together with 12 diagrams showing the location of posts. The preparation of these maps is a continual repetition of work from year to year. This is due to the fact that contracts for the furnishing of electric current are only made for the period of one year. Attention was called last year to this continual repetition of work. Property owners have discussed this matter with me many times, asking why assessments cannot be made for a longer period of time, or if this is impractical, why the assessments cannot be placed on the tax rolls. The only solution seems to be by an entirely new method of procedure.

City Attorney, Assistance to.

This department, as usual, has done a very considerable amount of research work of the old archives, especially in connection with the dedication of streets, for the use of the City Attorney in defense of suits against the city; also for use in actions brought by the city.

The research commenced last year to determine the width of streets in the old part of the city has continued, and much valuable information has been obtained, which I am sure will be of great use in the future.

Many of the reports refer to sketches or maps which we have been unable to find. Some of these may be among the miscellaneous un-indexed maps in the City Clerks vault. Efforts will be made as soon as time will permit to examine the same. After this work is completed I would suggest making a special volume, together with an index to the same, thereby preserving for

future use, and avoiding a possible repetition of work.

Suit for Recovery of Land in the Los Angeles River Bed.

I regret to say that in the suit for the recovery of land claimed under adverse possession has not yet been determined. Considerable further searching has been done in connection therewith. The action has been set for trial a number of times but for some reason or other seems to be continually postponed.

Further searching has also been done as to the city's rights to all the lands embraced within the river bed between the northerly and southerly limits as defined by Ordinances Nos. 287 (Old Series) and 6035 (New Series).

Blue Printing.

20,322 blue and blue line prints have been made of the various city maps and plans, being equivalent to 106,992 square feet. This shows an increase of 19,692 square feet over that of last year. The suggestion has been made that the city and county should combine and install a plant in order to do their own blue printing. I do not believe such an arrangement would be of advantage to the city, owing to the fact that the city and county offices are so far apart. The time consumed in messenger service would be very considerable, and I am sure would offset any cost that might be saved. I am, however, of the opinion that the time has arrived when the city should install a plant of its own. I do not believe there would be very much saving in cost over the contract price now obtained, but the city would have the advantage of obtaining prints at a moment's notice, and much of the bookkeeping work, writing of orders, etc., could be done away with. The amount of blue printing which will be called for during the next year, owing to the enormous increase in area of the city will no doubt be very great. Last year's contract was very satisfactory, but a private contractor can hardly be expected to give precedence to the city's work, for which he receives a very low price, when he has a considerable amount of private work on hand at much higher rates.

General.

The following is a complete list of the number of maps, drawings, Vrooman Act diagrams, searches, etc., which have been prepared under my supervision during the fiscal year:

New district maps completed, 28; new district maps traced, 25; district maps retraced, 2; 200-foot scale maps, 1; alms District, 1; record maps platted on district maps, originals, 58; same, tracings, 58; same, house numbering, 58; same, blue line prints of originals, 21; Ordinances platted on district maps, originals, 111; same, tracings, 111; same, house numbering, 111; same, blue line prints of originals, 84. Descriptive deeds platted on district maps, originals, 97; same, tracings, 197; same, blue line prints of originals, 98; same, house numbering, 157. Original maps for opening and widening of streets, 17; condemnation maps for opening and widening of streets, 17; Vrooman Act diagrams made in duplicate, 168; diagrams under the Act of 1913, 10; preliminary assessment maps, 170 bids for street

improvement figured and checked, 2; 636; final estimates for street improvements figured, 310; Lighting Act assessment maps, 19; Lighting Act location of posts, 12; Exhibit maps for court cases and miscellaneous maps, original, 4; same, tracings, 26. New record subdivision maps checked and approved, 53; same traced from record maps, 179. Record subdivision maps traced from record maps, annexations, 202; blue prints made of recorded subdivision maps, San Fernando annexation, 600; deeds to city, descriptions prepared and checked, 134; certificates of title made for deeds to city, 88; recorded instruments copied and checked, 412; recorded instruments copied, Palms annexation, 291; record property owners certified to, 1,260; maps for posting of notices of assessment districts, checked, 507; posting affidavits, checked, 507; protests to opening and widening of streets, parks, etc., checked and recorded, 134; frontage of 1,075,198 feet. Reports to City Council and Board of Public Works, 898; ordinances indexed and pasted in office records, 2,181; ordinances re-indexed, 3,300; searches on court cases, application for quit claim, etc., 20; miscellaneous maps to Council and Board of Public Works, 37. Total number of blue and blue line prints made, 20,322. Total number of square feet of blue and blue line prints made, 106,992.

The map of the city on a scale of 2,000 feet to the inch has been brought up to date and will again be re-produced and made a part of this year's report. The progress of street improvements, sewers, etc., being shown thereon by different colors.

A new map showing the territory annexed to the city has also been prepared.

Sixteen standard plans of manholes, flush tanks, culverts, etc., have been re-drawn, making a total with the 50 plans drawn last year of 66. These have all been re-produced by Photolithography to a uniform size of 8x11 inches. They have proved to be very valuable for use in the office and are being much sought after by engineers and those employed in kindred professions in cities all over the United States.

I am pleased to state that an opinion has recently been received from the City Attorney upholding our contention as to the lands legally dedicated as Elysian Park, and confirming the lands set aside and described under Ordinance No. 218 (Old Series). The area of Elysian Park as described under Ordinance No. 5619 (New Series) is 525 acres (planimeter measurement). The area as embraced under Ordinance No. 218 (Old Series) is 583 acres; the difference being an increase of 58 acres.

Very little work has of course been done in the gathering of the records of the newly annexed territory. Copies, however, of all recorded maps of the Palms District and Bairdstown have been obtained and we are securing as fast as possible blue prints of the recorded maps covering the San Fernando Valley.

A preliminary index map has been outlined of this new territory, together with that adjoining and contiguous thereto. It is proposed to outline an index scheme for all the territory which may possibly be annexed to the city in the future. This will simplify the changing of the index books, the insertion of the number covering any new addition being all that will be required.

The Crane Exhibit.

Staff Article

One of the most complete and distinctive exhibits in the Machinery Palace of the Panama-Pacific Exposition is the Crane exhibit of valves and a description of it will show the correctness of this our contention.

Passing through the main west entrance we find ourselves inside of a structure in which Lincoln Beachey, the aviator, managed to manipulate his aeroplane. We walk over a floor space of 357,224 square feet—more than eight acres—laid out in streets and avenues, divided into blocks in which are exhibited the world's latest word in things mechanical.

The streets, named from First to Fifth, run north and south of the building; the avenues, named from A to I, run east and west. Avenue E, stretching directly before us to the main east entrance, is the middle of the building from north to south, and Third street, running from the main south to the main north entrance, is the middle of the building from east to west.

As there is no building beyond the Palace of Machinery, the great bulk of travel by those visiting the Exposition will be toward the west entrances, and, naturally, most of this will gravitate toward the main entrance on this side. You will see presently why we mention these details. As we stand for a few moments just inside the entrance, looking about the vast interior, we begin to pick out distinctive features here and there. One is particularly dominant and invites our curiosity. It towers like a great iron chimney above its lower surroundings. We move toward it one block, one exhibiting section, coming to Second street and Avenue E, and the towering object reveals itself as a gigantic valve, a landmark for the exhibit of Crane Co., Chicago and Bridgeport—for the big valve was made at the Bridgeport Division of Crane Co.

Let us walk around block 20 before we enter the exhibit and take note of the details of the products therein arranged and displayed. The block is 63 feet on each side, giving a floor space of 3,969 square feet. The principal entrances are marked by arches, the legs of the arches being joined into railings comprising various sized valves, fittings, and specialties made by the company.

Coming back to the entrance from Second street we pass through an arch made of pipe specials, finding the towering valve on our left and a great back pressure and exhaust relief valve on our right. These two objects strike the eye first of all, especially when walking toward the east, but the great valve may be seen from nearly every street and avenue of approach to the Crane Co. block.

Once inside the railing we may take our time to look over the exhibit in detail; but first we are drawn to get a

closer acquaintance with the big valve. We are told by one of the men in charge that it is a 72-inch cylinder-operated gate valve, that it weighs approximately 57,000 pounds—twenty-eight and a half tons; that the distance from the bottom of the valve to the end of the stem when the gate is open is 32 feet 10 inches; that the diameter of the cylinder is 44 inches, the diameter of the stem is 4½ inches, and the working pressure 25 pounds steam and 50 pounds water. We also are informed that a number of these huge valves have been installed in various parts of the country, particularly in city water supply and large water power plant lines. During this talk the attendant has been idly toying with a small brass object. It is three inches high from the bottom to the top of the stem when opened, and an inch and three-eighths face to face and has an opening into which a one-eighth bit of pipe may be screwed. It weighs two ounces. This is the other end of the line of valves made by Crane Co., a one-eighth-inch brass globe valve. Anything in valves for any purpose—steam, water, gas, ammonia, etc.—between these sizes the company makes, and most of them may be seen, at least the representatives of the various classes, in this exhibit.

Now a turn to the right brings us to the bulky back pressure and exhaust relief valve, also from the shops of the Bridgeport Division. This is a forty-eight-inch valve with a cylinder to hold the valve open. The interior space is roomy enough to seat four persons; the valve has a sufficient area to relieve any condenser now in existence—and when condensers demand anything larger, Crane Co. is prepared to furnish it. The distance from the bottom of this valve to the end of the stem, when the valve is open, is 15 feet; its weight 14,000 pounds—seven tons; face to face measurement, 96 inches; maximum diameter of the body, 7 feet 2½ inches. What the towering valve to the left has in height this one offsets in girth.

Another especially noteworthy feature is the valve a trifle to the rear of the big back pressure valve—a 24-inch extra heavy cast steel rising-stem gate valve. This is motor operated, the motor being so wired that it automatically opens and closes the valve, allowing it to be operated either automatically or by hand. The body, bonnet and disc are of Crane cast steel; the thickness of the body is 1¼ inches, thickness of flange 2¾ inches, size of by-pass 4 inches, diameter of stem 3 inches, face to face measurement 31 inches, height with the valve open 11 feet, weight 8,200 pounds—more than four tons.

As we ramble toward Avenue D we note that the entrance on that side is worthy of close attention. Entrance is through an arch composed of drainage fittings and pipe bends. The

drainage fittings here seen are now generally used in sanitary piping in all buildings. The fittings are connected with wrought pipe and screwed thread joints. This type of construction is the most sanitary type of piping equipment consisting of special long and easy sweep fittings and wrought pipe, having a smooth interior. The fittings are made with a shoulder which the pipe abuts, forming a continuous joint and leaving no pocket for the lodgement of solid matter. The fittings are made in all sizes from 1 inch to 14 inches, comprising 53 shapes and 460 patterns. They are furnished, black, tarred, or galvanized, either in cast or malleable iron.

The Third street entrance is another arch composed of pipe bends and ammonia separator. Flanking this entrance are two condensers and an exhibit of valves and fittings used in refrigerating plants. The material is of the best quality and the fittings of the highest type now in existence for this character of work. All flanged fittings and valves are made of the same center to face dimensions, so that any fitting or any valve may be replaced or an addition may be made to the piping without the necessity of cutting off or adding to existing piping.

The three entrance arches naturally invite attention to pipe bends and this complete feature of the Crane shops. The bending of pipe for use in all kinds of piping lines, railings, etc., has grown to be one of the most important factors of the valve and fitting industry. The bends at these three entrances of the Crane Co. exhibit—Avenue D, Second street and Third street—show in a limited way the possibilities of this feature. On a table in the west section of the exhibit may be seen nine bends all of different shapes. Many of these shapes may be obtained in any size or weight of pipe; others in pipe up to 36-inch outside diameter. In the Chicago shops of Crane Co., one department covering 50,000 square feet and employing 220 men is devoted exclusively to pipe bending, flanging, cutting threads, and welding pipe for complete piping equipment.

Attractive features of the exhibit are the graceful pedestals on which are mounted various Crane products, most of them cut in section so as to show their inner construction.

On these pedestals may be seen: A 6-inch No. 37-E Crane-Erwood valve; a 6-inch No. 29-A cast steel angle valve; a 6-inch No. 30-E "Y" pattern stop check valve; an 8-inch No. 415-V combination back pressure and exhaust relief valve; a 5-inch blow-off valve, 2½-inch No. 399 "Y" pattern blow-off valve, and 2½-inch No. 316 blow-off cock; 4-inch No. 1116 pop safety valves mounted on a "Y" base; 6-inch No. 28-A cast steel "Y" pattern stop check valves; a 12-inch No. 600 whistle; a 6-inch No. 53-E balance ex-

pansion joint, a 6-inch No. 1123 iron body water relief valve; a 9-inch drip pocket with water gauges, a 6-inch No. 013 extra heavy vertical separator; a 12-inch No. 03 oil separator; a 6-inch standard base tee; an 8-inch No. 395 foot valve; an 8-inch No. 115-A stay-open type exhaust relief valve; a 6-inch C. C. strainer; a 6-inch iron-body type "B" pressure regulator valve; a 3-inch No. 021 receiver separator; a 6-inch No. 359 J. D. angle valve; a 6-inch No. 343 medium angle valve; 4-inch No. 1117-A cast steel pop safety valves mounted on a "Y" base; a 6-inch No. 1503 ammonia angle valve; a locomotive turret with three No. 1183 locomotive pop safety valves.

Twenty attractive oak tables bear the following, sectioned where necessary to show interior construction and operation: An 8 by 6 inch welded steel header showing flanged joints; 3/4-inch Nos. 33, 1, and 101 Crane-tilt traps; 6-inch No. 461 standard, No. 501 medium, and No. 9-Extra heavy gate valves; 6-inch No. 351, standard, No. 341 medium, and No. 27-E extra heavy globe valves; 6-inch No. 498 low pressure, No. 462 standard hub and gate valve and 6-inch No. 374 hub end check valve; 6-inch No. 367 standard, No. 39-E extra heavy, and No. 221-H hydraulic check valves; 6-inch No. 401 standard, No. 409 double, and No. 412 low pressure expansion joints; 6-inch standard, extra heavy, hydraulic flanged tees; 2-inch miniature pipe bends, seven pieces; 4-inch Nos. 1000, 1002, 1003, 1007, 1010, 1022, 1026, 1028, 1030, 1038, 1045, and 1056 drainage fittings; 1 1/2-inch Nos. 1057 and 1058 drainage street elbows; a cast steel lateral with risers; 6-inch No. 7-A cast steel gate valve; 2-inch No. 201-D cast steel gate valve; 6-inch cast steel elbow flanged; 6-inch No. 481 standard, No. 58-E extra heavy double disc gate valves; 6-inch No. 471 quick opening gate valve; a variety of ammonia goods; branch tees, panel, etc., for 24-inch motor operated gate valve; 6-inch standard, cast iron medium, cast iron extra heavy, cast iron No. 1 L. S. malleable flat band, malleable hydraulic L. S. and cast steel elbows; 6-inch cast iron water fittings; 6-inch base elbow screwed; 6-inch and 12-inch hydraulic flanged tees; 6-inch No. 467 standard flanged gate, No. 462 1/2 hub end gate, and No. 375 flanged check valves, underwriters.

There are also tables supporting show cases. In these eight show cases may be seen, ranging from one-eighth inch to two and a half inch, brass globe valves, wedge gate and gate valves, hose and garden hose valves, quick opening gate valves, hydraulic gate valves, hydraulic globe valves, radiator valves, for all services, check valves, steam cocks, ball pattern railing fittings, slip and screw joint variable angle railing fittings, auxiliary railing fittings, hitching post caps, gas fittings, pattern railing fittings, flush joint stair rail fittings, malleable street elbows, service tees, crosses, return bends, unions, cast iron reducing elbows, reducing tees, cast iron crosses, "Y" bends, iron plugs, iron bushings, 45 degree elbows, malleable and cast iron fittings, union elbows, waste nuts, lock nuts, plugs, long screws, etc., pricing practically the entire Crane line in brass, cast iron, malleable iron

and galvanized. Ammonia return bends, unions, flanged unions, globe valves, angle valves, expansion globe valves, expansion angle valve, gauges, relief valves, check valves, sediment trap, elbow and tees, ammonia double pipe water cooler return bend, water return bend complete, oil separator, etc. Articles in this part of the exhibit are sectioned wherever it is desirable to show inner construction and operation.

Four cabinets complete the display of the smaller goods showing globe and angle valves, frost valve, cab hose sprinkler valve, three way valve, check valve, air brake fittings and car heater fittings, ash pan blower valve, blow off valves and nine cocks.

Crane Co. prepared this exhibit for the Panama-Pacific International Exposition with three objects in view:

First. As a comprehensive demonstration of the completeness, adaptability, elasticity, and dependableness of the various lines of Crane products.

Second. As a practical educational feature for both the engineer and the layman who cannot fail to carry away something of permanent value in the way of exact knowledge from a visit to the Crane exhibit.

Third. As an exposition of the greatest piping material for the use of steam, water, gas, ammonia, etc., made at any time thus far by any one concern in the world, the material shown and its arrangement being the "latest word" in modern piping material.

Here may be seen valves in brass, hard metal, cast iron, malleable iron, ferrosteel, and cast steel, in sizes ranging from one-eighth of an inch to seventy-two inches and in weight from two ounces to 59,000 pounds. (It would take 564,600 of the smallest valves in the exhibit to equal the weight of the largest valve shown.)

The valves are displayed as operated by hand-wheel, gears, levers, hydraulic cylinders, electric motors, and automatically. The pressures range from twenty-nine inches of vacuum to 3,000 pounds hydrostatic. The temperatures range from minus degrees F. to 800 degrees F.

Fittings are shown in brass, hard metal, cast iron, malleable iron, ferrosteel, and cast steel, in sizes from one-eighth of an inch to eighteen inches, weighing from three-quarters of an ounce to 2,000 pounds, with pressures and temperatures the same as for the valves.

Nothing that is necessary to the proper equipment of the pipe lines and their accessories for the modern power plant is missing from this exhibit. It is at once a spectacle in metal and a school in up-to-date installation.

To the student in "safety first" in the power plant there are features of peculiar interest. Here he may see steam pop safety valves, water relief valves, double acting emergency cut-out valves, automatic stop cock check valves, exhaust relief valves, back pressure valves, Crane-tilt traps, self-cleaning strainers, pressure regulators, fusible plugs, whistles and whistle valves, steam separators, oil separators, pipe bends, expansion bends and blow-off valves. Each one of these has its definite purpose in the modern

plant where efficiency is to be joined with safety and economy, where quality is to be considered before a comparatively trifling difference in initial cost.

Archives of the Crane Exhibit.

Not the least striking features of the Crane Exhibit at San Francisco are the three arches through which visitors pass into the exhibit block from Second street, Avenue D and Third street.

What we have called the Main Entrance to the exhibit, because of the line of greatest travel, is on the Second street side of the block. The arch is 19 feet high, and is made up of an 18-inch cast steel header, a 20-inch welded steel header, a proportionate "U" bend for the main curve with a loop bend below.

The left wing of this arch, serving as a railing, is composed of extra heavy gate valves from 18 inches down to 2 inches. The right wing comprises extra heavy flanged reducing tees from 18 inches down to 2 inches, and from 10 inches to 1 inch extra heavy cast iron screwed ell. The Avenue D arch is made up of a 6-inch ammonia separator, 6-inch quarter bends and 6-inch by 4-inch tees. The left wing is a 3-inch double pipe bine cooler; the right wing a 2-inch atmospheric ammonia condenser. The height of this arch is 12 feet. On the Third street entrance the arch is 15 feet high, and consists of 8-inch drainage fittings and 6-inch quarter bend pipes. The left wing consists of cast steel angle valves and cast steel check valves mounted on a 12-inch welded steel header. The right wing is made up of globe and angle "Y" pattern stop check valves mounted on a 12-inch welded steel header.

The railing on the Avenue E side of the block is an attractive practical illustration of some of the things that may be done with pipe and Crane railing fittings.

GREAT WESTERN WISS SHELL CONTRACT.

W. S. Van Winkle, manager of the sales department of the Great Western Power Company has announced that his company had landed the contract for furnishing light and power to the plant of the Shell at Martinez, for which both the Pacific Gas and Electric and the Great Western have been fighting for some time.

The Great Western is now expending \$10,000 in Contra Costa, extending its service, according to Van Winkle. Recently the company landed the contract for lighting and furnishing electric power to the Somers warehouse at Crockett.

LIFT EMBARGO ON IRRIGATION BONDS.

State Controller John S. Chambers and State Treasurer Friend Richardson have informed P. H. Griffin of the Oakland Irrigation District that they will shortly lift the embargo on irrigation bonds. Hitherto irrigation bonds have not been accepted as security for State deposits. Chambers and Richardson will shortly tour the valley and investigate the different irrigation districts.

EDITORIALS.

The growth of a new industry from a small beginning to a position of importance is always a very interesting phenomenon, and especially so when it takes place right at home before your very eyes and offers the chance for close observation of the turns of the wheels of progress.

It has been the writer's great good fortune to be able to make some observations of this kind, and these lines are penned as an appreciation of this opportunity and in the hope that they might be of interest to some of our readers.

The California Corrugated Culvert Company is the concern under observation, and its growth has, thanks to the farsighted management and policies of the Messrs. Force, father and sons, been true to the proverb that of a little acorn grew a mighty oak.

The company was organized and the first plant built at 5th and Parker streets, West Berkeley, in the year 1905, where the factory and office together covered some 1500 square feet of ground. The plant was increased in 1910 to 5,000 square feet of ground at which time also the Los Angeles branch was established.

In 1912 it was again increased to 12,500 square feet and in 1915, the present year, it was found necessary to almost treble the space, it being now 34,750 square feet.

The machine tool equipment in 1908 consisted of some drills and rolls for turning the sheets into shape. In the years gone by new and improved types of rolls have been designed and built. Combined punches and riveters have been installed to which have been added devices of the company's own design and manufacture that has greatly increased the capacity and enables the manufacture of a better product.

The quality of the product has always been the first consideration and when that was attained the efficiency of the plant was brought a par, and the plant is now by far the largest and best equipped culvert plant in the world.

The present enlargement is, as far as the building is concerned, almost entirely a new plant, and it has taken extremely good management to keep the plant running full capacity at the same time the new building was being erected.

The new plant is a model plant in many respects; it is fireproof, and it takes a special permit from the general manager to carry a piece of wood into the building.

The roof is of steel trusses of saw-tooth design, giving perfect light and ventilation and added ease of future additional expansion. The workbenches are of iron, the lockers and partitions are of iron, and the storage bins in the metal stock room for all kinds of supplies are also of iron.

The floor is of concrete and it took 20 carloads of concrete mix to make it.

A very efficient and economical handling and grouping of operations has been arranged for.

The sheets for flume enter the window openings on rollers by gravity, go through the necessary operations and wind up at the shipping doors, where traveling cranes with electric hoists load them on the cars; the same is also true of the culvert end of the work.

One corner of the building has been set aside for a permanent exhibit of all products manufactured.

All machinery is so safeguarded that an accident is almost an impossibility and the following letter vouches for the accuracy of this statement:

STATE COMPENSATION INSURANCE
FUND
of the

STATE OF CALIFORNIA

Executive Offices

Underwood Bldg., 525 Market Street,
San Francisco.

San Francisco, Cal., April 30, 1915.

California Corrugated Culvert Co.,

Fifth and Parker streets,

West Berkeley, California.

Gentlemen: We wish to congratulate you on the manner in which you have applied the principle of "Safety First" in the carrying on of your manufacturing operations. We commend you not alone because you have very efficiently guarded all machinery and have removed or decreased the physical hazards in an unusually careful and conscientious way, but because you have recognized that safety depends to a great extent upon the frame of mind of the employee, and that good sanitary conditions and cheerful surroundings will prevent many needless accidents. The good lighting, ventilation and other sanitary conditions of your plant, together with the work of your safety committee, should result in efficient and careful work on the part of your employees and should minimize the occurrence of accidents.

We have been able to allow you a reduction of approximately 30 per cent in your rate on account of your safety work, but without doubt you realize that the more important benefit which you derive from your efforts in safety and welfare work, is the increased efficiency of your employees, and the improved character of their work.

Yours very truly,

STATE COMPENSATION INSURANCE
FUND,

By (Signed) E. F. GOELZER,

Chief Inspector.

The beginning in 1908 was made by the manufacture of culverts only, but the opportunity for the manufacture of irrigation gates of various designs offered itself, then watering troughs and tanks were added and lately flumes

have been manufactured with great success, and the plant is now the best equipped flume plant in the United States; and it is also especially well equipped to handle heavy sheet metal up to 10 gauge. From a little acorn grew a mighty oak.

BUTTE COUNTY HIGHWAY BRIDGES

Bridge building operations in Butte County are occupying the attention of County Surveyor Martin C. Polk. Work is brisk along those lines, and the contractors in charge of the erection of the various bridges are putting forth every effort to have all completed before the winter rains begin.

According to figures supplied by Surveyor Polk, thirty-one bridges, aggregating a total length of more than 2,500 feet, at a cost of about \$60,000, are now being constructed, or have recently been completed.

The largest bridge will span Butte Creek, south of Chico. The bridge will be 340 feet in length and cost approximately \$14,000. It is being constructed of concrete and steel, and, according to contractor E. D. Sharp, will be completed by December 15th.

Four of the eight bridges on the route of the State highway, between Chico and Nelson, have been completed by the Chico Construction Company. The aggregate length of the bridges is 250 feet. They are constructed of concrete and reinforced with steel. The total cost of the eight bridges will be approximately \$15,000.

On the Princeton-Biggs road, eight bridges are being erected. These bridges will be of concrete, and will replace wooden frame bridges. The total length of these structures is 300 feet. The cost will be about \$4,000.

Seven bridges are being constructed in the Nelson district, the largest, 200 feet long, will span Dry Creek, south of Nelson. The cost for the seven bridges will be near \$10,000.

John Oldham, in charge of the construction of the bridge to cross Pine Creek at Cana, announces the bridge will be ready for acceptance by Surveyor Polk December 1st. The bridge is 180 feet in length and cost \$3,000. A bridge over Campbell Creek, one-quarter of a mile south of the Tehama County line, is nearing completion. The bridge is forty feet long, and will cost \$1,200.

RICHMOND TO HAVE REPORT ON WATER.

J. H. Dockweiler, water supply expert, has been retained by the water commission of Richmond to furnish the city with a report on its water supply. Three thousand five hundred dollars has been appropriated to defray the expenses of the report.

Letters To the Editor.

BENT BROTHERS
ENGINEERING CONTRACTORS
General Offices: Central Building
Los Angeles, California.

Los Angeles, Cal., Nov. 17, 1915.

Mr. Geo. Nelson,

Building and Engineering News,
560 Mission St., San Francisco, Cal.

Dear Sir: Replying to yours of Nov. 16th referring to clipping from last Sunday Times regarding Long Beach Sewer, would say the item is ridiculous because there has never been the slightest ground on which it could be brought before the grand jury. The most the Clay people's representatives have been able to claim, is that Olmsted & Gillelen's money should be held up, or rather they should be penalized for what they claim are engineering blunders. I only wish we could get somebody to father that grand jury insinuation, but we can't. Capt. Milner, the Chief Inspector, who is quoted, denies ever having said anything of the kind and lays in onto the reporter, who, he says, misquoted him.

Meantime the job is nearing the finish and is going to be the best sewer system in California. The Clay people will of course do all in their power to injure us by blocking the payment, but it won't get them very far.

Yours,

A. S. BENT.

SEWER AFFAIRS TO GRAND JURY.

Long Beach Investigators to Carry Matter Up.

LONG BEACH, Nov. 13.—It was declared today by Capt. A. N. Milner, inspector for the city in the construction of the main outfall sewer, that, no matter what action the City Commission took in the matter of the hearing on alleged defects of the sewer, the entire case would be placed before the Los Angeles County grand jury.

The sewer hearing, lasting two weeks, developed allegations that the sewer contractors and engineers were inefficient. Commissioners have not yet decided upon the merits of the lengthy testimony adduced at this hearing.

Capt. Milner and F. S. Craig have been the complainants in the hearing. It is stated that the matter has already been placed before county officials. The contractors have not yet received pay for their work.

[Above item appeared in the Los Angeles Times for Sunday, the 14th of November, and we at once wrote the contractors on this work to get their side of the matter, and by return mail got their prompt reply.—Editor.]

OLMSTED AND GILLELEN
Consulting Engineers
1112 Hollingsworth Building
Los Angeles, Cal.

Nov. 18, 1915.

Mr. George Nelson,
Editor Building & Engineering News,
560 Mission St.,
San Francisco, Cal.

Dear Sir: Your very kind offer of November 16th to publish our version of the Long Beach controversy is greatly appreciated.

The real facts of the case are that P. S. Craig, a politician recently defeated in a city election, endeavored to discredit the administration and thereby improve his political position for future office seeking by attacking the plans and the general construction work on the Long Beach Sewer System. A hearing on these charges was held before the City Commissioners and we are enclosing you the published results of this hearing as they appeared in the Long Beach Telegram of November 17th.

Again thanking you for your kind offer to publish the real truth of the affair, we are

Yours very truly,

OLMSTED & GILLELEN.

Per Frank Gillelen.

(Long Beach Telegram, Nov. 17, 1915.)

SEWER ENGINEERS AND CONTRACTORS CLEARED

Of Charges Made Against Them Regarding Construction of Main Outfall System.

Basing their conclusions on the facts presented at the recent public hearing, four members of the municipal commission this morning presented a verdict completely vindicating the sanitary engineers, Olmsted & Gillelen, and the Arthur S. Bent Construction Company, in the building of the main outfall sewer system.

Not one of the charges preferred by Frank S. Craig, former works board president who instigated the investigation, are held to be borne out by the evidence. The report simply confirms in detail the widespread belief during the latter part of the hearing that Craig's case had completely collapsed under the weight of unbiased testimony.

Two reports were brought in by the commission, the majority verdict being signed by Major W. T. Lisenby, and Commissioners J. R. Williams, C. J. Hargis and Harry B. Riley.

A minority report, differing from the majority statement on only three items, was presented and signed by Affairs Commissioner F. M. Cates. Cates disagrees with the unanimous verdict of his colleagues in the following points: First, that economy would have followed initial installation of Ys in the sewer system; second, that some

pipe in the industrial district covered as an extra, should have been included in the specifications; and third, that the city would have been better protected in the purchase of cement had the specifications required a product showing no retrogression.

Aside from the above mentioned particulars, the minority signer stated that he was in accord with the views of the majority in the conclusion that other charges had not been proved by the facts and evidence in the case.

In another portion of this issue appears the two verdicts in full, but The Telegram takes this occasion to second the decision of the commission and to state the belief that the opinion is in accord with the complete facts.

Both reports after being read were ordered filed and their contents spread on the minutes of the session, this latter action being taken on the advice of the City Attorney.

The complainant in the case served notice of his appeal from the majority report, and asked to be given a certified copy of the concluding documents. He held that in at least ten counts the majority had erred.

Presentation of the verdict publicly marks the closing chapter in an investigation that has been officially under way for two months and unofficially for a longer period. The commission has had its findings under consideration since the close of the public hearing, numerous executive sessions being held for the purpose of its discussion and a verdict was reached only late Tuesday afternoon.

TULARE STREET PAVING BEGINS.

The preliminary work of paving the streets of Tulare started upon the arrival of Fred Dean, paving superintendent of the Federal Construction Company. He has been superintending the paving work at Porterville and will work in co-operation with A. P. Bosworth, City Superintendent, in the paving work in Tulare. The full crew will be put to work at once. All machinery and material has been ordered and that which has not already arrived, will be here within the next few days.

SCENIC ROAD TO MOUNT HOOD.

All the preliminary survey work for the proposed scenic road around to the east and south of Mount Hood will be completed within a week or ten days, according to the report of J. T. Schuyler, engineer in charge. Mr. Schuyler says that a survey of the main line is completed and that the work now being carried forward is for proposed side roads to points of scenic interest.

The Forestry Department will ask the coming Congress for an appropriation for the construction of the proposed road.

Technical Societies.

SAN FRANCISCO ASSOCIATION OF MEMBERS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.

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Weekly luncheons in College Room, Hoffbrau Cafe, Wednesdays at 12:30. Engineers welcome; Informal; no program.

Regular meetings are held bi-monthly at such time and place as may be appointed by the board of directors. The established custom is to meet on the third Fridays of February, April, June, August, October and December.

Address E. T. Thurston, Secretary, 913 Mechanics' Institute Bldg., Post street, San Francisco.

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233 Post Street.

President—W. B. Paville.
Vice-President—Edgar A. Matthews.
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EXECUTIVE COMMITTEE — J. A. Lighthipe, J. E. Barker, Geo. A. Damon, A. W. Nye.

Regular meetings third Tuesday in each month. Address all communications to C. G. Pyle, Secretary, Standard Underground Cable Co., 914 Hibernian Bldg., Los Angeles.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.

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Regular monthly meetings as arranged by program committee. Address all communications to H. Z. Osborne, Jr., Secretary, care City Engineer's Office, Los Angeles.

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Treasurer.....August Wackerbarth
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Regular meetings second Tuesday evening each month. Address all communications to A. R. Walker, Acting Secretary, 1403 Hibernian Building.

AMER. SOC. OF MECHANICAL ENGINEERS—Los Angeles Section.

Chairman.....Walter H. Adams
Secretary.....Ford W. Harris
EXECUTIVE COMMITTEE—W. H. Adams, Ford W. Harris, O. J. Root, W. W. Smith, Paul Weeks.

Address all communications to Ford W. Harris, 1029 Higgins Bldg., Los Angeles.

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Address all communications to Frank C. Ayars, Secretary, 505-6 Douglas Bldg., Los Angeles.

PERSONAL.

R. A. Birk and P. C. Gillette of Chisobal and Balboa, Panama, respectively, civil engineers in the employ of the government, are guests at the Rosslyn. They will be in Los Angeles for several days. The two men have been at the Canal Zone for several years and are now on leaves of absence.

They will visit San Francisco and will from that point start a trip across the continent which will take several weeks. They will return to New Orleans and will sail from that port to Panama to resume their duties. They stated that the menacing slides occurred before they departed and that the problem, in their opinion, will be solved by the first of the year.

City Engineer S. G. Bennett of Oxnard has resigned to take a position as field engineer for the Ventura County Highway Commission.

Superintendent of Streets C. M. Davis of the city of Oroville has tendered his resignation to City Clerk E. J. Mitchell, and a special meeting of the Trustees has been called to select his successor. James Parker, who for several years has done street work in this city, is an applicant for the position, and it is believed will land the job.

H. T. Corey, author of a work on Imperial Valley Irrigation system and prominently identified with the early history of Imperial Valley in an engineering capacity, has completed a notable addition to the publications bearing on the irrigation system and engineering data pertaining to the Imperial Valley. The volume is issued by the J. J. Newbegin press of San Francisco and is embellished with inserts from the American Society of Civil Engineers. It is technical in aspect, but conceded to be highly educative in character. Only a limited number of volumes were issued, these being mainly for distribution to irrigation engineers.

Harry Cauthard, formerly in charge of the Sacramento Valley Irrigation Company's canal system on the West Side, with headquarters at Willows, has been named chief construction engineer for the Western Canal System, and has established headquarters in Chico. Cauthard's first task will be to construct flood barriers to prevent injury to canal construction work now in progress.

Joseph H. Moore, civil engineer of Eureka filed with the Supervisors of Humboldt County a map of a new building tract to be known as Nob Hill tract. It lies south of the city and is to be devoted to residences. The Supervisors approved the map.

ADVANCE CONSTRUCTION NEWS.

Classified According to Character of Work.

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PAINT THE ROOF.

Exhaustive tests have shown that the use of high-grade paints upon a shingled roof largely eliminates the danger of roof conflagrations, such as are usually started by hot cinders and burning brands carried through the air from a distance. Exposure tests have shown that a high-grade lined oil case paints upon a shingled roof largely eliminates the danger of flame which such paint affords, it has additional properties to recommend it, such as a waterproofing qualities, ornamental character, and ability to withstand long exposure.—Educational Bureau, Paint Manufacturers' Association of the United States.

APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$28,000. Architects, Welsh & Carey, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location 24th and Church streets. Will contain stores on the first floor besides the entrance. Upper floors arranged for two, three and four room apartments. Interior finish pine and elm panels with some hardwood floors. Steam heat and hot water supply. Wall beds. Bath rooms tile and composition floors. Exterior covered with cement plaster. Plans being prepared.

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$8,500. Architect, B. R. Christensen, Lick Bldg., S. F. Owner's name withheld. Location 26th avenue, Richmond District. Will contain four suites of three rooms and bath. Interior finish pine with hardwood floors. Central heating system and hot water supply. Wall beds and tile baths. Exterior covered with cement plaster and brick veneer. Plans being prepared.

SAN FRANCISCO—Apartment house, 3 story and base, brick and steel, \$30,000. Architect, W. G. Hind, 46 Kearny street, S. F. Owner, Clyde S. Payne. Location, south Bush west of Hyde. Will contain three and four room suites. Interior finish pine and hardwood with some hardwood floors. Steam heat, automatic elevator and hot water supply. Bath rooms finished in tile. Wall beds. Exterior faced with pressed brick and cement plaster. Plans complete and segregated contracts being awarded.

BERKELEY, ALAMEDA CO., CAL.—Apartment house, 2 story and base, frame, \$25,000. Architects, Wright & Rushforth, 354 California street. Owner, H. A. Mattern. Location, east Hille-gass south Stuart. Will contain 52 rooms arranged in two and three room suites. Interior finish pine and hardwood with some white enamel and hardwood floors. Steam heat and a hot water system. Wall beds. Bath rooms finished in tile. Marble and tile entrance. Exterior faced with cement plaster. Plans complete and figures being taken.

PITTSBURG, CONTRA COSTA CO., CAL.—Apartment house, 2 story and base, frame, \$11,000. Architect, O. R. Thayer, 20 Montgomery street, S. F. Owner, Charles E. Perry, Pittsburg. Will contain eight suites of three and four rooms. Interior finish pine throughout. Hot water system. Wall beds. Exterior covered with shingles and brick veneer. Plans complete and in the hands of the owner who will do the work by Day Labor.

STOCKTON, SAN JOAQUIN CO., CAL.—Apartment house, 3 story and base, brick and concrete. Cost not

stated. Architect, W. B. Thomas, Yosemite Bldg., Stockton. Owner, B. Granich. Location, east California north of Channel. Will contain two stores and 41 apartments of two and three rooms. Interior finish pine and elm. Hardwood floors. Steam heat, oil burning system and hot water supply. Bath rooms finished in tile. Wall beds and patent store fronts. Exterior faced with pressed brick and cement plaster. Plans being prepared.

SAN FRANCISCO—Apartment house, 6 story and base, steel and brick, \$85,000. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Gerard Investment Co. Location, southeast corner of Geary and Leavenworth streets, covering an area of 44 by 83 feet. Will contain 40 apartments of three and four rooms. Interior finish pine, hardwood and white enamel. Hardwood and tile floors, marble wainscot and ornamental plaster. Steam heat, elevator service, oil burning plant, vacuum cleaning and hot water supply. Bath rooms tile. Wall beds. Exterior faced with pressed brick trimmed with terracotta. Plans complete and work by Day Labor.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—Apartment house and stores, 2 story and base. Class C construction. Cost not stated. Architects, Train & Williams, Exchange Bldg., L. A. Owner, Ralph Swing. Will cover an area of 40 by 110 feet. Two stores and eight apartments of three and four rooms. Interior finish pine. Wall beds. Hot water system. Tile baths and patent store fronts. Exterior faced with pressed brick. Plans being prepared.

LOS ANGELES, CAL.—Apartment house, 4 story and base. Class C construction, \$55,000. Architect, L. T. Mayo, Black Bldg., L. A. Owner, Mr. Bramhall. Location, corner of 8th and Hoover streets, covering an area of 60 by 130 feet. Will contain 102 rooms arranged in two and three room suites with private baths and wall beds. Interior finish pine and elm panels. Some hardwood floors. Steam heat, automatic elevator and hot water system. Tile bath rooms. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

LOS ANGELES, CAL.—Apartment house, 3 story and base, frame, \$25,000. Architect, A. L. Reed, 224 Pacific avenue, Long Beach. Owner, Mrs. Ida G. Platt. Contractors, J. H. Woodworth & Son, Chamber of Commerce Bldg., Pasadena. Contract price, \$28,000.

SAN FRANCISCO—Apartment house, 4 story and base, brick and frame. Cost not stated. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, Floyd C. Curry. Contractors, Higgins Co., Humboldt Bank Bldg., S. F. Contract price not stated.

BATH HOUSES.

SEATTLE, WASH.—Bath house, 1 and 2 story and base, reinforced concrete, \$250,000. Architect, B. Marcus Pretica, Pantages Bldg., Seattle. Owners, Albert Shubach, C. D. Stimpson and Jacob Berger. Location, corner of Leonra and 2nd avenue, covering an area of 180 by 180 feet. Plunge will be 110 by 60 feet. There will be showers and tub baths. Interior pine, tile and marble. Fireproof construction. Steam heat, oil burning plant and pumping plant capable of 750 gallons per minute. Exterior faced with cement plaster. Plans being prepared.

BONDS

SANTA CLARA, SANTA CLARA CO., CAL.—At their session last week the Board of Town Trustees decided to submit the question of issuing and selling bonds of \$45,000 for paving improvements to the voters.

The proceeds of the sale of these bonds, if the issue carries, will be to complete the paving of that portion of the State highway running through Santa Clara on the San Jose-San Francisco road.

H. E. Fisher, Town Engineer, estimates that the paving of the uncompleted portion of the State highway in Santa Clara would cost \$26,999 and the contemplated improvements on the Homestead road and Lincoln street would cost \$18,010.

BAKERSFIELD, KERN CO., CAL.—The Board of Education has decided to call an election on December 14th for the purpose of voting bonds in the sum of \$75,000 for additional school facilities. The funds will be used to erect two new school buildings, one on Tenth street, owned by the board, and one on a lot at Union and Nineteenth, to be purchased out of the money derived from the sale of the bonds, and equipment for the new buildings.

PORTLAND, ORE.—The Medynski bond issue was defeated at an election held in Portland recently. There were 108 for the issue and 1,478 against. The Medynski plan called for an issue of \$1,030,000 in paving and refunding bonds.

SAN BRUNO, SAN MATEO CO., CAL.—The citizens of San Bruno last week voted bonds of \$20,000 for the erection of a new school building. The building to be erected is estimated to cost \$17,500. The remainder of the sale of the bonds will be used to install a heating plant in the structure.

WASCO, KERN CO., CAL.—An election held to vote bonds of \$45,000 to provide for the construction of a high school carried last week. Plans for the building will be ordered shortly.

RICHMOND, CONTRA COSTA CO., CAL.—Petitions are now in circulation addressed to the Council opposing the calling of additional bond elections.

SARACENTO, CAL.—The last of the Sacramento city school bonds have been sold to the N. W. Halsey Company. The bonds sold amounted to \$206,000. The proceeds will be used in making school improvements.

TERRA BELLA, TULARE CO., CAL.—To finance the construction of im-

provements to be made the Terra Bella Irrigation District, recently formed, will soon call an election to vote bonds.

OAKDALE, STANISLAUS CO., CAL.—Application has been made by County Librarian Miss C. D. Provines with the Carnegie Corporation asking that a library building to cost \$7,000 be erected here. It is thought if the request is granted additional money will be secured to erect a more costly building.

SELBY, CONTRA COSTA CO., CAL.—On December 11th an election will be held to vote bonds of \$11,000 for the construction of a school building. This will be the second election held in this district for the voting of these bonds.

AUBURN, PLACER CO., CAL.—All three propositions providing for city improvements were carried at the election held in Auburn last week. Proposition 1 provided \$15,000 for the extension of sewers, construction of a septic disposal system and enlarging several of the main sewers. Proposition 2 provided \$5,000 for the purchase of fire auto trucks, and proposition 3, for the installation of a fire alarm system. When the bonds have been sold bids for the above work will be called for.

BAKER, ORE.—Bonds of \$125,000 were voted here last week. The issue will provide funds for the erection of a high school building.

KENNETT, SHASTA CO., CAL.—The City Trustees have received two bids for the purchase of the Kennett bridge bonds amounting to \$5,000.

THE DALLES, ORE.—A proposition to vote bonds of \$290,000 will be discussed by the County Court and other active boosters at a meeting to be held here this week.

SAN RAFAEL, MARIN CO., CAL.—The proposition of calling a special election to vote bonds of \$40,000 to provide funds for dredging the San Rafael Canal was laid over for further consideration at the last meeting of the Council.

WOLTERS SCHOOL DISTRICT, CAL.—The voters here are contemplating calling an election to vote bonds of \$12,000 for the erection of a school building.

WHITTIER, LOS ANGELES CO., CAL.—Engineer F. C. Roberts, Marsh-Strong Bldg., L. A., has been commissioned to prepare plans for a new water works and distributing system to be installed at Whittier at a cost of \$100,000. A bond election will be called to vote funds for the work.

RIVERSIDE, RIVERSIDE CO., CAL.—The \$50,000 bond issue of the Mecca Road District has been declared invalid on account of irregularities at the polls.

INDIO, RIVERSIDE CO., CAL.—The \$65,000 highway bonds have been sold.

SAN RAFAEL, MARIN CO., CAL.—At the last meeting of the board of directors of the Municipal Water District a resolution was adopted to advertise for bids for the sale of \$600,000 of the bonds to be sold December 21st, \$300,000 to be delivered in January, and \$300,000 in April.

The plan of the board of directors is to use about \$150,000 in the purchase of the Howard-Shafter properties, \$130,000 for tunnel work, road work, preliminary work on the Alpine dam, and purchase of right of way

over the Jory and Cascade properties and \$289,000 for the purchase of the North Coast Company's property, at the payment of interest for the first year.

CALEXICO, IMPERIAL CO., CAL.—The sale of \$10,000 additional Calexico school bonds has been authorized by the Supervisors.

CALEXICO, IMPERIAL CO., CAL.—Tuesday, December 28th, is the date set for the \$100,000 bond election to determine whether water and sewer extension work shall be carried out in Calexico, the trustees passing the ordinance on first reading. Three separate issues are contained in the election one for sewer extension in different parts of the city; another for water extension on the east side and also for fire protection in the down town section. The last item, \$5,000, is concerned with the proposed purchase of a fire truck for the city.

BRIDGES, DAMS AND HARBOR WORK

SAN JOSE, SANTA CLARA CO., CAL.—Revetment wall, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the Santa Clara Supervisors plans and specifications for a reinforced concrete revetment and curtain wall on the Los Gatos Creek were approved and bids were ordered to be received up to December 6th at 11 a. m. Further information may be had from the County Clerk or Engineer at San Jose.

SAN JOSE, SANTA CLARA CO., CAL.—Culvert, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications prepared by the County Engineer for the construction of a concrete culvert on Edmondson avenue in Supervisor District No. 1, near Morgan Hill, were accepted by the county Supervisors and bids for the work were ordered received up to December 6th at 11 a. m.

SAN JOSE, SANTA CLARA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The Santa Clara County Supervisors at the last meeting ordered the County Engineer to prepare plans and specifications for the construction of a reinforced concrete bridge over the Guadalupe Creek on the Branham road near the railroad crossing. On completion and approval of the plans bids for this work will be called.

AUBURN, PLACER CO., CAL.—Bridge, timber construction. Cost not stated. Engineer, County Surveyor, Auburn. Owners, Placer County. Bids will be opened on December 7th for the construction of a wooden bridge, 420 feet long, across Dry Creek on the section line between sections 8 and 9, Tp. 10 N., R. 6 E., M. D. B. and M., in Supervisor District No. 1.

VISALIA, TULARE CO., CAL.—Bridges, 2, reinforced concrete and timber. Cost not stated. Engineer, County Surveyor, Visalia. Owners, Tulare County. At a recent meeting of the County Supervisors, bids were ordered received up to December 7th for the construction of two bridges in the Second District, one over Sand Creek and

one of reinforced concrete construction over the Alta Canal. Further information may be had from the County Engineer at Visalia.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Plans have been completed by the County Engineer for the construction of two bridges in Gaviota Canyon, the overhead crossing of the railroad near Ellwood and a bridge at El Capitan. The plans are now in the hands of the State Highway Commission awaiting their approval. Bids will be called immediately by the County Supervisors of Santa Barbara.

RED BLUFF, TEHAMA CO., CAL.—Bridge, timber construction. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. In response to a petition presented to the County Supervisors the County Engineer has been instructed to prepare plans and specifications for a wooden bridge to be erected over the North Fork of Mill Creek and Dry Creek in Road District No. 3. Bids will be called for on the completion and approval of the plans.

MERCED, MERCED CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Merced. Owners, Merced County. At the last meeting of the County Supervisors the construction of a bridge on Pacheco Pass road in District No. 5, was ordered. A resolution was adopted at the same meeting that the county pay one-half of the cost of a concrete bridge across South Slough at the city limits.

MERCED, MERCED CO., CAL.—Bridges, timber and reinforced concrete. Cost not stated. Engineer, County Surveyor, Merced. Owners, Merced County. The Merced County Supervisors have directed the County Engineer to prepare plans and specifications for bridges to be constructed in the county as follows: Cottonwood to Newman road, over canal near Hubbard and Carmichael; also bridge over Quinto Creek on Cottonwood school house road near Clay school house. Bids for the construction of these bridges will be called for on the completion and adoption of the plans.

MODESTO, STANISLAUS CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Bids will be received until December 11th for the construction of a bridge over a branch of Dry Creek and a reinforced concrete bridge over lateral No. 5, of the Modesto Irrigation District.

CALINAS, MONTEREY CO., CAL.—Bridge approach, reinforced concrete. Cost not stated. Engineer, County Surveyor Howard F. Cozzens, Salinas. Owners, Monterey County. The County Supervisors at their last meeting directed the County Surveyor to construct an approach to the bridge crossing the Pajaro River at Watsonville under the Day Labor system.

WILLOWS, GLENN CO., CAL.—Bridge, reinforced concrete, \$7,000. Engineer, County Surveyor, Willows. Owners, Glenn County. Cotton Bros., 510 32nd street, Oakland, bridge contractors, have asked the Supervisors

to release them from a contract for building the Salt Creek bridge at Newville. The Cottons bid \$6,000. They now say they made a mistake of \$1,000 and that their bid should have read \$7,000. Even at that figure they were the lowest bidders. The Supervisors have taken the matter under consideration and will make their decision known at the December meeting.

Contracts Awarded.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Bridge, reinforced concrete, \$1,575. Engineer, County Surveyor, Santa Cruz. Owners, Santa Cruz County. Contractors, Foster-Vogt Co., 503 Market street, S. F. Contract price, \$1,575.

CHURCHES

FRESNO, FRESNO CO., CAL.—Church, 2 story and base, brick and steel. Cost not stated. Architect, Robert B. Hotchkiss, Rowell Bldg., Fresno. Owners, First Church of Christ, Scientist. Location, corner of Calaveras and N streets, covering an area of 82 by 115 feet. Will contain the main auditorium, seating 900 people, Sunday school rooms and reading rooms. Interior finish pine, hardwood and ornamental plaster. Central heating system and vacuum cleaning. Art glass windows. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and figures being taken.

PORTLAND, ORE.—Mausoleum, 1 story, reinforced concrete and granite, \$60,000. Architects, Lawrence and Holford, Chamber of Commerce Bldg., Portland. Owners, Portland Mausoleum Co. Location, Riverview Cemetery. Will contain 350 crypts. Interior finish stone and ornamental plaster. Modern electric work and plumbing. Exterior faced with granite. Plans being prepared.

MERCED, MERCED CO., CAL.—Church, 1 story and base, brick, \$20,000. Architects, Cowell & Bedesen, Merced. Owners, Central Presbyterian Church. Location, 20th and L streets. Designed in the classic style. Will contain main auditorium, Sunday school rooms and pastor's study. Interior finish pine and ornamental plaster. Art glass windows. Central heating system. Exterior faced with pressed brick. Plans approved and bids to be called for shortly.

Contracts Awarded

SACRAMENTO, CAL.—Church, 1 story and base, brick and concrete, \$15,000. Architects, Shea & LaFollett, Bankers' Investment Bldg., S. F. Owners, Church of the Immaculate Conception. Contractors, Barton & Hite, 1009 1/2 9th street, Sacramento. Contract price, \$15,000.

COURT HOUSES.

SAN FRANCISCO.—City hall bulletin board. Cost not stated. Architects, Bakewell & Brown, 261 Kearny street, S. F. Owners, City and County of San Francisco. Bids will be received by the Board of Public Works up to December 31st for furnishing and installing a bulletin board in the new City Hall. Plans can be secured from the City Department of Architecture, Temporary City Hall.

FACTORIES AND WAREHOUSES

SAN FRANCISCO.—Packing house, 2 story and base, reinforced concrete, \$25,000. Architect, Smith O'Brien, Humboldt Bank Bldg., S. F. Owners, Workman Packing Co. Location, west Seventh south of Harrison. Fireproof construction. Will contain offices, packing rooms and shipping department. Interior finish pine with cement floors. Refrigerating equipment and vacuum cleaning. Steam heat, oil burning plant and hot water supply. Metal window sash and frames. Exterior faced with cement plaster. Plans complete and figures being taken.

LOS ANGELES, CAL.—Sub-station, reinforced concrete, \$50,000. Architect, Frederick L. Roehrig, American Bank Bldg., L. A. Owners, Aqueduct Power Co. Location, Main street, covering an area of 70 by 175 feet. Construction fire proof. Interior finish cement plaster. Special power equipment. Exterior faced with cement plaster. Plans being prepared.

LOS ANGELES, CAL.—Warehouse, 4 story and base. Class C construction. Cost not stated. Architects, Morgan, Walls & Morgan, Van Nuys Bldg., L. A. Owners, Los Angeles Soap Co. Location, Banning east of Alameda street, covering an area of 100 by 100 feet. Construction steel and heavy timbers. Interior finish pine. Freight elevators, metal covered doors and window sash. Exterior faced with select common brick. Plans being prepared.

Contracts Awarded.

LOS ANGELES, CAL.—Wharf shed, 6 story and base, reinforced concrete, \$117,000. Architect, Harbor Commission, L. A. Owners, City and County of Los Angeles. Contractors, Merchants' Realty and Investment Co., Van Nuys Bldg., L. A. Contract price, \$117,000.

LOS ANGELES, CAL.—Warehouse, 7 story and base. Class A construction. Cost not stated. Architect, none. Owners, Lyon Fireproof Storage Co. Contractors, Richards - Neustadt Co., Wright and Callender Bldg., L. A. Contract price not stated.

FIRE HOUSES AND JAILS

SAN FRANCISCO.—Fire house, 2 story and base. Class C construction, \$12,000. Architects, Ward & Blohme, Alaska Commercial Bldg., S. F. Owners, City and County of San Francisco. Working drawings have been completed and turned over to the Fire Commission for approval. The building will be located on the north side of Howard street between Second and Third streets, and will be known as Engine House No. 1. Further mention will be made when the bids are called.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Jail, 1 story and base, reinforced concrete. Cost not stated. Architect's name not given. Owners, Town of San Luis Obispo. At the last meeting of the City Council specifications for a new jail building were adopted. Bids will be called for shortly.

FIRE REPORT

LOS ANGELES, CAL.—The apartment house of Mrs. M. Pierson at 215 West 23rd street was partially de-

stroyed by fire last week. The loss is \$15,000.

OLETA, CAL.—Buildings costing about \$35,000 were destroyed by fire here last week.

FAIRFAX, MARIN CO., CAL.—La Boheme, a resort, near here, and the business section of this town are in ashes as the result of a fire that did damage estimated at \$50,000.

OAKLAND, CAL.—The cabinet shop of Alfred Moack at Fifth and Franklin streets was destroyed by fire last week. The damage is placed at several thousand dollars.

FLATS

SAN FRANCISCO—Flats, 3, 3 story and base, frame, \$6,000 each. Architect, L. Traverso, 854 Union street, S. F. Owners, L. Cavagnaro & Co. Location, west Taylor south of Lombard. Each will contain three flats of five and six rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile mantels. Tile bath rooms. Marble and tile entrance. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats and shop, 2 story and base, frame, \$7,000. Architect, none. Owner, William Helbing. Location, north Fulton west of Franklin, covering an area of 38 by 120 feet. First floor arranged for automobile paint shop and upper floor for two flats. Interior finish pine. Some hardwood floors. Open fire places and tile mantels. Exterior covered with ship-lap and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architect, none. Owner, Oscar H. Curtaz, 1420 Market street, S. F. Location, north Fulton west of Franklin, covering an area of 28 by 120 feet. Will contain two six-room flats. Interior finish pine and elm panels. Hardwood floors, open fire places and tile or brick mantels. Tile bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SACRAMENTO, CAL.—Flats, 2 story and base, frame, \$4,500. Architect, none. Owner, W. B. Ellis, 520 1/2 20th street, Sacramento. Location, 1517 28th street. Will contain two flats of five and six rooms. Interiors finished in pine and elm panels. Hardwood floors and open fire places. Mantels tile or brick. Tile wainscot in bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

GARAGES

SAN FRANCISCO—Garage, 2 story and base. Class A construction, \$35,000. Architect, August G. Headman, New Call Bldg., S. F. Owner, J. K. Bigelow. Location, north Bush between Powell and Mason streets, covering an area of 87 1/2 by 137 1/2 feet. Construction, fireproof. Concrete floors. Two inclines. Metal window sash and frames. Special tanks. Exterior faced with cement plaster. Plans complete and figures being taken.

LOS ANGELES, CAL.—Garage 3 story and base. Class A construction, \$100,000. Architects, Morgan, Walls & Morgan, Van Nuy's Bldg., L. A. Owners, J. W. Leavitt & Co. Location, Oliver street, covering an area of 100 by 120 feet. Construction steel and reinforced concrete. Main floor fitted up for office and sales rooms. Interior finish pine, hardwoods and tile. Upper floors, storage space, repair rooms and shipping department. Exterior faced with cement plaster. Plans being prepared.

LOS ANGELES, CAL.—Garage, 2 story and base, brick. Cost not stated. Architect, Albert C. Martin, Higgins Bldg., L. A. Owner, Tony Milovitch and Miss T. Garibaldi. Location, Los Angeles street between 5th and 6th streets, covering an area of 60 by 115 feet. Designed for a commercial garage. Concrete floors, metal window sash and frames and special gasoline storage tanks. Exterior faced with pressed brick. Plans complete and figures being taken.

Contracts Awarded.

EUREKA, HUMBOLDT CO., CAL.—Garage, 1 story and base, brick, \$6,244. Architect, E. J. Burke, Eureka. Owner, S. S. Mitchell. Contractors, Mercer-Fraser Co., Eureka. Contract price, \$6,244.

GOVERNMENT WORK & SUPPLIES

Reclamation Work.

A summation of the work of the Reclamation Service to the beginning of the present fiscal year shows that it has dug 9,592 miles of canals and ditches and excavated 89 tunnels, with an aggregate length of more than 25 miles. Dams of masonry, earth crib, and rock fill have been erected with a total volume of 12,200,000 cubic yards. These include the two highest dams in the world. The available reservoir capacity at this time is approximately 6,500,000 acre feet, or sufficient to cover the states of New Jersey and Delaware to a depth of 12 inches. The service has built 4,622 bridges, with a total length of 19 miles. Its culverts number 5,714 and are 36 miles long. There are now in operation 298 miles of pipe line and 85 miles of flumes. The service has built 784 miles of wagon road, much of it in what was before inaccessible mountain regions, 82 miles of railroad, 2,554 miles of telephone lines, 429 miles of power transmission lines, and 1,068 buildings, such as power houses, pumping stations, offices, residences, barns and store-houses. The projects now under way or completed embrace approximately 3,000,000 acres of irrigable land, divided in about 60,000 farms of from 10 to 160 acres each. During the year 1915 water was available from government ditches for 1,450,407 acres on 29,017 farms, and the government was under contract to supply water to 1,088,003 acres. The excavations of rock and earth amount to 130,149,368 cubic yards. The government has used 2,501,382 barrels of cement and has manufactured 1,177,215 barrels of cement and sand cement. The power developed amounts to approximately 35,000 horsepower. The net investment of the service to date is approximately \$100,000,000.

Canal Circular 977.

The following bids were received by the general purchasing officer, Panama Canal, Washington, D. C., November 4, under circular 977, for furnishing the annual supply of fuel oil during the calendar year 1916:

Bid 1. Standard Oil Co., 200 Bush street, San Francisco, Cal., Balboa, 92c per bbl, 20 to 25 days; Cristobal, \$1.05, 22 to 27 days; in 60,000-bbl lots.

2. The Texas Co., 17 Battery Place, New York City, at Cristobal, \$1.55 per bbl, less 25 per cent, 60 days, more than 25 per cent, 120 days; alternate bid, \$1.49, half Mexican; for delivery before January 1, \$1.65 and \$1.59.

Reclamation Service, Chain Shafts, Etc.

The following bids were received by the chief engineer, U. S. Reclamation Service, Washington, D. C., November 8 for furnishing chain shafts for rolling crest of Grand River diversion dam, Grand Valley project, Colo.:

Item 1, 1 chain shaft for 60-ft roller; 2, 6 do, for 70-ft rollers; 3, operating chain and guard chain for 60-ft roller; 4, 6 operating and guard chains for 70-ft rollers; 5, 1 safety for 60-ft roller and 6 do, for 70-ft roller.

Vulcan Iron Works, Denver, Colo., items 1 to 5, \$8,780; time June 1.

Lakeside Bridge & Steel Co., North Milwaukee, Wis., items 1 to 4, \$5,147; 5, \$891; delivery, item 1, 35 days; 2, 35 days; 3, 4, and 5, 60 days.

Link Belt Co., Chicago, Ill., items 1 to 4, \$10,500; 5, \$1,572; delivery, items 1, 3, and 5, February 21; 2 and 4, March 22, 1916.

Cylinder Gates.

The following bids were received by the U. S. Reclamation Service at Denver, Colo., under advertisement No. 853, for cylinder gates:

Darbyshire-Harvie Iron & Machine Co., El Paso, Tex., \$1,235.

El Paso Foundry & Machine Co., El Paso, Tex., \$1,300.

Minneapolis Steel & Machinery Co., Minneapolis, Minn., \$1,050.

Vulcan Iron Works, Denver, Colo., \$1,125.

Western Pipe & Steel Co. of California, Richmond, Cal., \$960; accepted.

Seattle Construction & Dry Dock Co., Seattle, Wash., \$1,380.

Butte, Mont., Repairs.

The contract for repairing the work-room roof at the U. S. post office, Butte, Mont., has been awarded to the Montana Roofing Co., Butte, Mont., at \$116.

Panama, Spuds.

The following bids were received on November 6 by the assistant purchasing agent of the Panama Canal, at San Francisco, Cal., for furnishing three spuds of Douglas fir, 34x34 ins x 70 ft:

Van Arsdale Lumber Co., San Francisco, Cal., \$599 ea.

W. R. Grace & Co., San Francisco, Cal., \$420; accepted.

Denver, Colo., Chutes.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., November 8 for installing chutes in the U. S. post office at Denver, Colo.:

American Mailing Device Corp., 103

Park avenue, New York City, \$743; 10 days.

Cutler Mail Chute Co., Rochester, N. Y., \$718; 60 days.

Prospective Bidders.

Plans and specifications have been furnished the following firms for work at Pearl Harbor, radio buildings. Bids close December 4:

W. N. Conannon, San Francisco, Cal.
Spaulding Construction Co., Rialto Building, San Francisco, Cal.
Construction and Engineering Co., San Francisco, Cal.

Trussed Concrete Steel Co., Washington, D. C.

Post Office Buildings.

A new plan has been adopted by Secretary McAdoo for classification of post office buildings. The regulation will be according to postal receipts and will be as follows:

Class A—Marble or granite facing; fireproof throughout; metal frames, sashes and doors; interior finish to include the finer grades of marble, ornamental bronze work, mahogany, etc.; public spaces to have monumental treatment; mural decorations; special interior lighting fixtures.

Class B—Limestone or sandstone facing; fireproof throughout; exterior frames and sash, metal; interior frames and sash, metal; interior finish to exclude the more expensive woods and marbles; ornamental metal to be used only where iron is suitable; restricted ornament in public spaces.

Class C—Brick facing with stone or terra cotta trimmings; fireproof floors; non-fireproof roof, frames, sashes and doors, wood; interior finish to exclude the more expensive woods and marbles, the latter used only where sanitary conditions demand; public spaces restricted to very simple forms of ornament.

Class D—Brick facing; little stone or terra cotta used; only first floor fireproof; stock sash, frames, doors, etc., where advisable; ordinary class of building.

HALLS AND SOCIETY BUILDINGS

Contracts Awarded

VISALIA, TULARE CO., CAL.—Municipal auditorium, 2 story and base, brick and steel, \$32,000. Architects, Coates & Traver, Rowell Bldg., Fresno. Owners, City of Visalia. Contractors, Trowhitt & Shields, Fresno. Contract price, \$32,000.

HOSPITALS

SAN FRANCISCO—Hospital wings, 3 story, Class A construction. Cost as follows. Architect's names as given below. Owners, City and County of San Francisco. The Board of Public Works has requested the Supervisors to provide funds for the construction of both the southeast and northeast wings of the San Francisco Hospital. Architect, Hermann Barth, 12 Geary street, has plans for the southeast wing complete and the same have officially been approved. The sum of \$55,250 is asked by the Board of Works to start this construction. Architect John Reid, Jr., First National Bank Bldg., has plans

complete for the northeast wing, and the Board of Works has requested the sum of \$10,500 to start this construction. Both buildings will be of the Class A type, with steel frames and brick exterior walls, hollow tile interior partitions and concrete floors. Bids will be called for shortly.

EUREKA, HUMBOLDT CO., CAL.—Hospital, 1 and 2 story and base, frame, \$13,000; \$1,000 additional for equipment. Architect, E. J. Burke, Eureka. Owners, Humboldt County. Will contain wards and private rooms for male and female patients. Interior finish pine with some hardwood floors. Furnace heat and hot water system. The bath rooms and operating room. Exterior covered with rustic and shingles. Plans complete and figures being taken.

NORWALK, LOS ANGELES CO., CAL.—Hospital laundry, 1 story and base, concrete and frame. Cost not stated. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be received until December 13th for the construction of a laundry building. Exterior faced with cement plaster. Plans and specifications on file at the State Department of Engineering. An official proposal appears in another column of this issue.

LOS ANGELES, CAL.—Hardwood floors, etc. Cost not stated. Architect, none. Owners, United States Government. Sealed proposals will be received at office of Treasurer Pacific Branch, N. H. D. V. S., Soldiers' Home, Los Angeles County, Cal., and there opened at 12 o'clock M., December 11, 1915, for furnishing and laying hardwood and composition floors in three barracks at above location. Specifications and other information can be had upon application to the Treasurer. Geo. T. Baggott, Treasurer.

IRRIGATION PROJECTS

SALEM, ORE.—Irrigation work, \$1,600,000. Engineer's name not given. Owners, Graves Creek Irrigation District. State Engineer Lewis has issued a permit to the Graves Creek irrigation project to appropriate sufficient water from Graves and Jumpoff creeks to irrigate 20,000 acres of land and to develop 3,000 horsepower. Two large reservoirs are included in the plans and, exclusive of them, the cost of the works is estimated at \$1,000,000. The project is located in Josephine County.

MODESTO, STANISLAUS CO., CAL.—Irrigation work. Cost not stated. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Bids received by the Board of Directors of the Modesto Irrigation District for the work of cleaning, deepening and extending the main drainage canal of the district were rejected as they were above Engineer Herrmann's estimate. The bidders were Contra Costa Construction Co., S. F., \$26,000; Ross Construction Co., Sacramento, \$19,450. The work will now be done under the Day Labor system in charge of Engineer Herrmann.

WILLOWS, GLENN CO., CAL.—Irrigation canals. Cost not stated. Engineer's name not given. Owners, Glenn County Irrigation District. Proposals are wanted at once for the construction

tion of a system of canals and laterals and deep drains in Glenn County. For information and plans see Washington Dodge, 1 Sansome street, San Francisco.

LA PINE, ORE.—Irrigation power equipment. Cost not stated. Engineer's name not given. Owners, Pringle Falls Water and Power Co., Portland. The Pringle Falls Water and Power Co., with head offices in Portland, has just been sold to a syndicate of Eastern capitalists headed by Tomes Bros. of Nebraska. The consideration is said to have been \$300,000. The plans of the new company as announced are to supply water for the irrigation of the entire La Pine basin and Eden Coulee, Silver Lake and Fort Rock valleys. Power and light for La Pine will also be among the first steps in development. The power plant, which is practically finished, will be immediately equipped, a sawmill with a daily capacity of 150,000 feet will be erected in the spring.

Contracts Awarded

MODESTO, STANISLAUS CO., CAL.—Irrigation work. Cost as follows. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Tieslau Bros., 110 Jessie street, S. F., for building the transition section of the main canal to connect with the Dry Creek flume, \$2,572; G. J. Ulrich, Modesto, for building nine concrete drops in lateral No. 3, \$19,940; and Peart Bros. of Oakland for construction of concrete facing and curtain wall for dam No. 1 of the Dallas reservoir, \$72,500.

LIBRARIES

BERKELEY, ALAMEDA CO., CAL.—Library structural steel work. Cost not stated. Architect, John Galen Howard, 604 Mission street, S. F. Owners, University of California. Plans and specifications have been completed and figures will be received up to 9 A. M. of December 1st for furnishing and erecting the structural steel for the new University Library building. Plans can be secured from the office of the Comptroller at Berkeley. An official proposal appears in another column of this issue.

RAILROAD CONSTRUCTION AND EQUIPMENT

SEATTLE, WASH.—Railroad sheds, 2 story and base, frame, \$60,000. Architect, West, Port of Seattle Commission, Seattle. Owners, City of Seattle. Location, Spokane avenue, covering a large ground area. Exterior corrugated iron. Plans complete and figures being taken. Bids close on December 8th.

RESIDENCES

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, none. Owners, Oscar Heyman & Bro., 742 Market street, S. F. Location, east 15th avenue north of Balboa. Will contain five rooms and bath. Interior finish pine and elm panels. Hardwood floors, open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor

SAN FRANCISCO — Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, A. R. Lapham, 511 12th avenue, S. E. Location, east 12th avenue north of Cabrillo. Will contain six rooms, bath and sleeping porch. Interior finish pine and elm panels with some hardwood floors. Open fire place and tile or brick mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 4, 1 story and base, frame, \$2,000 each. Architect, B. R. Christensen, Lick Bldg., S. F. Owner's name withheld. Location, Sunnyside District. Each house will contain five rooms and bath. Interior finish pine throughout. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic and shingles. Plans complete and figures being taken.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$5,000. Architect, Harris Allen, Central Bank Bldg., Oakland. Owner, R. L. Underhill. Location, Tamalpais near Rose. Will contain nine rooms, bath and sleeping porch. Interior finish pine, elm panels and white enamel. Hardwood floors and open fire place. Tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with shakes. Plans being prepared.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, George W. Nunes, 5430 Dover street, Oakland. Location, north Chabot Road east of Claremont. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantel. Imitation tile bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 1½ story and base, frame, \$3,000. Architect, C. Walde, 1723 Telegraph avenue, Oakland. Owner, W. F. Neary. Location, west York Drive north of Holly Place. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwoods and white enamel. Hardwood floors. Open fire places and tile mantels. Furnace heat. Automatic water heater. Bath room finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

ALAMEDA, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Conrad Roth, 2117 Pacific avenue, Alameda. Location, corner of Schiller and Buena Vista avenues. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Some hardwood floors. Open fire places and tile mantels. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

ALAMEDA, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, F. P. Montague, 2911 East 16th street, Oakland. Location, 1652 Central avenue. Will contain five rooms and bath. Interior finish pine throughout. Some

hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$3,000. Architect, none. Owner, Charles M. Johnson, 2317 Carlton street, Berkeley. Location, west Benvenue south of Webster. Will contain six rooms, bath and sleeping porch. Interior finish pine, hardwood veneer and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile or brick. Bath room tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residences, 2, 1 story and base, frame, \$2,200 each. Architects, Hutchinson & McLean, 470 13th street, Oakland. Owner, John D. Garrettson, 4119 Manilla avenue, Oakland. Location, south Julia west of California. Each will contain six rooms and bath. Interior finish pine with some elm panels. Hardwood floors and open fire places. Mantels tile and brick. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$3,000. Architect, H. H. Gutterston, 68 Post street, S. F. Owners, Mason-McDuffie Co. Location, south Garber west of Oak Knoll. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans being prepared.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$4,500. Architect, M. I. Diggs, 2444 Bowditch, Berkeley. Owner, J. C. O'Connor. Location, east Carlton south of Prospect. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Furnace heat and automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

PETALUMA, SONOMA CO., CAL.—Residence, 2 story and base, frame. Cost not stated. Architect, Warren Perry, 604 Mission street, S. F. Owner, Henry B. Wintringham, Petaluma. Will contain eight rooms, two baths and office. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms tile. Furnace heat and automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

OAKDALE, STANISLAUS CO., CAL.—Residence, 2 story and base, frame, \$11,000. Architect's name not given. Owner, T. G. Roberts, Oakdale. Location, 1st avenue and Walnut street. Will contain nine rooms, two baths and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors. Furnace heat and

open fire places. Mantels tile or brick. Automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residences, 1 story and base, frame, \$2,500 each. Architect, none. Owners, Central California Land and Improvement Co., 955 I street, Fresno. The Central California Land and Improvement Company is planning the erection of several bungalows on the La Sierra or Einstein tract. Work is to be commenced at once on the first dwelling located on McKinley near Belmont, which will be modern in every particular, with white asbestos roof. Edwin Einstein is secretary of the company.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$1,500. Architect, none. Owner, J. R. Church, 1221 Y street, Fresno. Location, Riverside Addition. Will contain five rooms and bath. Interior finish pine. Some hardwood floors. Open fire place. Automatic water heater. Exterior covered with rustic. Plans complete and work by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$2,750. Architect, none. Owners, Gede & Gede, 451 Poplar avenue, Fresno. Location, Smith Tract. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

SCHOOLS

SAN FRANCISCO—School, 2 and 3 story and base. Class A construction, \$125,000. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, City and County of San Francisco. Bids will be received by the Board of Public Works until December 1st for the general construction, brick and terra cotta work, plumbing, electric work and heating and ventilating work for the Redding School, to be erected at the southwest corner of pine and Larkin streets. Plans can be secured from the City Department of Architecture. Official proposals appear in another column of this issue.

BERKELEY, ALAMEDA CO., CAL.—School addition, frame. Cost not stated. Architect, State Architect, George B. McDougall, Sacramento. Owners, State of California. Bids will be received until December 14th for the construction of a frame addition to the Dairy Building at the California School for the Deaf and Blind. Plans can be secured from the State Department of Engineering. An official proposal appears in another column of this issue.

PASADENA, LOS ANGELES CO., CAL.—Chemistry building, 3 story and base, reinforced concrete, \$60,000. Architect, Elmer Grey, Wright and Calender Bldg., L. A. Owners, Throop College. Construction fireproof with reinforced concrete floors and walls and hollow tile interior partitions. Interior finish pine and hardwood floors. Central heating system. Exterior faced with cement plaster. Plans being prepared.

LOS ANGELES, CAL.—School group, 4, 1 and 2 story. Class A, \$200,000. Architect, Norman F. Marsh, 214 Broadway Central Bldg., L. A. Owners, City of Los Angeles. Location, 38th and Hooper streets. The group will comprise the sciences, art, academic and mechanics buildings and a power house. Reinforced concrete to main floor level and brick above. Interior finish pine with hardwood floors. Central heating system and program clocks. Exterior faced with cement plaster. Plans complete and figures being taken. Bids will be opened on December 9th.

Contracts Awarded.

CALIXICO, IMPERIAL CO., CAL.—Schools, 2, 1 story and base, frame. Cost as follows. Architects, Allison & Allison, Hibernian Bldg., L. A. Owners, Town of Calixico. Contractor, James P. Dawson, Fay Bldg., L. A., \$14,758; and Welch & Wright, El Centro, \$17,750. O. F. Peterson, El Centro, plumbing on both buildings. Heating and ventilating still undecided.

VENTURA, VENTURA CO., CAL.—School buildings, 3, 1 story, frame, \$43,333. Architect, State Architect George B. McDougal, Sacramento. Owners, State of California. Contractors, The Kling Co., 15th street, L. A. Contract price, \$43,333.

WOODLAKE, TULARE CO., CAL.—School, 2 story and base, reinforced concrete, \$29,780. Architect, O. L. Clark, Brower Bldg., Bakersfield. Owners, Woodlake School District. Contractors, Philbrook & Colvin, Turlock. Contract price, \$29,780.

SEWERS, STREET WORK & WATER SYSTEMS

ANTIOCH, CONTRA COSTA CO., CAL.—Street paving. Cost as follows. Engineer, City Engineer, Antioch. Owners, City of Antioch. The following bids were opened by the Trustess for paving the principal streets of Antioch: Ralsch Improvement Co., 1108 Crocker Bldg., S. F., \$15,489.89. McGilvray Construction Co., 1007 7th street, Sacramento, \$15,891.80. City Improvement Co., Whittell Bldg., S. F., \$21,850.00. A contract will be awarded shortly.

RICHMOND, CONTRA COSTA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. At the last meeting of the City Council plans and specifications prepared by City Engineer Chapman were approved for the improvement of 33rd street, and bids were ordered called until November 29th. Further information may be had from the City Engineer.

REDONDO BEACH, LOS ANGELES CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Redondo Beach. Owners, City of Redondo Beach. At the last meeting of the City Trustees the following action was taken relative to public improvements. A resolution adopting specifications for the construction of a wood bridge across Beryl street on Lucia avenue was approved. The City Engineer was instructed to prepare plans and specifications and estimate the cost of building a public comfort station at the north approach to the mu-

nicipal pier. In the matter of the substitution of concrete lamp posts for iron ones on the municipal wharf, after much discussion the special engineer was instructed to arrange for the substitution.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. The City Council has plans under way for the paving of west Mission street from Bath to San Andreas, and out to Modoc road to join with the county paving.

PASCO ROBLES, SAN LUIS OBISPO CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer Pasco Robles. Owners, City of Paso Robles. The City Trustees have ordered bids received for the construction of sewers in certain streets of the city. Bids close November 29th. Further information may be had from the City Clerk at Paso Robles.

BERKELEY, ALAMEDA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be opened on November 30th for constructing concrete culverts 6 feet by 6 inside dimensions in Cordornices Creek across Santa Fe avenue, Masonic avenue and Evelyn avenue; that earth fill be made in said streets south of the northern boundary line of the City of Berkeley to the level of the top of the creek banks, and that macadam be placed on top of the fill in Evelyn avenue to a width of 16 feet.

SAN LEANDRO, ALAMEDA CO., CAL.—Street extension. Cost not stated. Engineer, City Engineer Goodwin, San Leandro. Owners, City of San Leandro. At the last meeting of the Town Board City Engineer Robert L. Goodwin was asked to furnish plans and specifications for the improvement of Sybil avenue, which will be extended through to the Foothill Boulevard. Further mention will be made of this work when the plans are complete.

REDWOOD CITY, SAN MATEO CO., CAL.—Street pavement. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The County Surveyor was instructed at a recent meeting of the County Supervisors to prepare plans and specifications for a 16-foot 5-inch macadam road with the necessary screenings on the Holy Cross fill from Cypress Lawn to the gate at Holy Cross. Further information will be made of this work when the plans are completed.

SALEM, ORE.—State highway work. Cost as follows. Engineer, State Highway Commission, Salem. Owners, State of Oregon. The State Highway Commission apportioned the 1916 highway funds as follows: For administration expenses and bridges, \$25,000; Clatsop County, \$20,500; Columbia County, \$26,000; Hood River, \$5,000; Hood River and Wasco, \$45,000; Crook, \$10,000; Washington, \$11,500; Douglas and Josephine, \$20,000; Yamhill, Tillamook, \$2,000; Lane, \$5,000; Polk, \$5,000; Jackson, \$45,000; making a total of \$237,000.

ALAMEDA, ALAMEDA CO., CAL.—Street paving. Cost not stated. Engineer, City Engineer, Alameda. Owners, City of Alameda. Bids are now

being received for the improvement of Central avenue from Fernside to 4th street, thus giving this city a paved boulevard from one end of the city to the other. Bidders are to furnish their own specifications for the work. Further information may be had from the City Clerk at Alameda.

REDWOOD CITY, SAN MATEO CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Redwood City. Owners, Redwood City. The City Trustees at their last meeting instructed the City Engineer to prepare plans and specifications for the construction of a sewer on the county road from James street to Broadway. Further mention will be made of the work when the plans are complete.

SALINAS, MONTEREY CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor Cozzins, Salinas. Owners, Monterey County. At the last meeting of the County Supervisors plans and specifications prepared by County Surveyor Cozzina for grading and macadamizing the Monterey-Castroville road, in Monterey, Allisal and Pajaro road districts, were approved, and bids were ordered called until December 6th at 2 p. m. Plans were also approved for the improving of a portion of the Coast road, near the Oliver ranch house, in Sur road district, and bids were ordered called for December 6th. Plans and specifications together with full information relative to both improvements may be had from the County Surveyor at Salinas.

TURLOCK, STANISLAUS CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Turlock. Owners, City of Turlock. Plans and specifications prepared by the City Engineer for the improvement of Diablo street from the easterly property line of Marshall street to the north property line of East avenue, were adopted at the last meeting of the City Trustees. The specifications provide that the street be oiled, rolled, graded and curbed with granite curbs. Bids on this work will soon be called for.

Contracts Awarded.

SACRAMENTO, CAL.—State highway work. Cost as follows. Engineer, State Highway Commission, Sacramento. Owners, State of California. Contractors, C. H. and A. W. Gorrill, New Call Bldg., S. F., Placer County work, \$47,339.89. George R. Daley, McNeese Bldg., San Diego, Mariposa County work, \$42,748.60.

RIVERSIDE, RIVERSIDE CO., CAL.—Road construction, \$78,296. Engineer, County Surveyor, Riverside. Owners, Riverside County. Contractors, B. R. Davidson Construction Co., Monrovia. Contract price, \$78,296.

SAUSALITO, MARIN CO., CAL.—Street improvement, \$1,856.79. Engineer, City Engineer, Sausalito. Owners, City of Sausalito. Contractors, Construction and Engineering Co., 1047 Folsom street, S. F. Contract price, \$1,859.79.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction, \$6,196.04. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractor, W. S. Gause, Piedmont, Oakland. Contract price, \$6,196.04.

STORES AND OFFICES

SAN FRANCISCO—Stores, 1 story and base, brick and steel, \$10,000. Architect, William Knowles, Hearst Bldg., S. F. Owners, William Ede Estate. Location, south Market east of 9th street, covering an area of 50 by 91 feet. Will contain a large market. Interior finish pine and tile. Tile floor. Patent store fronts. Exterior faced with pressed brick. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Stores, 2 story and base. Class C construction, \$16,000. Architect, Alfred Henry Jacobs, 116 Sutter street, S. F. Owner's name withheld. Location, northwest corner of Sutter and Mason streets. Will contain one large store with a mezzanine floor. Interior finish pine and hardwood with some ornamental plaster. Plate glass fronts. Exterior faced with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO — Stores, 1 story and base, frame, \$3,000. Architect, Theo. W. Lenzen, Humboldt Bank Bldg., S. F. Owner, A. Magrane, 601 Buena Vista avenue, S. F. Location, south Geary west of 16th avenue, covering an area of 50 by 65 feet. Will contain two small stores. Interior finish pine. Patent store fronts. Exterior covered with shiplap and cement plaster. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL. — Stores and offices sub-division, \$40,000. Architects, Eisen & Son, Wilcox Bldg., L. A. Owner, F. W. Blanchard. Location, Broadway between 2nd and 3rd streets. Work will include new interior partitions, interior trim, plastering, electric work, elevator work and plumbing. New store fronts. Plans being prepared.

Contracts Awarded.

OAKLAND, CAL.—Stores, 1 story and base. Class A construction, \$18,000. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners, First Trust and Savings Bank. Contractor, F. A. Muller, Syndicate Bldg., Oakland. Contract price, \$18,000. Contractor taking sub-figures.

DELANO, KERN CO., CAL.—Market, 1 story and base, brick. Cost not stated. Architect, none. Owner, Luther B. Crow. Contractors, Trewitt & Shields, Fresno. Contract price not stated.

THEATRES

Contracts Awarded.

LOS ANGELES, CAL.—Motion picture studio, frame, \$20,000. Architect, none. Owners, National Drama Co. Contractors, W. M. Shumway Co., 6057 Hollywood avenue, L. A. Contract price, \$20,000.

Building Totals for the Month Of October.

Building totals for the month of October, 1915, point to a most satisfactory condition prevailing in building circles, not only in San Francisco and the adjoining territory, but throughout the entire United States. A close comparison is given in the following table, published by the American Con-

tractor of Chicago, of the prosperity of the building business in seventy-six American cities for the month of October.

Concerning the totals as given for San Francisco during October 1914, and 1915, in the following table our readers should bear in mind the fact that during October, 1914, the City and County of San Francisco awarded the contract for the Twin Peaks Tunnel, an enterprise which involved the expenditure of \$3,372,000, or considerably more than one-half of the total of building construction for the month while the Panama-Pacific International Exposition spent \$584,257 during October, 1914, against nothing in the same month of this year. Excepting these two items the grand total for October of 1914 was \$1,985,746 while October, 1915, with no large items of City and County construction, shows a grand total of \$2,261,687.

October is not only the largest of any of the months during 1915, but totals the most of any October since 1908, as is shown by the following table giving the total for the month of October since 1906.

October, 1906	\$6,536,331
October, 1907	4,906,430
October, 1908	3,032,047
October, 1909	2,083,385
October, 1910	1,772,952
October, 1911	1,928,826
October, 1912	1,918,839
October, 1913	777,387
October, 1914	5,942,013
October, 1915	2,261,687

BUILDING OPERATIONS FOR OCTOBER.

Building operations for October made decidedly the best showing for the year to date. Official reports received by the American Contractor, Chicago, from 76 cities show building permits issued for the month to amount to \$64,587,622, as compared with \$49,274,609 for October last year, an increase of 42 per cent. There was a gain of 32 per cent in September and one of 14 per cent in August, the comparative reports for months earlier in the year all showing losses as compared with 1914. The increase last month was so large that it seems to mark a full return to the normal amount of construction work. The improvement is general throughout the country, 54 of the 76 cities showing gains. Among the cities making the more notable increases are the following, together with the percentage of their gains: Akron, 299; Albany, 195; Baltimore, 110; Boston, 100; Cincinnati, 115; Dayton, 762; Harrisburg, 196; Kansas City, 183; Manchester, 188; Minneapolis, 120; Nashville, 120; Oklahoma, 2,027; Omaha, 128; St. Joseph, 146; Sioux City, 180; Spokane, 170; Springfield, Ill., 156; Toledo, 101; Washington, 230; Wichita, 412.

The influence of the splendid showing of the past three months has practically offset the reverses of the first seven months of the year, the total returns for ten months reaching \$566,823,188, as compared with \$574,316,049, for the corresponding months of 1914, a decrease of only one per cent. Following are the details:

	October 1915.	October 1914.
Akron	\$ 1,215,045	\$ 304,815

Alameda	29,918	28,51
Albany	705,365	239,22
Atlanta	257,251	215,98
Baltimore	629,138	299,09
Berkeley	126,150	132,95
Birmingham	136,747	138,37
Boston	2,098,209	1,047,38
Buffalo	556,000	604,00
Cedar Rapids	116,000	245,00
Chattanooga	90,410	77,38
Chicago	12,479,250	6,774,20
Cincinnati	865,575	402,23
Cleveland	3,097,501	2,265,68
Columbus	390,685	649,22
Dallas	243,887	204,15
Dayton	302,225	36,20
Denver	192,450	177,98
Des Moines	221,701	145,08
Detroit	2,611,400	1,491,22
Duluth	217,240	236,63
East Orange	66,770	122,50
Evansville	76,383	99,85
Fort Wayne	259,800	161,40
Grand Rapids	169,576	152,80
Harrisburg	158,400	53,47
Hartford	493,718	360,13
Indianapolis	532,777	338,08
Kansas City	1,512,015	533,70
Lincoln	103,010	53,80
Little Rock	121,969	120,74
Los Angeles	787,389	1,573,22
Louisville	304,040	336,70
Manchester	290,779	97,49
Memphis	165,005	105,80
Milwaukee	747,169	668,13
Minneapolis	2,338,555	1,064,50
Nashville	181,738	82,56
Newark	723,279	707,08
New Haven	280,120	231,31
New Orleans	65,590	286,37
New York City	11,006,328	9,242,64
Manhattan	3,070,466	4,023,13
Bronx	2,304,664	1,292,08
Brooklyn	3,670,682	2,719,32
Borough of—		
Queens	1,776,826	1,076,19
Richmond	218,650	131,89
Oakland	467,329	423,35
Oklahoma	424,925	19,75
Omaha	500,225	157,67
Paterson	90,496	50,83
Peoria	109,700	165,60
Philadelphia	2,980,665	2,466,91
Pittsburgh	1,274,960	1,085,38
Portland	351,030	508,70
Richmond	181,203	122,62
Rochester	784,960	401,12
St. Joseph	61,818	25,10
St. Louis	1,214,618	1,115,87
St. Paul	739,308	1,000,10
Salt Lake City	167,655	107,60
San Antonio	1,110,380	82,00
San Francisco	2,261,687	5,942,91
Schenectady	62,061	98,23
Scranton	121,740	300,83
Seattle	550,765	610,60
Shreveport	75,124	75,98
Sioux City	147,950	52,95
South Bend	38,235	25,13
Spokane	162,023	60,50
Springfield, Ill.	162,600	63,52
Syracuse	392,240	293,08
Tacoma	70,205	46,53
Toledo	815,552	404,97
Topeka	55,759	50,55
Troy	65,059	64,17
Utica, N. Y.	283,880	279,92
Washington	1,344,999	407,41
Wichita	41,440	8,100
Wilkes-Barre	40,253	58,17
Worcester	370,142	590,80
Total	\$64,587,622	\$49,274,609

OFFICIAL PROPOSALS.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 991—Proposals for Steel Shapes, Plates and Bars, Steel and Iron Chain, Steel and Iron Pipe, Pipe Fittings, Valves, Sink Pumps, Cocks, Ejectors, Lathes, Copper Tubing, Manila Rope, Mop Heads, Flax Swabs, Rubber Bands, Manila Paper, Wagon Tires and Spokes and Lumber.

Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. December 1, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 991) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Five Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. January 4, 1916, and then there will be opened, for a power house and an operating building of reinforced concrete and steel construction and three quarters of wood construction for commanding officer, married operators and bachelor operators at the naval station, Cavite, P. I. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. Proposals will also be received at the naval station, Cavite, P. I., until 4:30 o'clock p. m. January 4, 1916, and opened at 10 o'clock a. m. January 5, 1916. H. R. STANFORD, chief of bureau.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC Works of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 8th day of December, 1915, for doing the following work:—Furnishing and installing Directories and Bulletin Boards in the City Hall.

Progressive payments will be made. Said work must be done in accordance with the specifications on file in the office of the Board of Public Works, to which reference is hereby made, and must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works and completed within sixty (60) calendar days thereafter.

The amount of bond for faithful performance of contract has been fixed at \$500.00.

All proposals offered must be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the aggregate of the proposal.

Printed proposal forms will be furnished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works. F. J. CHURCHILL, Secretary.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC Works of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 1st day of December, 1915, for doing the following work:

The General Construction of the Redding Grammar School building, to be located at the southwesterly corner of Pine and Larkin streets.

Progressive payments will be made.

Said work must be done in accordance with the specifications on file in the office of the Board of Public Works, to which reference is hereby made,

and must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works, and completed within two hundred and seventy (270) calendar days thereafter.

The amount of bond for faithful performance of contract has been fixed as follows:

Proposition No. 1.....\$16,250.00
Proposition No. 2.....13,750.00

All proposals offered must be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the aggregate of the proposal.

Printed proposal forms will be furnished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works. F. J. CHURCHILL, Secretary.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC Works of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 1st day of December, 1915, for doing the following work:

The Brick and Terra Cotta Work of the Redding Grammar School building, to be located on the southwesterly corner of Pine and Larkin streets.

Progressive payments will be made.

Said work must be done in accordance with the specifications on file in the office of the Board of Public Works, to which reference is hereby made,

and must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works, and completed within one hundred and eighty (180) calendar days thereafter.

The amount of bond for faithful performance of contract has been fixed as follows:

Proposition No. 1.....\$5,000.00
Proposition No. 2.....4,000.00

All proposals offered must be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the aggregate of the proposal.

Printed proposal forms will be furnished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works. F. J. CHURCHILL, Secretary.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC Works of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 1st day of December, 1915, for doing the following work:

1915, for doing the following work:—The Plumbing Work of the Redding Grammar School building, to be located at the southwesterly corner of Pine and Larkin streets.

Progressive payments will be made. Said work must be done in accordance with the specifications on file in the office of the Board of Public Works, to which reference is hereby made, and must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works and completed within two hundred and seventy (270) calendar days thereafter.

The amount of bond for faithful performance of contract has been fixed as follows:

Proposition No. 1.....\$1,500.00
Proposition No. 2.....1,250.00

All proposals offered must be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the aggregate of the proposal.

Printed proposal forms will be furnished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works. F. J. CHURCHILL, Secretary.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC Works of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 1st day of December, 1915, for doing the following work:

The installation of a heating and ventilating system in the Redding Grammar School, to be located at the southwesterly corner of Pine and Larkin streets.

Progressive payments will be made.

Said work must be done in accordance with the specifications on file in the office of the Board of Public Works, to which reference is hereby made,

and must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works, and completed within two hundred and seventy (270) calendar days thereafter.

The amount of bond for faithful performance of contract has been fixed as follows:

Proposition No. 1.....\$1,000.00
Proposition No. 2.....750.00

All proposals offered must be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the aggregate of the proposal.

Printed proposal forms will be furnished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works. F. J. CHURCHILL, Secretary.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC Works of the City and County of San Francisco.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 1st day of December, 1915, for doing the following work:

The Electric Work of the Redding Grammar School building, to be located

at the southwesterly corner of Pine and Larkin streets.

Progressive payments will be made. Said work must be done in accordance with the specifications on file in the office of the Board of Public Works, to which reference is hereby made, and must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works and completed within two hundred and seventy (270) calendar days thereafter.

The amount of bond for faithful performance of contract has been fixed as follows:

Proposition No. 1.....\$25.00
Proposition No. 2.....500.00

All proposals offered must be accompanied by a check certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the aggregate of the proposal.

Printed proposals from will be furnished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works, F. J. CHURCHILL, Secretary.

NOTICE TO STEEL ROLLING DOOR MANUFACTURERS.

OFFICE OF THE BOARD OF STATE Harbor Commissioners, Union Depot and Ferry House, San Francisco, California.

Sealed proposals or bids will be received at this office at or prior to **11 o'clock a. m., on Friday, November 26, 1915**, for furnishing and installing steel rolling doors on the shed on Pier No. 35, on the water front of the City and County of San Francisco, in accordance with the plans and specifications prepared for these doors by the Chief Engineer and adopted by the Board August 9, 1915, and on file in this office, to which special reference is hereby made.

No bid will be received unless it is made on a blank form furnished from this office. Each bid shall be accompanied by a certified check for an amount equal to Five (5) per cent of the amount of the proposal, to be made payable to the order of the Secretary of the Board, conditioned that if the proposal is accepted and the contract awarded, and if the bidder shall fail or neglect to execute the contract and give the bond required within six days after the award is made, in that case said sum mentioned in said check shall be deemed liquidated damages for such failure and neglect and shall be paid into the San Francisco Harbor Improvement Fund.

The bond required to be not less than one-half of the amount of the bid, with two or more sureties to be approved by the Board of State Harbor Commissioners, and conditioned for the faithful performance by the contractor of all the terms and conditions of said contract according to the true intent and meaning thereof, and the satisfaction of said Board; and said bond shall shall be effective as provided in an act approved May 1 1911, for the protection of material men, mechanics and laborers.

Bids will not be considered by this Board unless delivered to the Secretary or to the Assistant Secretary at the office of the Secretary, Room 17, Ferry Building, at or prior to **11 o'clock a. m., on Friday, November 26, 1915**, at which time and place the bids will be opened.

The Board reserves the right to reject any or all bids if deemed for the best interest of the State.

Bidders are invited to be present at the opening of the bids.

Plans and specifications of this work to be had at Room 18, Ferry Building, upon depositing \$20.00 for same, which will be returned on return of plans and specifications.

Bidders are requested to mark envelope containing bid: "Bid for Steel Rolling Doors."

J. J. DWYER,
THOMAS S. WILLIAMS,
J. H. McCALLUM,

Board of State Harbor Commissioners.

JEROME NEWMAN,
Chief Engineer.
LEO V. MERLE, JR.,
Secretary.

FOR CEMENT, SAND AND CRUSHED ROCK.

U. S. Engineer Office, 723 Central Building, Los Angeles, Cal., November 10, 1915.—Sealed proposals for furnishing American Portland cement, sand and crushed rock at San Francisco, Cal. will be received at this office until **11 A. M., December 10, 1915**, and then opened. Information on application. R. R. RAYMOND, Major, Engineers.

PROPOSALS FOR BUILDING.

BUILDING.—Sealed proposals indorsed "Proposals for Three Buildings" will be received at the naval station, Pearl Harbor, Hawaii, and at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m., December 4, 1915**, and then and there publicly opened, for constructing one reinforced concrete power house, one reinforced concrete operating building and one wooden double quarters for chief operator at the naval station, Pearl Harbor, Hawaii. Plans and specifications can be obtained on application to the bureau or to the commandant of the station named, H. R. STANFORD, chief of bureau.

PROPOSALS FOR BUILDING.

BUILDING.—Sealed proposals indorsed "Proposals for Five Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until **11 o'clock a. m., January 4, 1916**, and then and there publicly opened, for a power house and an operating building of reinforced concrete and steel construction and three quarters of wood construction for commanding officer, married operators and bachelor operators at the naval station, Cavite, P. I. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. Proposals will be received at the naval station, Cavite, P. I., until **4:30 o'clock p. m., January 4, 1916**, and opened **9 o'clock a. m., January 5, 1916**. H. R. STANFORD, chief of bureau.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 990.—Proposals for Iron Castings, Wrought Iron or Steel Pipe, Mule Shoes, Horseshoe Nails, Screws, Cotters, Tracks, Turnbuckles, Bronze Bars, Brass Chain, Shovels, Manue Forks, Mop Handles, Roof Brushes, Paint Brushes, Saws, Glass, Scythe Stones, Steel Tapes, Rules, Plumbbobs, Galvanized Hose Couplings, Door Bolts, Locks, Hinges, Door Hooks, Furniture Casters, Hose Packing, Asbestos Gaskets, Sash Cord, Chain Line, Twine, Tarpaulins, Sheetmetal, Bunting, Railway Flags, Cheesecloth, Oilcloth, Linoleum, Emery Cloth, Sandpaper, Leather Belting, Belt Lacing, Ship's Felt, Cork, Boiler Lagging, Crayons, Metal Polish, Beeswax, Candles, Petasessum Chlorate, Borax, Lye, Paper and White Oil. Lumber. Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m., November 26, 1915**, at which time they will be opened in public for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 290) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. Engineer, Crayons, in the following cities: Seattle, Wash.; Los Angeles, Cal.; F. C. BOGGS, major, corps of engineers, U. S. Army, general purchasing agent.

NOTICE TO CONTRACTORS.

OFFICE OF THE BOARD OF STATE Harbor Commissioners, Union Depot and Ferry House, San Francisco, California.

Sealed proposals or bids will be received at this office at or prior to **11 o'clock a. m., on Friday, November 26, 1915**, for furnishing material and constructing wood block pavement on Pier No. 35, on the waterfront of the City and County of San Francisco, in accordance with the plans and specifications prepared therefor by the Chief Engineer and adopted by the Board May 21, 1914, and file in this office, to which special reference is hereby made. The materials to be used in this work shall consist of the requisite quantities of wood paving blocks, sand and asphalt, all materials will be subjected to a rigid examination and test, and if found defective, undersized, unsuitable or not as specified, will be condemned and must be immediately removed from the work by the contractor at his expense.

No bid will be received unless it is made on a blank form furnished from this office. Each bid shall be accompanied by a certified check for an amount equal to Five (5) per cent of the amount of the proposal, to be made payable to the order of the Secretary of the Board, conditioned that if the proposal is accepted and the contract awarded, and if the bidder shall fail or neglect to execute the contract and give the bond required within six days after the award is made, in that case said sum mentioned in said check shall be deemed liquidated damages for such failure and neglect and shall be paid into the San Francisco Harbor Improvement Fund.

The bond required to be not less than one-half of the amount of the bid, with two or more sureties to be approved by the Board of State Harbor Commissioners, and conditioned for the faithful performance by the contractor of all the terms and conditions of said contract according to the true intent and meaning thereof and to the satisfaction of said Board; and said bond shall be effective as provided in an act approved May 1 1911, for the protection of material men, mechanics and laborers.

Bids will not be considered by this Board unless delivered to the Secretary or to the Assistant Secretary at the office of the Secretary, Room 17, Ferry Building, at or prior to **11 o'clock a. m., on Friday, November 26, 1915**, at which time and place the bids will be opened.

The Board reserves the right to reject any or all bids if deemed for the best interest of the State.

Bidders are invited to be present at the opening of the bids.

Plans and specifications of this work to be had at Room 15, Ferry Building, upon depositing \$20.00 for same, which will be returned on return of plans and specifications.

Bidders are requested to mark envelope containing bid: "Bid for Wood Block Pavement Pier No. 35."

J. J. DWYER,
THOMAS S. WILLIAMS,
J. H. McCALLUM,

Board of State Harbor Commissioners.
JEROME NEWMAN,
Chief Engineer.
LEO V. MERLE, JR.,
Secretary.

NOTICE TO CONTRACTORS.

PHILIPPINE BUILDING FOR SALE.

SEALED BIDS for the purchase of the Philippine Building and its fixtures pertaining thereto on the Grounds of the Panama-Pacific International Exposition will be received from **11 A. M., November 26, 1915**.

Said building contains the following material from the Philippine Islands: approximately 40,000 board feet of hardwoods, 42 palma brava columns, 4,000 square yards sauali and 281 windows and transoms of shell work.

Full details relative to the building and fixtures may be obtained from the Secretary of the Philippine Board at his office in the Philippine Building be-

between the hours of 8 A. M. and 5 P. M.
All bids should be securely sealed and accompanied by a certified check for 10% of the amount of the bid. The envelope should be marked "Bid for purchase of Philippine Building" and should be addressed to The Director-General, Philippine Board, Panama-Pacific International Exposition. The right is reserved to reject any or all bids.

W. W. BARCLAY,
Director-General,
Philippine Board P. I. E. (*)

BIDS WANTED FOR CONSTRUCTING WIRE FENCE.

OFFICE CONSTRUCTING QUARTERMASTER, Fort Mason, Cal.—SEALED PROPOSALS for constructing wire fence at Fort Barry, Cal., will be received here until 11 A. M., November 26, 1915, and then opened. Further information on application. (*)

PROPOSAL FOR BIDS.

BIDS are requested for the structural steel and steel erection (combined) for the University Library, University of California, Berkeley, Cal.

SEALED BIDS will be received at the Office of the Comptroller, University of California, Berkeley, Cal., at or before 9 A. M., Wednesday, December 2, 1915. A deposit of \$50.00 will be required for each set of plans and specifications taken out, which deposit will be refunded upon return of said plans and specifications, accompanied by a check for the same. No bids will be received unless accompanied by a certified check or bond in favor of the undersigned, equal to 10% of the bid, to secure execution of the contract by the successful bidder. The right is reserved to reject any or all bids.
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA. (*)

WEST VIRGINIA BUILDING.

PROPOSALS FOR THE SALE, WRECKING AND REMOVAL OF THE WEST VIRGINIA STATE BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION, AND FOR THE SALE OF FURNITURE, ETC.

SEALED PROPOSALS for the sale, wrecking and complete removal of the West Virginia State Building at the Panama-Pacific International Exposition at San Francisco, California, are asked by the West Virginia Commission.

TWO PROPOSALS are desired, one to be for the sale, wrecking and complete removal of the building and fixtures, and clearing lot to official grade; and the other for the sale, wrecking and complete removal of the building without fixtures, and clearing lot to official grade.

ALSO, PROPOSALS are desired for the sale of all furniture and hangings contained in the West Virginia Building. The furnishings include eight bed-room suites and a large equipment of reed furniture. Hangings, carpets, etc., are of best quality and as good as new.

Proposals on the above shall be separate and all proposals shall be securely sealed, accompanied by a certified check for ten per cent (10%) of the amount of the proposal, and mailed as follows: "To G. A. Bolden, Resident Secretary, West Virginia Commission, West Virginia Building, Exposition Grounds, San Francisco, California."
Building and furnishings may be inspected at any time between the hours of 11 A. M. and 4 P. M., Sundays excepted.

Proposals will be received up to and including noon of Thursday, November 18th, 1915. The West Virginia Commission reserves right to reject any or all bids.

WEST VIRGINIA COMMISSION,
By G. A. BOLDEN,
Resident Secretary. (*)

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock P. M., on December 6, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:

Imperial County, from Dixieland to El Centro (VII-Im-12 C) about 12 miles in length, to be paved with Portland cement concrete.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers' offices are located at Willits, Dunsuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
AUSTIN B. FLETCHER,
Highway Engineer.

WILSON R. ELLIS,
Secretary. (*)
Dated: November 9, 1915.

PROPOSALS FOR THE SALE, WRECKING AND REMOVAL OF THE FRENCH BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED PROPOSALS for the sale, wrecking and complete removal of the French Building at the Panama-Pacific International Exposition at San Francisco, California, are asked by the French Commission.

PROPOSALS are desired for the sale, wrecking and complete removal of the building and clearing lot to official grade.

Proposals shall be securely sealed, accompanied by a certified check for ten per cent (10%) of the amount of the proposal, and mailed as follows: "P. J. Gregoire, Secretary, French Commission, French Building, Exposition Grounds, San Francisco, California."

Building may be inspected at any time between the hours of 11 A. M. and 4 P. M., Sundays excepted.

Proposals will be received up to and including noon of Friday, November 26th, 1915. The French Commission reserves right to reject any or all bids.

FRENCH COMMISSION,
P. J. GREGOIRE,
Secretary. (*)

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock P. M., on Nov. 29, 1915, at which

George Nelson, C. E.

Engineering	560 Mission St.
Financing	San Francisco, Cal.
Developments	503 Grant Bldg.
Construction	Los Angeles, Cal.

Chester B. Loomis, M. E.

CONSULTING ENGINEER

Power and Pumping Plants
Cost Studies, - Design.
Installation, - Testing
Reports.

419 Wilcox Building
Los Angeles, California

time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:

Yolo County, near the easterly side of the Yolo By-pass (III-Yol-6-B), a plate girder bascule 80-foot clear span with reinforced concrete approaches. Total length about 141 feet.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the offices of the Division Engineers at Los Angeles and San Francisco, and at the division in which the work is situated. The Division Engineers' offices are located at Willits, Dunsuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
AUSTIN B. FLETCHER,
Highway Engineer.

WILSON R. ELLIS,
Secretary. (*)
Dated: Nov. 1, 1915.

NOTICE TO HOUSE MOVERS.

FOR SALE for immediate removal two frame buildings, No. 29 and No. 71 Bartlett Street, bet. 21st and 22nd Sts. Address: Reid Bros., 104 Montgomery St., San Francisco. (*)

PROPOSALS FOR BUILDING.

BUILDING — Sealed proposals indorsed "Proposals for Three Buildings" will be received at the naval station, Pearl Harbor, Hawaii, and at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. November 27, 1915, and then publicly opened, for constructing one reinforced concrete power house, one reinforced concrete operating

building and one wooden double quarters for chief operators at the naval station, Pearl Harbor. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McCLURE, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, noon, Tuesday, December 14th, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of the "Alterations and Additions to Dairy Building," California School for Deaf and Blind, Berkeley, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McCLURE, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for the 'Alterations and Additions to Dairy Building,' California School for Deaf and Blind, Berkeley, California."

(SIGNED) W. F. McCLURE,
State Engineer. (*)

NOTICE TO CONTRACTORS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., November 16, 1915. SEALED PROPOSALS will be opened in this office at 3 P. M., December 22, 1915, for the construction complete (including mechanical equipment and approaches of the United States post office at Aurora, Nebr. Drawings and specifications may be obtained from the custodian of site at Aurora, Nebr., or at this office, in the discretion of the Supervising Architect, JAS. A. WETMORE, Acting Supervising Architect.

NOTICE TO CONTRACTORS.

PROPOSALS are wanted at once for the construction of a system of canals, laterals, and deep drains, in Glenn County, California. For information and plans see WASHINGTON DODGE, 1 Sansone St., San Francisco, Cal. (*)

PROPOSALS FOR THE SALE, WRECKING AND REMOVAL OF THE OREGON STATE BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

Subject to the acceptance as a gift of the Oregon Building by the authorities representing the Federal Government, as proposed by the Commission of the State of Oregon, said Commission will receive at their office in the Oregon Building at the Exposition Grounds on 27th day of November, sealed bids for the purchase of the Oregon Building, without furnishings, furniture or fixtures. Certified check for ten per cent of the amount must accompany bids. The purchaser will be required to remove the building in accordance with the requirements of the Exposition authorities within the time limit imposed by them and to furnish a satisfactory bond for the faithful performance of such undertaking. The Commission reserves the right to reject any and all bids.

Address proposals to the Oregon Commission, Oregon Building at Exposition Grounds and mark them "Proposal to purchase building."

C. L. HAWLEY,
Commissioner in Charge. (*)

NOTICE.

PROPOSALS for the purchase of the Missouri State Building at the Panama-Pacific International Exposition, exclusive of the furnishings and fixtures, except plumbing, will be received until ten o'clock A. M., November 30, 1915. The right to reject any of his bids is reserved. Address W. D. SMITH, Missouri Building, Exposition Grounds. (*)

NOTICE TO HOUSE-WRECKERS.

PROPOSAL FOR THE SALE AND REMOVAL OF THE LUMBERMEN'S BUILDING AND HOUSE OF HOO-HOO AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED PROPOSALS for the sale and complete removal of The Lumbermen's Building and House of Hoo-Hoo, South Horticultural Gardens, Panama-Pacific International Exposition, San Francisco, Cal., are asked by the Board of Governors.

Proposals to be for the complete removal of Building from premises and grading of lot clear to level of curb, prior to March 15th, 1916. Proposal will be exclusive of small room at rear which is simply a lean-to and all radiators, furniture and draperies; but will include main building, plate glass in window openings, toilets, lavatories, pipe, both sanitary and water, chandeliers, lighting fixtures, flowers, plants and plants and logs and flower boxes in colonnade and pergolas and the pylons.

All proposals shall be securely sealed, accompanied by certified check for 10% of the amount of proposal and mailed as follows: "To A. B. Wastell, Executive Secretary, The Lumbermen's Building and House of Hoo-Hoo, 1111 Hobart Building, San Francisco, Cal." Proposals will be received up to and including noon of Saturday, November 26th, 1915.

The Board of Governors reserves the right to reject any or all bids and the proposals will be forfeited if balance of the amount of accepted bid is not paid in to this Board by December 5th, 1915.

For further particulars apply to undersigned at 1111 Hobart Building.
FOR THE BOARD OF GOVERNORS,
A. B. WASTELL,
Executive Secretary. (*)

SPECIAL AGENT HAS BUSY DAYS IN TOUR OF COUNTRY.

WASHINGTON, D. C., Nov. 17, 1915.—Great interest has been shown by American manufacturers in the action of the Bureau of Foreign and Domestic Commerce, Department of Commerce, in sending out an export trade adviser on a tour of cities in various parts of the country, and the resulting large demands upon the time of this adviser, Special Agent Stanley H. Rose, have brought very busy days to him in every place that he has visited.

Mr. Rose has been in Ohio this week, and his three days' schedule at Springfield was made up of conferences with business men and representatives of manufacturing plants, held at the rooms of the Commercial Club, and addresses before several organizations, some of which called for active work until late in the evening, following days in which there were very few spare moments.

On the first day of his visit to Springfield, Mr. Rose held conferences beginning at 10 A. M., with representatives of power machinery manufacturers, at 1:30 P. M., with makers of machine tools and specialties, and at

1:30 with makers of miscellaneous lines of goods. At 12:15 P. M., he addressed the Rotary Club on "Ethics of Foreign Trade," and at 7:30 in the evening spoke before the Commercial Club on "Government Aid in Increasing Springfield's Foreign Trade," illustrating the latter address with stereopticon slides emphasizing the superiority of American-made goods in foreign countries.

On the second day, the conference hours with manufacturers were repeated, morning and afternoon, with special attention given to agricultural implements, automobile accessories and specialties, and miscellaneous goods. In the evening, Mr. Rose addressed the Spanish classes of the high school and Wittenberg College, explaining why Spanish should be studied, and giving valuable information about opportunities open for students of Spanish.

The conferences of the third day, held morning and afternoon, were on grinding and separating machinery, and household necessities, concluding a period during which the foreign markets for the products of Ohio industrial plants were very widely discussed. The representative of the Bureau of Foreign and Domestic Commerce, in his reports to Washington, pays a tribute to the energy and efficiency of the Springfield Commercial Club, which contributed very much to the success of his visit.

From Springfield Mr. Rose went to Columbus, and will proceed to Lincoln, and Omaha, Neb., Des Moines, Davenport, and Burlington, Iowa, St. Louis, Mo., Louisville, Ky., Cincinnati, and Marietta, Ohio, Johnstown, and Reading, Pa., and the New York office of the Bureau, closing that portion of his tour on December 24. Early in 1916, he will start out on a tour of the centers he has not yet been able to reach.

In the earlier portion of his present tour, he visited Baltimore, New York City, Albany, Buffalo, Rochester, Fairmont, W. Va., Indianapolis, Chicago, Kalamazoo, Grand Rapids, Detroit, and Toledo.

Appointment of Chinese commercial attaches to Great Britain, Japan, Russia, France, Germany, Belgium, and the United States is being considered at Peking.

NEW PACIFIC SERVICE TO START NEXT MONTH.

[Extract from Japan Chronicle, Oct. 1, forwarded by Consul General George H. Seidmore, Yokohama.]

The Java-China-Japan Line will establish a regular service once a month between Batavia, Samarang, Soerabaya, Macassar, Manila, Hongkong, Kobe, Yokohama, and San Francisco. According to the Asahi (Osaka), the necessary arrangements for connection with the Southern Pacific Railway have been made, and the first steamer on the new service will leave Batavia December 15.

The Municipal Bond Market is looking up, and the Bond Buyers are looking the "Building and Engineering News" up. A proposal ad for your bonds in our columns will bring competition.

ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

APARTMENT HOUSE—3 story and base, frame, \$28,000. San Francisco. Architects, Welsh & Carey, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location, 24th and Church streets. Will contain stores on the first floor besides the entrance. Upper floors arranged for two, three and four room apartments. Interior finish pine and elm panels with some hardwood floors. Steam heat and hot water supply. Wall beds. Bath rooms tile and composition floors. Exterior covered with cement plaster. Plans being prepared.

APARTMENT HOUSE—2 story and base, frame, \$8,500. San Francisco. Architect, E. R. Christensen, Lick Bldg., S. F. Owner's name withheld. Location, 26th avenue, Richmond District. Will contain four suites of three rooms and bath. Interior finish pine with hardwood floors. central heating system and hot water supply. Wall beds and tile baths. Exterior covered with cement plaster and brick veneer. Plans being prepared.

APARTMENT HOUSE—3 story and base, brick and steel, \$30,000. San Francisco. Architect, W. G. Hind, 46 Eddy street, S. F. Owner, Clyde S. Payne. Location, south Bush west of Hyde. Will contain three and four room suites. Interior finish pine and hardwood with some hardwood floors. Steam heat, automatic elevator and hot water supply. Bath rooms finished in tile. Wall beds. Exterior faced with pressed brick and cement plaster. Plans complete and segregated contracts being awarded.

CITY HALL BULLETIN BOARD—Cost not stated. San Francisco. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owners, City and County of San Francisco. Bids will be received by the Board of Public Works up to December 8th for furnishing and installing a bulletin board in the new City Hall. Plans can be secured from the City Department of Architecture, Temporary City Hall.

FIRE HOUSE—2 story and base. Class C construction, \$42,000. San Francisco. Architects, Ward & Blohme, Alaska Commercial Bldg., S. F. Owners, City and County of San Francisco. Working drawings have been completed and turned over to the Fire Commission for approval. The building will be located on the north side of Howard street between Second and Third streets and will be known as Engine House No. 4. Further mention will be made when the bids are called.

PACKING HOUSE—2 story and base, reinforced concrete, \$25,000. San Francisco. Architect, Smith O'Brien, Humboldt Bank Bldg., S. F. Owners, Workman Packing Co. Location, west 7th south of Harrison. Fireproof construction. Will contain offices, packing rooms and shipping department.

Interior finish pine with cement floors. Refrigerating equipment and vacuum cleaning. Steam heat, oil burning plant and hot water supply. Metal window sash and frames. Exterior faced with cement plaster. Plans complete and figures being taken.

FLATS—3, 3 story and base, frame, \$6,000 each. San Francisco. Architect, L. Traverso, 854 Union street, S. F. Owners, L. Cavignaro & Co. Location, west Taylor south of Lombard. Each will contain three flats of five and six rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile mantels. Tile bath rooms. Marble and tile entrance. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FLATS AND SHOP—2 story and base, frame, \$7,000. San Francisco. Architect, none. Owner, William Helbing. Location, north Fulton west of Franklin, covering an area of 38 by 120 feet. First floor arranged for automobile paint shop and upper floor for two flats. Interior finish pine. Some hardwood floors. Open fire places and tile mantels. Exterior covered with ship-lap and cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$4,000. San Francisco. Architect, none. Owner, Oscar H. Curtaz, 1420 Market street, S. F. Location, north Fulton west of Franklin, covering an area of 28 by 120 feet. Will contain two six-room flats. Interior finish pine and elm panels. Hardwood floors, open fire places and tile or brick mantels. Tile bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owners, Oscar Heyman & Bro., 742 Market street, S. F. Location, east 45th avenue north of Balboa. Will contain five rooms and bath. Interior finish pine and elm panels. Hardwood floors, open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, A. R. Lapham, 511 12th avenue, S. F. Location, east 12th avenue north of Cabrillo. Will contain six rooms, bath and sleeping porch. Interior finish pine and elm panels with some hardwood floors. Open fire place and tile or brick mantel. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—4, 1 story and base, frame, \$2,000 each. San Francisco.

Architect, E. R. Christensen, Lick Bldg., S. F. Owner's name withheld. Location, Sunnyside District. Each house will contain five rooms and bath. Interior finish pine throughout. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic and shingles. Plans complete and figures being taken.

APARTMENT HOUSE—6 story and base, steel and brick, \$85,000. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Gerard Investment Co. Location, southeast corner of Geary and Leavenworth streets, covering an area of 44 by 88 feet. Will contain 40 apartments of three and four rooms. Interior finish pine, hardwood and white enamel. Hardwood and tile floors, marble wainscot and ornamental plaster. Steam heat, elevator service, oil burning plant, vacuum cleaning and hot water supply. Bath rooms tile. Wall beds. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and work by Day Labor.

GARAGE—2 story and base. Class A construction, \$35,000. San Francisco. Architect, August G. Headman, New Call Bldg., S. F. Owner, J. K. Bigelow. Location, north Bush between Powell and Mason streets, covering an area of 87½ by 137½ feet. Construction fireproof construction. Concrete floors. Two inclines. Metal window sash and frames. Special tanks. Exterior faced with cement plaster. Plans complete and figures being taken.

HOSPITAL WINGS—3 story. Class A construction. Cost as follows. San Francisco. Architects, names given below. Owners, City and County of San Francisco. The Board of Public Works has requested the Supervisors to provide funds for the construction of both the southeast and northeast wings of the San Francisco Hospital. Architect Hermann Barth, 12 Geary street, has plans for the southeast wing complete and the same have been officially approved. The sum of \$56,250 is asked by the Board of Public Works to start this construction. Architect John Reid, Jr., First National Bank Bldg., has plans complete for the northeast wing and the Board of Public Works has requested the sum of \$40,500 to start this construction. Both buildings will be of the Class A type, with steel frames and brick exterior walls, hollow tile interior partitions and concrete floors. Bids will be called for shortly.

SCHOOL—1 and 3 story and base, Class A construction, \$125,000. San Francisco. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, City and County of San Francisco. Bids will be received by the Board of Public Works until December 1st for the general construction, brick and terra cotta work,

plumbing, electric work and heating and ventilating work for the Redding School to be erected at the southwest corner of Pine and Larkin streets. Plans can be secured from the City Department of Architecture. Official proposals appear in another column of this issue.

STORES—1 story and base, brick and steel, \$10,000. San Francisco. Architect, William Knowles, Hearst Bldg., S. F. Owners, William Ede Estate. Location, south Market east of 9th street, covering an area of 50 by 91 feet. Will contain a large market. Interior finish pine and tile. Tile floor. Patent store fronts. Exterior faced with pressed brick. Plans complete and work to be done by Day Labor.

STORES—2 story and base. Class C construction, \$16,000. San Francisco. Architect, Alfred Henry Jacobs, 110 Sutter street, S. F. Owner's name withheld. Location, northwest corner of Sutter and Mason streets. Will contain one large store with a mezzanine floor. Interior finish pine and hardwood with some ornamental plaster. Plate glass fronts. Exterior faced with cement plaster. Plans complete and figures being taken.

STORES—1 story and base, frame, \$3,000. San Francisco. Architect, Theo. W. L. nzen, Humboldt Bank Bldg., S. F. Owner, A. Magrane, 601 Buena Vista avenue, S. F. Location, south Geary west of 16th avenue, covering an area of 50 by 65 feet. Will contain two small stores. Interior finish pine. Patent store fronts. Exterior covered with shiplap and cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—4 story and base, brick and frame. Cost not stated. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner, Floyd C. Curry. Contractors, Higgins Co., Humboldt Bank Bldg., S. F. Contract price not stated.

OAKLAND AND ALAMEDA COUNTY

STREET IMPROVEMENT—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be received up to November 30th for constructing concrete culverts, 6 feet by 6 inside dimensions in Cordornies Creek across Santa Fe avenue, Masonic avenue and Evelyn avenue; that earth fill be made in said streets south of the northern boundary line of the city of Berkeley to the level of the top of the creek banks, and that macadam be placed on top of the fill in Evelyn avenue to a width of 16 feet.

STREET EXTENSION—Cost not stated. San Leandro, Alameda Co., Cal. Engineer, City Engineer Goodwin, San Leandro. Owners, City of San Leandro. At the last meeting of the Town Board City Engineer Robert L. Goodwin was asked to furnish plans and specifications for the improvement of Sybil avenue, which will be extended through to the Foothill Boulevard. Further mention will be made of this work when the plans are complete.

APARTMENT HOUSE—2 story and base, frame, \$25,000. Berkeley, Alameda Co., Cal. Architects, Wright & Rushforth, 354 California street, S. F. Owner, H. A. Mattern. Location, east

Hilegass south Stuart. Will contain 32 rooms arranged in two and three room suites. Interior finish pine and hardwood with some white enamel and hardwood floors. Steam heat and a hot water system. Wall beds. Bath rooms finished in tile. Marble and tile entrance. Exterior faced with cement plaster. Plans complete and figures being taken.

RESIDENCE—2 story and base, frame, \$5,000. Berkeley, Alameda Co., Cal. Architect, Harris Allen, Central Bank Bldg., Oakland. Owner, R. L. Underhill. Location, Tamalpais near Rose. Will contain nine rooms, bath and sleeping porch. Interior finish pine, elm panels and white enamel. Hardwood floors and open fire place. Tile or brick mantel. Imitation tile in bath room. Automatic water heater. Exterior covered with shakes. Plans being prepared.

RESIDENCE—2 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, George W. Nunes, 5430 Dover street, Oakland. Location, north Chabot Road east of Claremont. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Imitation tile bath. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1½ story and base, frame, \$3,000. Piedmont, Alameda Co., Cal. Architect, C. Walde, 1723 Telegraph avenue, Oakland. Owner, W. F. Neary. Location, west York Drive north of Holly Place. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwoods and white enamel. Hardwood floors. Open fire places and tile mantels. Furnace heat. Automatic water heater. Bath room finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Alameda, Alameda Co., Cal. Architect, none. Owner, Conrad Roth, 2117 Pacific avenue, Alameda. Location, corner of Schiller and Buena Vista avenues. Will contain five rooms bath and sleeping porch. Interior finish pine and white enamel. Some hardwood floors. Open fire places and tile mantels. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Alameda, Alameda Co., Cal. Architect, none. Owner, F. P. Montague, 2911 East 16th street, Oakland. Location, 1032 Central avenue. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$3,000. Berkeley, Alameda Co., Cal. Architect, none. Owner, Charles M. Johnson, 2317 Carlton street, Berkeley. Location, west Benvenue south of Webster. Will contain six rooms, bath and sleeping porch. Interior finish pine, hardwood veneer and white enamel. Hardwood floors, furnace

heat and open fire places. Mantels tile or brick. Bath room tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 1 story and base, frame, \$2,200 each. Berkeley, Alameda Co., Cal. Architects, Hutchinson & McLean, 470 13th street, Oakland. Owner, John D. Garretson, 4119 Manilla avenue, Oakland. Location, south Julia west of California. Each will contain six rooms and bath. Interior finish pine with some elm panels. Hardwood floors and open fire places. Mantels tile and brick. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,000. Berkeley, Alameda Co., Cal. Architect, H. H. Gutterston, 68 Post street, S. F. Owners, Mason-McDuffie Co. Location, south Garber west of Oak Knoll. Will contain 7 rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heaters. Exterior covered with cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$1,500. Oakland, Cal. Architect, M. L. Briggs, 2444 Bowditch, Berkeley. Owner, J. C. O'Connor. Location, east Carlton south of Prospect. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Furnace heat and automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

LIBRARY STRUCTURAL STEEL WORK—Cost not stated. Berkeley, Alameda Co., Cal. Architect, John Galen Howard, 604 Mission street, S. F. Owners, University of California. Plans and specifications have been completed and figures will be received up to 9 a. m. of December 1st for furnishing and erecting the structural steel for the new University Library building. Plans can be secured from the office of the Comptroller at Berkeley. An official proposal appears in another column of this issue.

SCHOOL ADDITION—Frame. Cost not stated. Berkeley, Alameda Co., Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be received until December 14th for the construction of a frame addition to the Dairy building at the California School for the Deaf and Blind. Plans can be secured from the State Department of Engineering. An official proposal appears in another column of this issue.

STREET PAVING—Cost not stated. Alameda, Alameda Co., Cal. Engineer, City Engineer, Alameda. Owners, City of Alameda. Bids are now being received for the improvement of Central avenue from Fernside to Fourth street, thus giving this city a paved boulevard from one end of the city to the other. Bidders are to furnish their own specifications for the work. Further information may be had from the City Clerk at Alameda.

STORES—1 story and base. Class A construction, \$18,000. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners, First Trust and Savings Bank. Contractor, F. A. Muller, Syndicate Bldg., Oakland. Contract price, \$18,000. Contractor taking sub-figures.

SAN JOSE AND THE SANTA CLARA VALLEY

STREET PAVEMENT—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. The County Surveyor was instructed at a recent meeting of the County Supervisors to prepare plans and specifications for a 16-foot 5-inch macadam road with the necessary screenings on the Holy Cross hill from Cypress Lawn to the gate at Holy Cross. Further information will be made of this work when the plans are completed.

REVESTMENT WALL—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. At the last meeting of the Santa Clara Supervisors plans and specifications for a reinforced concrete revestment and curtain wall on the Los Gatos Creek were approved and bids were ordered to be received up to December 6th at 11 a. m. Further information may be had from the County Clerk or Engineer at San Jose.

CULVERT—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Plans and specifications prepared by the County Engineer for the construction of a concrete culvert on Edmondson avenue in Supervisor District No. 1, near Morgan Hill, were accepted by the County Supervisors and bids for the work were ordered received up to December 6th, 11 a. m.

BRIDGE—Reinforced concrete. Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. The Santa Clara County Supervisors at the last meeting ordered the County Engineer to prepare plans and specifications for the construction of a reinforced concrete bridge over the Guadalupe Creek on the Branham road near the railroad crossing. On completion and approval of the plans bids for this work will be called.

BRIDGE APPROACH—Reinforced concrete. Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor Howard F. Cozzens, Salinas. Owners, Monterey County. The County Supervisors at their last meeting directed the County Surveyor to construct an approach to the bridge crossing the Pajaro River at Watsonville, under the Day Labor system.

SEWER CONSTRUCTION—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, City Engineer, Redwood City. Owners, Redwood City. The City Trustees at their last meeting instructed the City Engineer to prepare plans and specifications for the construction of a sewer on the county road from James street to Broadway. Further mention will be made of the work when the plans are complete.

ROAD CONSTRUCTION—Cost not

stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor Cozzens, Salinas. Owners, Monterey County. At the last meeting of the County Supervisors plans and specifications prepared by County Surveyor Cozzens for grading and macadamizing the Monterey-Castroville road, in Monterey, Alisal and Pajaro road districts, were approved and bids ordered called until December 6th at 2 p. m. Plans were also approved for the improving of a portion of the Coast road, near the Oliver ranch house, in Sur road district, and bids were ordered called until December 6th. Plans and specifications together with full information relative to both improvements may be had from the County Surveyor at Salinas.

Contracts Awarded.

BRIDGE—Reinforced concrete, \$1,575. Santa Cruz, Santa Cruz Co., Cal. Engineer, County Surveyor, Santa Cruz. Owners, Santa Cruz County. Contractors, Foster-Vogt Co., 503 Market street, S. F. Contract price, \$1,575.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

STREET PAVING—Cost as follows. Antioch, Contra Costa Co., Cal. Engineer, City Engineer, Antioch. Owners, City of Antioch. The following bids were opened by the Trustees for paving the principal streets of Antioch: Raich Improvement Co., 1108 Crocker Bldg., S. F., \$15,489.89; McGillivray Construction Co., 1007 7th street, Sacramento, \$15,891.80; City Improvement Co., Whittell Bldg., S. F., \$21,850.80. A contract will be awarded shortly.

STREET IMPROVEMENT—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. At the last meeting of the City Council plans and specifications prepared by City Engineer Chapman were approved for the improvement 33rd street, and bids were ordered called until November 29th. Further information may be had from the City Engineer.

APARTMENT HOUSE—2 story and base, frame, \$11,000. Pittsburg, Contra Costa Co., Cal. Architect, O. R. Thayer, 26 Montgomery street, S. F. Owner, Charles E. Perry, Pittsburg. Will contain eight suites of three and four rooms. Interior finish pine throughout. Hot water system. Wall beds. Exterior covered with shingles and brick veneer. Plans complete and in the hands of the owner who will do the work by Day Labor.

RESIDENCE—2 story and base, frame. Cost not stated. Petaluma, Sonoma Co., Cal. Architect, Warren Perry, 604 Mission street, S. F. Owner, Dr. Henry B. Witheringham, Petaluma. Will contain eight rooms, two baths and office. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath rooms tile. Furnace heat and automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

Contracts Awarded.

STREET IMPROVEMENT—\$1,856.79. Sausalito, Marin Co., Cal. Engineer, City Engineer, Sausalito. Owners, City of Sausalito. Contractors, Construc-

tion and Engineering Co., 1017 Folsom street, S. F. Contract price, \$1,859.79.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

BRIDGES—2. Reinforced concrete and timber. Cost not stated. Visalia, Tulare Co., Cal. Engineer, County Surveyor, Visalia. Owners, Tulare County. At a recent meeting of the County Supervisors, bids were ordered received up to December 7th for the construction of two bridges in the Second District, one over Sand Creek and one of reinforced concrete construction over the Alta Canal. Further information may be had from the County Engineer at Visalia.

CHURCH—2 story and base, brick and steel. Cost not stated. Fresno, Fresno Co., Cal. Architect, Robert B. Hotchkiss, Rowell Bldg., Fresno. Owners, First Church of Christ, Scientist. Location, corner of Caleveras and N streets, covering an area of 82 by 115 feet. Will contain the main auditorium, seating 300 people, Sunday school rooms and reading rooms. Interior finish pine, hardwood and ornamental plaster. Central heating system and vacuum cleaning. Art glass windows. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and figures being taken.

RESIDENCE—2 story and base, frame, \$11,000. Oakdale, Stanislaus Co., Cal. Architect's name not given. Owner, T. G. Roberts, Oakdale. Location, 1st avenue and Walnut street. Will contain nine rooms, two baths and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile or brick. Automatic water heater. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—1 story and base, frame, \$2,500 each. Fresno, Fresno Co., Cal. Architect, none. Owners, Central California Land and Improvement Co., 955 1 street, Fresno. The Central California Land and Improvement Co. is planning the erection of several bungalows on the La Sierra or Einstein tract. Work is to be commenced at once on the first dwelling located on McKinley near Belmont, which will be modern in every particular, with white asbestos roof. Edwin Einstein is secretary of the company.

RESIDENCE—1 story and base, frame, \$1,500. Fresno, Fresno Co., Cal. Architect, none. Owner, J. R. Church, 1221 V street, Fresno. Location, Riverdale Addition. Will contain five rooms and bath. Interior finish pine. Some hardwood floors. Open fire place. Automatic water heater. Exterior covered with rustic. Plans complete and work by Day Labor.

RESIDENCE—2 story and base, frame, \$2,750. Fresno, Fresno Co., Cal. Architect, none. Owners, Gede and Gede, 551 Poplar avenue, Fresno. Location, Smith Tract. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and the mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

BRIDGE—Reinforced concrete. Cost not stated. Merced, Merced Co., Cal. Engineer, County Surveyor, Merced. Owners, Merced Co. At the last meeting of the County Supervisors the construction of a bridge on Pacheco Pass road in District No. 5, was ordered. A resolution was adopted at the same meeting that the county pay one-half of the cost of a concrete bridge across South Slough at the city limits.

BRIDGES—Timber and reinforced concrete. Cost not stated. Merced, Merced Co., Cal. Engineer, County Surveyor, Merced. Owners, Merced County. The Merced County Supervisors have directed the County Engineer to prepare plans and specifications for bridges to be constructed in the county as follows: Cottonwood to Newman road, over canal near Hubbard Carmichael; also bridges over Quinto Creek on Cottonwood school house road near Clay school house. Bids for the construction of these bridges will be called for on the completion and adoption of the plans.

BRIDGES—Reinforced concrete. Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Bids will be received until December 14th for the construction of a reinforced concrete bridge over lateral No. 5, of Modesto Irrigation District.

CHURCH—1 story and base, brick, \$20,000. Merced, Merced Co., Cal. Architects, Cowell & Bedesen, Merced. Owners, Central Presbyterian Church. Location 20th and L streets. Designed in the classic style. Will contain main auditorium. Sunday school rooms and pastor's study. Interior finish pine and ornamental plaster. Art glass windows. Central heating system. Exterior faced with pressed brick. Plans approved and bids to be called for shortly.

IRRIGATION WORK—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Bids received by the Board of Directors of the Modesto Irrigation District for the work of cleaning, deepening and extending the main drainage canal of the district were rejected as they were above Engineer Herrmann's estimate. The bidders were Contra Costa Construction Co., S. F., \$26,000; Ross Construction Co., Sacramento, \$19,450. The work will be done under the Day Labor system in charge of Engineer Herrmann.

STREET IMPROVEMENT—Cost not stated. Turlock, Stanislaus Co., Cal. Engineer, City Engineer, Turlock. Owners, City of Turlock. Plans and specifications prepared by the City Engineer for the improvement of Diablo street from the easterly property line of Marshall street to the north property line of East avenue, were adopted at the last meeting of the City Trustees. The specifications provide that the street be oiled, rolled, graded and curbed with granite curbs. Bids on this work will soon be called for.

Contracts Awarded.

IRRIGATION WORK—Cost as follows. Modesto, Stanislaus Co., Cal. Engineer, Herrmann, Modesto. Owners, Modesto Irrigation District. Ties-

lau Bros., 110 Jessie street, S. F., for building the transition section of the main canal to connect with the Dry Creek flume, \$2,572; G. J. Ulrich, Modesto, for building nine concrete drops in lateral No. 3, \$19,340; and Peart Bros., of Oakdale for construction of concrete facing and curtain wall for dam No. 1 of the Dalles reservoir, \$72,800.

JAIL—1 story and base, reinforced concrete. Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Architect's name not given. Owners, Town of San Luis Obispo. At the last meeting of the City Council specifications for a new jail building were adopted. Bids will be called for shortly.

MUNICIPAL AUDITORIUM—2 story and base, brick and steel, \$23,000. Visalia, Tulare Co., Cal. Architects, Coates & Traver, Rowell Bldg., Fresno. Owners, City of Visalia. Contractors, Trewhitt & Shields, Fresno. Contract price, \$23,000.

SCHOOL—2 story and base, reinforced concrete, \$29,780. Woodlake, Tulare Co., Cal. Architect, O. L. Clark, Brower Bldg., Bakersfield. Owners, Woodlake School District. Contractors, Philbrook & Colvin, Turlock. Contract price, \$29,780.

MARKET—1 story and base, brick. Cost not stated. Delano, Kern Co., Cal. Architect, none. Owner, Luther B. Crow. Contractors, Trewhitt & Shields, Fresno. Contract price not stated.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

BRIDGE—Timber construction. Cost not stated. Auburn, Placer Co., Cal. Engineer, County Surveyor, Auburn. Owners, Placer County. Bids will be opened on December 7th for the construction of a wooden bridge, 420 feet long, across Dry Creek on the section line between sections 5 and 9, Tp. 10 N., R. 3 E., M. D. B. and M., in Supervisor District No. 1.

APARTMENT HOUSE—3 story and base, brick and concrete. Cost not stated. Architect, W. B. Thomas, Yosemite Bldg., Stockton. Owner, B. Granich. Location, east California north of Channel. Will contain two stores and 41 apartments of two and three rooms. Interior finish pine and elm. Hardwood floors. Steam heat, oil burning system and hot water supply. Bath room finished in tile. Wall beds and patent store fronts. Exterior faced with pressed brick and cement plaster. Plans being prepared.

BRIDGE—Timber construction. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. In response to a petition presented to the County Supervisors the County Engineer has been instructed to prepare plans and specifications for a wooden bridge to be erected over the North Fork of Mill Creek and Dry Creek in Road District No. 3. Bids will be called for on completion and approval of the plans.

FLATS—2 story and base, frame, \$4,500. Sacramento, Cal. Architect, none. Owner, W. B. Ellis, 520½ 20th street, Sacramento. Location, 1517 28th street. Will contain two flats of five

and six rooms. Interiors finished in pine and elm panels. Hardwood floors and open fire places. Mantels tile or brick. Tile wainscot in bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

BRIDGE—Reinforced concrete, \$7,000. Willows, Glenn Co., Cal. Engineer, County Surveyor, Willows. Owners, Glenn County. Cotton Bros., 54 32nd street, Oakland, bridge contractors, have asked the Supervisors to release them from a contract for building the Salt Creek bridge at Newville. The Cottons bid \$6,000. They now say they made a mistake of \$1,000 and that their bid should have read \$7,000. Even at that figure they were the lowest bidders. The Supervisors have taken the matter under consideration and will make their decision known at the December meeting.

IRRIGATION CANALS—Cost not stated. Willows, Glenn Co., Cal. Engineer's name not given. Owners, Glenn County Irrigation District. Proposals are wanted at once for the construction of a system of canals, laterals and deep drains in Glenn County. For information and plans see Washington Dodge, 1 Sansome street, San Francisco.

HOSPITAL—1 and 2 story and base, frame, \$13,000, and \$4,000 additional for equipment. Eureka, Humboldt Co., Cal. Architect, E. J. Burke, Eureka. Owners, Humboldt County. Will contain wards and private rooms for male and female patients. Interior finish pine with some hardwood floors. Furnace heat and hot water system. Tile bath rooms and operating rooms. Exterior covered with rustic and shingles. Plans complete and figures being taken.

Contracts Awarded.

STATE HIGHWAY WORK—Cost as follows. Sacramento, Cal. Engineer, State Highway Commission, Sacramento. Owners, State of California. Contractors, C. H. and A. W. Gorrell, New Call Bldg., S. F., Placer County work, \$17,379.50. George R. Daley, McNece Bldg., San Diego, Mariposa County work, \$42,748.60.

SEWER CONSTRUCTION—\$6,196.04. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractor, W. S. Gause, Piedmont, Oakland. Contract price, \$6,196.04.

CHURCH—1 story and base, brick and concrete, \$15,000. Sacramento, Cal. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, Church of the Immaculate Conception. Contractors, Barton & Hite, 1009½ 9th street, Sacramento. Contract price, \$15,000.

GARAGE—1 story and base, brick, \$6,244. Eureka, Humboldt Co., Cal. Architect, E. J. Burke, Eureka. Owner, S. S. Mitchell. Contractors, Mercer-Fraser Co., Eureka. Contract price, \$6,244.

LOS ANGELES AND SOUTHERN CALIFORNIA

STREET IMPROVEMENT—Cost not stated. Redondo Beach, Los Angeles Co., Cal. Engineer, City Engineer, Redondo Beach. Owners, City of Redondo Beach.

do Beach. At the last meeting of the City Trustees the following action was taken relative to public improvements. A resolution adopting specifications for the construction of a wood bridge across Beryl street on Lucia avenue was approved. The City Engineer was instructed to prepare plans and specifications and estimate the cost of building a public comfort station at the north approach to the municipal pier. In the matter of the substitution of concrete lamp posts for iron ones on the municipal wharf, after much discussion the special engineer was instructed to arrange for the substitution.

ROAD IMPROVEMENT—Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. The City Council has plans under way for the paving of west Mission street from Bath to San Andreas, and out to Modoc road to join with the county paving.

SEWER CONSTRUCTION—Cost not stated. Paso Robles, San Luis Obispo Co., Cal. Engineer, City Engineer, Paso Robles. Owners, City of Paso Robles. The City Trustees have ordered bids received for the construction of sewers in certain streets of the city. Bids close November 29th. Further information may be had from the City Clerk at Paso Robles.

BRIDGE—Reinforced concrete. Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Plans have been completed by the County Engineer for the construction of two bridges in Gaviota Canyon, the overhead crossing of the railroad near Ellwood, and a bridge at El Capitán. The plans are now in the hands of the State Highway Commission awaiting their approval. Bids for the work will be called immediately by the County Supervisors of Santa Barbara.

APARTMENT HOUSE AND STORES—2 story and base. Class C construction. Cost not stated. San Bernardino, San Bernardino Co., Cal. Architects, Train & Williams, Exchange Bldg., L. A. Owner, Ralph Swing. Will cover an area of 40 by 110 feet. Two stores and eight apartments of three and four rooms. Interior finish pine. Wall beds. Hot water system. Tile baths and patent store fronts. Exterior faced with pressed brick. Plans being prepared.

APARTMENT HOUSE—1 story and base. Class C construction, \$53,000.

Los Angeles, Cal. Architect, L. T. Mayo, Black Bldg., L. A. Owner, Mr. Bramhall. Location, corner of 8th and Hoover streets, covering an area of 60 by 130 feet. Will contain 102 rooms arranged in two and three rooms suites with private baths and wall beds. Interior finish pine and elm panels. Some hardwood floors. Steam heat, automatic elevator and hot water system. Tile bath rooms. Exterior faced with pressed brick. Plans being prepared.

SUB-STATION—Reinforced concrete, \$50,000. Los Angeles, Cal. Architect, Frederick L. Hochrig, American Bank Bldg., L. A. Owners, Aqueduct Power Co., Location, Main street, covering an area of 50 by 175 feet. Construction fire proof. Interior finish cement plaster. Special power equipment. Exterior faced with cement plaster. Plans being prepared.

WAREHOUSE—4 story and base. Class C construction. Cost not stated. Los Angeles, Cal. Architects, Morgan, Walls & Morgan, Van Nuys Bldg., L. A. Owners, Los Angeles Soap Co., Location, Hanning east of Alameda street, covering an area of 100 by 100 feet. Construction steel and heavy timbers. Interior finish pine. Freight elevators, metal covered doors and window sash. Exterior faced with select common brick. Plans being prepared.

GARAGE—3 story and base. Class A construction, \$100,000. Los Angeles, Cal. Architects, Morgan, Walls & Morgan, Van Nuys Bldg., L. A. Owners, J. W. Leavitt & Co. Location Oliver street, covering an area of 100 by 120 feet. Construction steel and reinforced concrete. Main floor fitted up for office and sales room. Interior finish pine, hardwoods and tile. Upper floors, storage space, repair rooms and shipping department. Exterior faced with cement plaster. Plans being prepared.

GARAGE—2 story and base, brick. Cost not stated. Los Angeles, Cal. Architect, Albert C. Martin, Higgins Bldg., L. A. Owner, Tony Milovitch and Miss T. Garibaldi. Location, Los Angeles street between 5th and 6th streets, covering an area of 60 by 115 feet. Designed for a commercial garage. Concrete floors, metal window sash and frames and special gasoline storage tanks. Exterior faced with pressed brick. Plans complete and figures being taken.

HOSPITAL LAUNDRY—1 story and base, concrete and frame. Cost not stated. Norwalk, Los Angeles Co., Cal. Architect, State Architect George B.

McDougall, Sacramento. Owners, State of California. Bids will be received until December 13th for the construction of a laundry building. Exterior faced with cement plaster. Plans and specifications on file at the State Department of Engineering. An official proposal appears in another column of this issue.

HARDWOOD FLOORS, ETC—Cost not stated. Los Angeles, Cal. Architect, none. Owners, United States Government. Sealed proposals will be received at office of Treasurer Pacific Branch, N. H. D. V. S., Soldiers' Home, Los Angeles County, Cal., and there opened at 12 o'clock M., December 11, 1915, for furnishing and laying hardwood and composition floors in three barracks at above location. Specifications and other information can be had upon application to the Treasurer, George T. Baggett, Treasurer.

CHEMISTRY BUILDING—3 story and base, reinforced concrete, \$60,000. Pasadena, Los Angeles Co., Cal. Architect, Elmer Grey, Wright and Callender Bldg., L. A. Owners, Throop College. Construction fireproof with reinforced concrete floors and walls and hollow tile interior partitions. Interior finish pine and hardwood floors. Central heating system. Exterior faced with cement plaster. Plans being prepared.

SCHOOL GROUP—1, 1 and 2 story. Class B, \$200,000. Los Angeles, Cal. Architect, Norman F. Marsh, 214 Broadway Central Bldg., L. A. Owners, City of Los Angeles. Location 35th and Hoover streets. The group will comprise the sciences, art, academic and mechanics buildings and a power house. Reinforced concrete to main floor level and brick above. Interior finish pine with hardwood floors. Central heating system and program clocks. Exterior faced with cement plaster. Plans complete and figures being taken. Bids will be opened on December 9th.

STORES AND OFFICES SUB-DIVISION—\$10,000. Los Angeles, Cal. Architects, Eisen & Son, Wilcox Bldg., L. A. Owner, F. W. Blanchard. Location, Broadway between 2nd and 3rd streets. Work will include new interior partitions, interior trim, plastering, electric work, elevator work and plumbing. New store fronts. Plans being prepared.

Contracts Awarded.

ROAD CONSTRUCTION—\$78,296. Riverside, Riverside Co., Cal. Engineer, County Surveyor, Riverside. Owners, Riverside County. Contractors, B. B. Davidson Construction Co., Monrovia. Contract price, \$78,296.

WHAIRF SHED—6 story and base, reinforced concrete, \$117,000. Los Angeles, Cal. Architect, Harbor Commission, L. A. Owners, City of Los Angeles. Contractors, Merchants' Realty and Investment Co., Van Nuys Bldg., L. A. Contract price, \$117,000.

APARTMENT HOUSE—3 story and base, frame, \$28,000. Los Angeles, Cal. Architect, A. L. Reed, 224 Pacific avenue, Long Beach. Owner, Mrs. Ida G. Platt. Contractors, J. H. Woodworth & Son, Chamber of Commerce Bldg., Pasadena. Contract price, \$28,000.

WAREHOUSE—7 story and base. Class A construction. Cost not stated. Los Angeles, Cal. Architect, none. Owners, Lyon Fireproof Storage Co.

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Contractors, Richards-Neustadt Co., Wright & Callender Bldg., L. A. Contract price not stated.

SCHOOLS—2, 1 story and base, frame. Cost as follows. Calexico, Imperial Co., Cal. Architects, Allison & Allison, Hibernian Bldg., L. A. Owners, Town of Calexico. Contractor, James P. Dawson, Fay Bldg., L. A., \$14,758, and Welch & Wright, El Centro, \$17,750. O. F. Peterson, El Centro, plumbing on both buildings. Heating and ventilating still undecided.

SCHOOL BUILDINGS—3, 1 story, frame, \$13,333. Ventura, Ventura Co., Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Contractors, The Kling Co., 15th street, L. A. Contract price, \$13,333.

MOTION PICTURE STUDIO—Frame, \$20,000. Los Angeles, Cal. Architect, none. Owners, National Drama Co. Contractors, W. M. Shumway Co., 6057 Hollywood avenue, L. A. Contract price, \$20,000.

PORTLAND AND OREGON

STATE HIGHWAY WORK—Cost as follows. Salem, Ore. Engineer, State Highway Commission, Salem. Owners, State of Oregon. The State Highway Commission apportioned the 1916 highway funds as follows: For administration expenses and bridges, \$25,000; Clatsop County, \$20,500; Columbia County, \$26,000; Hood River, \$5,000; Hood River and Wasco, \$15,000; Crook, \$10,000; Yamhill, Tillamook, \$9,000; Lane, \$5,000; Polk, \$5,000; Jackson, \$15,000; making a total of \$237,000.

IRRIGATION WORK—\$1,000,000. Salem, Ore. Engineer's name not given. Owners, Graves Creek Irrigation District. State Engineer Lewis has issued a permit to the Graves Creek irrigation project to appropriate sufficient water from Graves and Jumpoff creeks to irrigate 20,000 acres of land and to develop 3,000 horsepower. Two large reservoirs are included in the plans, and, exclusive of them, the cost of the works is estimated at \$1,000,000. The project is located in Josephine county.

MAUSOLEUM—1 story, reinforced concrete and granite, \$60,000. Portland, Ore. Architects, Lawrence and Holford, Chamber of Commerce Bldg., Portland. Owners, Portland Mausoleum Co. Location Riverview Cemetery. Will contain 350 crypts. Interior finish stone and ornamental plaster. Modern electric work and plumbing. Exterior faced with granite. Plans being prepared.

IRRIGATION POWER EQUIPMENT—Cost not stated. La Pine, Ore. Engineer's name not given. Owners, Pringle Falls Water and Power Co., Portland. The Pringle Falls Water and Power Co., with head offices in Portland, has just been sold to a syndicate of Eastern capitalists headed by Tomes Bros. of Nebraska. The consideration is said to have been \$300,000. The plans of the new company as announced are to supply water for the irrigation of the entire La Pine basin and Eden Coulee, Silver Lake and Fort Rock valleys. Power and light for La Pine

will also be among the first steps in development. The power plant, which is practically finished, will be immediately equipped, and a sawmill with a daily capacity of 150,000 feet, will be erected in the spring.

SEATTLE AND WASHINGTON

BATH HOUSE—1 and 2 story and base, reinforced concrete, \$250,000. Seattle, Wash. Architect, B. Marcus Pretica, Pantages Bldg., Seattle. Owners, Albert Shubach, C. D. Stimpson and Jacob Berger. Location, corner of Leonra and 2nd avenue, covering an area of 180 by 180 feet. Plunge will be 110 by 60 feet. There will be showers and tub baths. Interior pine, tile and marble. Fireproof construction. Steam heat, oil burning plant and pumping plant capable of pumping 750 gallons per minute. Exterior faced with cement plaster. Plans being prepared.

RAILROAD SHEDS—2 story and base, frame, \$60,000. Seattle, Wash. Architect, West, Port of Seattle Commission, Seattle. Owners, City of Seattle. Location, Spokane avenue, covering a large ground area. Exterior corrugated iron. Plans complete and figures being taken. Bids close on December 8th.

CONSULAR TRADE CONFERENCES.

Consul Lester Maynard, of Amoy, China, states that he will be in the United States on leave of absence until about December 31, 1915, and that his address will be care of the Department of State, Washington, D. C.

The leave of absence of Consul Willys R. Peck, of Tsingtau, China, having been extended he will be in Washington, D. C., from about December 1, 1915, to January 31, 1916. (1f)

The annual statement on the production of abrasive materials in the United States in 1914 is now available for distribution by the Geological Survey. Under this heading are considered only those mineral products which are used for grinding and polishing and other abrasive operations. The value of all the abrasive materials consumed in the United States during the year amounted to \$3,614,263.

The Municipal Bond Market is looking up, and the Bond Buyers are looking the "Building and Engineering News" up. A proposal ad for your bonds in our columns will bring competition.

E. R. Hoerchner

Attorney-at-Law

Phone Garfield 2856

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San Francisco



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California

Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

SAN FRANCISCO COUNTY.

No.	Owner	Contractor	Amt.
3242	MacArthur	MacArthur	3000
3242	Same	Same	3000
3244	Same	Same	3000
3245	Same	Same	3000
3246	Same	Same	3000
3247	Same	Same	2000
3248	Same	Same	2000
3249	Pacific G & T	Owner	1200
3250	McDougall	McDougall	350
3251	Levenson	Hoin	500
3252	Horn Co	Blackburn	300
3253	Root	Schroder	200
3254	Gates	Denke	1255
3255	Tomasini	Petri	18750
3256	Cerruti	Trevia	8200
3257	Chilton	Rector	1475
3258	Weinrank	Hinson	9075
3259	Pule	Tuttle	500
3260	Hurrell	Hurrell	4900
3261	Lapham	Lapham	2750
3262	Orero	Chiappe	5250
3263	Duffy	Olson	11745
3264	Rattin	Coburn	4606
3265	Cogswell	Rex	5100
3266	Same	Lawson	3649
3267	Same	Hurley	405
3268	Same	Herman	1350
3269	Same	U S Metal	1025
3270	Same	Cal Plate	2243
3271	Sherry	Scott	5450
3272	Conway	Mager	2460
3273	Moeller	Leigh	3300
3274	McLean	Petersen	775
3275	Same	Petersen	27528
3276	Same	Masow	3263
3277	Schalch	Montani	3500
3278	Ralsch	Cox	1600
3279	Same	Same	450
3280	Same	Kantzsch	1900
3281	Barden	Barden	1500
3282	Rocca	Collins	1500
3283	Balrd	Balrd	1400
3284	Craviotto	Craviotto	1400
3285	Aydukovich	Owner	10800
3286	Lurman	Lurman	10800
3287	Lurman	Lurman	2700
3288	Lyon	Bessett	2900
3289	Lyon	Bessett	3000
3290	Felton	Bessett	500
3291	Lyon	Bessett	1000
3292	Vereelli	Vereelli	1200
3293	Schwartz	Schwartz	1200
3294	Pacific Fr Exp	Owner	1200
3295	Same	Felton	400
3296	Sunset	Brumfield	450
3297	Berger	Fraser	1800
3298	Peterson	Peterson	400
3299	Thomas	Montgomery	500
3300	Bizzi	Beccas	500
3301	Koller	Fink	500
3302	Wilstrup	Thelander	500
3303	Werle	Werle	500
3304	Klopstock	Klopstock	650
3305	Dulin	Weizelsberger	1250
3306	Gallagher	Steur	26000
3307	Moody Est	Larsen	10518
3308	Williar	Commary	5750
3309	Torre	Maffel	3900
3310	Yates	Yates	3900
3311	Yates	Yates	3000
3312	Jacob	Welsh	2000
3313	Angerstein	Woolfrey	4000
3314	Nielsen	Nielsen	1500
3315	Nielsen	Nielsen	1500
3316	Mitchell	Cuneo	1450
3317	Same	Same	2800
3318	Samuelson	Olson	400
3319	Norton	Kern	500
3320	Costifos	Kordallie	1000
3321	Kellejles	Olson	425
3322	Sharman	Sharman	800
3323	Argus	Mullen	1500
3324	Schmitt	Schmitt	4000
3325	Travis	Travis	3000
3326	Road	Michelsen	3818
3327	Curtaz	Curtaz	1800
3328	Margara	Margara	9510
3329	Cath Archb	Central	2225
3330	Same	Lynch	2655
3331	Boma	Elshop	
3332	Wright	Vezina	
3333	Eriksen	Anderson	
3334	Cogswell	Maudrell	

(Correction in Location)

COTTAGES AND GARAGES

(3011) LOTS 40 AND 41 In W side

Edgewood Ave each 25 frontage by

121-6. All work except painting for

three one-story and basement frame

cottages and 3 garages.

Owner.....C. B. Grover, 215 Califor-

nia, San Francisco.

Architect...Dolliver & Swain, 701

Royal Insurance Bldg., 201

Sansome, San Francisco.

Contractor..Grimes & Drew, 116 Bat-

tery, San Francisco.

Filed Oct. 19, '15. Dated Oct. 18, '15.

Concrete work completed.....\$1870

Frame up and roof rafters on... 1870

Plastered on..... 1870

Standing finish on..... 1870

Completed and accepted..... 1870

TOTAL COST, \$9350

Bond, none. Limit, 90 days from sign-

ing. Forfeit, none. Plans and specifi-

cations filed.

FRAME FLATS

(3241) E LAGUNA 100 N Lombard.

All work for two-story frame flats.

Owner.....Andrea Marenzi, 3221 La-

guna, San Francisco.

Architlect...None.

Contractor..Giuseppe Polati, 2391

Greenwich, San Francisco.

Filed Nov. 12, '15. Dated Nov. 11, '15.

Rough work up and roof on.....\$875

Brown coated..... 875

Completed and accepted..... 875

Usual 35 days..... 875

TOTAL COST, \$3500

Bond, \$1750. Surety, Luigi Gavazza.

Limit, 90 days. Forfeit, none. Plans

and specifications filed.

FRAME DWELLING

(3242) N NINETEENTH 259-8 W

Douglass. Two-story and basement

frame dwelling.

Owner.....MacArthur Bros., 1560 Fell

San Francisco.

Architect...None.

Day's work..... COST, \$3000

(3243) N NINETEENTH 264-8 W

Douglass. Two-story and basement

frame dwelling.

Owner.....MacArthur Bros., 1560 Fell

San Francisco.

Architect...None.

Day's work..... COST, \$3000

(3244) N NINETEENTH 259-8 W

Douglass. Two-story and basement

frame dwelling.

Owner.....MacArthur Bros., 1560 Fell

San Francisco.

Architect...None.

Day's work..... COST, \$3000

FRAME DWELLING

(3245) N NINETEENTH 314-8 W

Douglass. Two-story and basement

frame dwelling.

Owner.....MacArthur Bros., 1560 Fell

San Francisco.

Architect...None.

Day's work..... COST, \$3000

FRAME DWELLING

(3245) N NINETEENTH 314-8 W

Douglass. Two-story and basement

frame dwelling.

Owner.....MacArthur Bros., 1560 Fell

San Francisco.

Architect...None.

Day's work..... COST, \$3000

FRAME DWELLING

(3246) N NINETEENTH 339-8 W

Douglass. Two-story and basement

frame dwelling.

Owner.....MacArthur Bros., 1560 Fell

San Francisco.

Architect...None.

Day's work..... COST, \$3000

FRAME DWELLING

(2247) N PERSIA 50 E Naples. One-

story and basement frame dwelling.

Owner.....MacArthur Bros., 1560 Fell

San Francisco.

Architect...None.

Day's work..... COST, \$2000

FRAME DWELLING

(3248) N PERSIA 25 E Naples. One-

story and basement frame dwelling.

Owner.....MacArthur Bros., 1560 Fell

San Francisco.

Architect...None.

Day's work..... COST, \$2000

BRICK HEATER ROOM

(3249) SE COLUMBIA SQUARE AND

Folsom. One-story brick heater

room.

Owner.....Pacific Gear & Tool Works,

1035 Folsom, San Francisco

Architect...None.

Day's work..... COST, \$1200

FRAME DWELLING

(3250) E BRADFORD 50 S Mayflower

One-story and basement frame dwlg.

Owner.....George McDougall, 1334

Hayes, San Francisco.

Architect...None.

Day's work..... COST, \$350

ALTERATIONS

(3251) NO. 1739 PINE. Minor altera-

tions in hotel.

Owner.....Mrs. E. Levenson, 1540

California, San Francisco.

Architect...None.

Contractor..Theo. S. Hoin, 1449 Hyde,

San Francisco.

COST, \$500

ALTERATIONS

(3252) NO. 364 NINTH. Alter lodging

house.

Owner.....J. W. Horn Co., Petaluma,

California.

Architect...None.

Contractor..A. H. Blackburn, 16

Koanoke, S. F.

COST, \$500

FRAME RESIDENCE

(3253) W NINETEENTH AVE 375 N

California. All work for one and one

half-story and basement frame resi-

dence.

Owner.....Edna A. Root, 1580 Wash-

ington, San Francisco.

Architect...None.

Contractor..Schroder Bros., 765 Fol-

son, San Francisco.

Filed Nov. 13, '15. Dated Nov. 11, '15.

Frame up.....\$600

Brown coated..... 600

Accepted..... 600

Usual 35 days..... 600
TOTAL COST, \$2400
 Bond, \$1200. Sureties, George Rehn and John M. Jacobson. Limit, 90 days from recording. Forfeit, none. Plans and specifications filed.

FRAME APARTMENTS

(3254) N LAKE 82-6 E 26th Ave E 37-6xN 108. All work for three-story and basement frame apartments.

Owner.....Emma A. Gates.
 Architect...E. H. Denke, 1317 Hyde, San Francisco.

Contractor...F. G. Denke, 1445 11th Ave., San Francisco.

Filed Nov. 13, '15. Dated Nov. 12, '15.
 End floor joists on.....\$2373
 Enclosed and roof on.....2373
 Rough coat plaster on.....2373
 Completed and accepted.....2373
 Usual 35 days.....3164

TOTAL COST, \$12,656

Bond, \$6338. Surety, The Aetna Accident & Liability Co. Limit, 90 days. Forfeit, \$2.50. Plans and specifications filed.

FRAME APARTMENTS

(3255) SE EIGHTH AVE & JUDAH S 100x E 57. All work except oil burner, lighting fixtures, shades, wall beds and fire escapes for three-story frame apartment building.

Owner.....F. Tomasini, 1301 Mason, San Francisco.

Architect...P. Righetti, 1168 Phelan Bldg., San Francisco.

Contractor...Farnocchia Petri & Co., 1654 San Jose Ave., S. F.

Filed Nov. 13, '15. Dated Oct. 28, '15.
 Frame up on.....\$2310
 Roof on and enclosed.....2310
 Brown coated.....2310
 Standing finish on.....2310
 Completed and accepted.....2310
 Usual 35 days.....4700

TOTAL COST, \$18,750

Bond, \$9375. Sureties, J. Mosca and L. Lombardi. Limit, 120 days. Forfeit, none. Plans and specifications filed.

ADDITION

(3256) NW COLUMBUS AVE & LOMBARD. All work for one-story addition to two-story and basement Class "C" building.

Owner.....Edward Cerruti, 699 61st, Oakland.

Architect...P. Righetti, Phelan Bldg., San Francisco.

Contractor...Trevis & Pasqualetti, 32 Harwood Place, S. F.

Filed Nov. 13, '15. Dated Oct. 9, '15.
 Roofed over.....\$1537.50
 Brown coated.....1537.50
 Standing finish on.....1537.50
 Completed and accepted.....1537.50
 Usual 35 days.....2050.00

TOTAL COST, \$3200.00

Bond, none. Limit, without delay to other work. Forfeit, none. Plans and specifications filed.

GAS HEATING SYSTEM

(3257) NOS 17-37 SANSOME. All work for Rector system of gas heating (23 radiators) for two-story building.

Owner...Mary E. Chilton by Alexander D. Keyes, Attorney, 1006 Humboldt Bank Bldg., San Francisco.

Architect...None.

Contractor...Rector System Gas Heating Co., 331 Sutter, S. F.

Filed Nov. 13, '15. Dated Oct. 4, '15.
 Roughed in.....37½%
 Radiators and motors delivered and set up.....37½%
 Completed.....25%

TOTAL COST, \$1475

Bond, limit, forfeit, none. Plans and specifications, none.

FRAME APARTMENTS

(3258) SE FIFTEENTH & DOLORES 29x100. All work for three-story and basement frame apartments.

Owner.....Christopher Weinrank.
 Architect...Chas. C. Frye and O. R. Thayer, 20 Montgomery, San Francisco.

Contractor...L. A. Hinson, 180 Jessie, San Francisco.

Filed Nov. 13, '15. Dated Nov. 11, '15.
 Frame up and roof boarded....\$2269
 Rough coat plaster on inside and outside.....2269
 Completed and accepted.....2269
 Usual 35 days.....2268

TOTAL COST, \$9075

Bond, \$4550. Sureties, Henry Conrad and Jno. Schmidt. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

REPAIRS

(3259) NOS. 540 TO 54 HAIGHT. Repair fire damage.

Owner.....Augusta T. Tuttle, 137 Montgomery, S. F.

Architect...None.

Day's work. **COST, \$500**

FRAME FLATS

(3260) E TENTH AVE 275 S Balboa. Two-story and basement frame (2) flats.

Owner.....A. C. Hurrell, 9 Sharon, San Francisco.

Architect...None.

Day's work. **COST, \$4900**

FRAME DWELLING

(3261) E TWELFTH AVE 75 N Cabrillo. Two-story and basement frame dwelling.

Owner.....A. R. Lapham, 511 12th Ave., San Francisco.

Architect...None.

Day's work. **COST, \$2750**

FRAME FLATS

(3262) NW GREEN AND AUGUST Alley W 21-2xN 60. All work except finish hardware, lighting fixtures and shades for three-story frame flats.

Owner.....J. A. Avancino and E. Orero, 760 Green, S. F.

Architect...Paul J. Capurro, 1884 Powell, San Francisco.

Contractor...G. Chiappe, 491 Greenwich, San Francisco.

Filed Nov. 15, '15. Dated Nov. 13, '15.
 Roof on.....\$1312.50
 Brown coated.....1312.50
 Completed and accepted.....1312.50
 Usual 35 days.....1312.50

TOTAL COST, \$5250.00

Bond, \$2625. Sureties, P. Valconesi and Frank Cuneo. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

FRAME STORE AND APARTMENTS

(3263) S TWENTY-FOURTH 25 W Vicksburg 25x108-8. All work except concrete work for two-story frame store and apartments.

Owner.....Thos. T. Duffy, Gdn. Est. Jno. F. Duffy, minor, 1219 Church, San Francisco.

Architect...Jno. E. McCarthy, 1340 13th Ave., San Francisco.

Contractor...A. E. Olson, 125 Jersey, San Francisco.

Filed Nov. 15, '15. Dated Nov. 12, '15.

2nd floor joists in place.....\$500
 Roof on.....823
 White coated.....823
 Completed and accepted.....823
 Usual 35 days.....983

TOTAL COST, \$3958

Bond, \$1979. Sureties, Jno. V. Nelson and H. A. Nunan. Limit, 75 days after Nov. 22, Forfeit, none. Plans and specifications filed.

FRAME FLATS

(3264) SW HOWARD AND 25TH S 65 xW 115. All work except wall beds, lighting fixtures, finish hardware, mantels and shades for three-story frame flats.

Owner.....Jno. M. and Frank J. Ratto, 2788 Folsom, S. F.

Architect...Paul J. Capurro, 1844 Powell, San Francisco.

Contractor...Chas. Coburn, 4030 24th, San Francisco.

Filed Nov. 16, '15. Dated Nov. 16, '15.

Roof on.....\$2936.25
 Brown coated.....2936.25
 Completed and accepted.....2936.25
 Usual 35 days.....2936.25

TOTAL COST, \$11,745.00

Bond, \$5872.50. Surety, Massachusetts Bonding & Insurance Co. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

ELECTRICAL WORK

(3265) LW FOLSOM & TWENTY-sixth W 170 S 150-9¼ m or 1 S 86 deg 35 min E 175 m or 1 N 173. Electrical work for three-story Class "A" school building.

Owner.....Cogswell Polytechnical College by Lange & Bergstrom, Sharon Bldg., S. F.

Architect...Fredk. H. Meyer, Bankers' Invst. Bldg., S. F.

Contractor...Rex Electric Constr. Co., 1174 Sutter, San Francisco

Filed Nov. 16, '15. Dated Nov. 9, '15.

On 10th of each month.....75%
 Usual 35 days.....25%

TOTAL COST, \$4606

Bond, limit, forfeit, plans and specifications, none.

(3266) COVERING PLUMBING ON

above.

Contractor...Herman Lawson, 344 4th Ave., San Francisco.

Filed Nov. 16, '15. Dated Oct. 22, '15.

Payments same as above.....

TOTAL COST, \$5100

Bond, limit, forfeit, none. Plans and specifications, none.

(3267) HEATING AND VENTILATING on above.

Contractor...J. C. Hurley Co., 509 6th, San Francisco.

Filed Nov. 16, '15. Dated Nov. 4, '15.

Payments same as above.....

TOTAL COST, \$3649

Bond, limit, forfeit, none. Plans and specifications, none.

(3268) VAULTS ON ABOVE.

Contractor...The Hermann Safe Co., 120 Folsom, S. F.

Filed Nov. 16, '15. Dated Nov. 9, '15.
Payments same as above.....
TOTAL COST, \$415
Bond, limit, forfeit, none. Plans and specifications, none.

(3269) SHEET METAL AND KALAMIN on above.
Contractor..United States Metal Products Co., 525 Market, S. F.
Filed Nov. 16, '15. Dated Nov. 5, '15.
Payments same as above.....
TOTAL COST, \$1850
Bond, limit, forfeit, none. Plans and specifications, none.

(3270) GLASS AND GLAZING ON above.
Contractor..California Plate & Window Glass Co., 864 Mission, San Francisco.
Filed Nov. 16, '15. Dated Nov. 9, '15.
Payments same as above.....
TOTAL COST, \$1025
Bond, limit, forfeit, none. Plans and specifications, none.

(3271) NE LAKE & TWENTY-SECOND Ave E 57-6XN 100. Plumbing, heating, piping, drainage, sewerage, tiling, etc., for two-story and basement Class "C" residence.
Owner.....John H. Sherry, Clay and Davis, San Francisco.
Architect...Nathaniel Blaisdell, 255 California, San Francisco.
Contractor..Scott Co., 243 Minna, S. F.
Filed Nov. 16, '15. Dated Nov. 15, '15.
Roughing of both systems completed\$300
Completed and accepted..... 852
Usual 35 days..... 561
TOTAL COST, \$2243
Bond, \$1123. Surety, New Amsterdam Casualty Co. Limit, 65 days after notification. Forfeit, \$20. Plans and specifications filed.

FRAME FLATS
(3272) S TWENTY-FOURTH 75 W Hampshire 30x93. All work except gas fixtures, wall beds and heaters for two-story frame flats.
Owner.....Jas. J. Conway, 2725 24th, San Francisco.
Architect...None.
Contractor..Mager Bros., 110 Jessie, San Francisco.
Filed Nov. 17, '15. Dated Nov. 16, '15.
Frame up\$1360
Brown coated 1360
Accepted 1360
Usual 35 days..... 1370
TOTAL COST, \$5450
Bond, none. Limit, 90 days after Nov. 17. Forfeit, none. Plans and specifications filed.

FRAME COTTAGE
(3273) E EIGHTEENTH AVE 350 S Geary S 25x6 126 O L 267. All work for two-story frame cottage.
Owner.....Gustave Moeller, 24th Ave & Clement, San Francisco.
Architect...None.
Contractor..Leigh & Schultz, 419 21st Ave., San Francisco.
Filed Nov. 17, '15. Dated Oct. 10, '15.
Brown coated\$ 500
Usual 35 days..... 1960
TOTAL COST, \$2460
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

(3274) SE HAYES AND OCTAVIA E 62-6xS 120. Excavation, foundation, fire door frames and rat proofing for three-story and basement frame stores and apartments.
Owner.....Daniel M. Moran, 154 6th, San Francisco.
Architect...Chas. J. I. Devlin, Pacific Bldg., San Francisco.
Contractor..H. L. Petersen, 62 Post, San Francisco.
Filed Nov. 17, '15. Dated Nov. 15, '15.
On 1st and 15th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$1885
Bond, \$950. Surety, The Aetna Accident & Liability Co. Limit, 35 days. Forfeit, \$25. Plans and specifications filed.

(3275) CEMENT FLOORS, SIDE walks, side walk lights and trap door on above.
Contractor..H. L. Petersen, 62 Post, San Francisco.
Filed Nov. 17, '15. Dated Nov. 15, '15.
Payments same as above.....
TOTAL COST, \$775
Bond, \$400. Surety, The Aetna Accident & Liability Co. Limit, 15 days. Forfeit, \$25. Plans and specifications filed.

(3276) CARPENTRY, JOINERY, MILL work, stair, hardware, ventilators, glass, brick, chimneys, marble, terrazzo, tiling, fire escapes, roofing, sheet metal, roof lights, metal signs, etc., on above.
Contractor..Masow & Morrison, Mo-nadnock Bldg., S. F.
Filed Nov. 17, '15. Dated Nov. 15, '15.
Payments same as above.....
TOTAL COST \$27,528
Bond, \$13,764. Surety, Fidelity & Deposit Co. of Maryland. Limit, 120 days after concrete foundations done. Forfeit, \$25. Plans and specifications filed.

FRAME FLATS
(3277) S PACIFIC 137-6 W Taylor W 4-3 S 57-6 W 23-3 S 80 E 27-6 N 137-6 All work except plumbing, tinning, painting, shades and chandeliers for two-story frame flats.
Owner.....Elizabeth Schallach, 976 Broadway, San Francisco.
Architect...J. A. Porporato, 619 Washington, San Francisco.
Contractor..S. Montani & G. Stefanini, 1753 Greenwich, S. F.
Filed Nov. 17, '15. Dated Nov. 16, '15.
Rough frame up and roof on...\$ 600
Brown coated 750
Completed and accepted..... 850
Usual 35 days..... 1063
TOTAL COST, \$3263
Bond, \$1800. Sureties, J. Boscetti and G. Giusti. Limit, 90 days. Forfeit, \$2. Plans and specifications filed.

FRAME DWELLING
(3278) E SEVENTH AVE 225 S Kirkham. Two-story and basement frame dwelling.
Owner.....A. J. Raisch, Crocker Bldg., San Francisco.
Architect...None.
Contractor..Cox Bros., 5th Ave and Lincoln Way, S. F.
COST, \$3500

(3279) E SEVENTH AVE 250 S Kirkham. Two-story and basement frame dwelling.

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Owner.....A. J. Ralsch, Crocker Bldg.,
San Francisco.
Architect...None.
Contractor...Cox Bros., 5th Ave and
Lincoln Way, S. F.
COST, \$3500

FRAME DWELLING
(3280) S CLEMENT 96 W 32nd Ave.
One-story and basement frame dwlg.
Owner.....L. Jung.
Architect...None.
Contractor...Kantzsch & McKay, 528
31st Ave., S. F.
COST, \$1600

FRAME DWELLING
(3281) NO. 5720 GEARY (rear). One-
story and basement frame dwelling.
Owner.....J. Barden, 3718 Geary,
San Francisco.
Architect...None.
Day's work. COST, \$450

ADDITION
(3282) NO. 2102 BUSH. Add one story
to frame flats.
Owner.....Jos. Rocca, Premises.
Architect...None.
Contractor...J. Collins, 1535 Hyde, S. F.
COST, \$1900

FRAME DWELLING
(3283) S TWENTIETH 55 E Sanchez.
Two-story and basement frame dwlg.
Owner.....Jas. Balrd, 469 Arkansas,
San Francisco.
Architect...None.
Day's work. COST, \$1800

ADDITION
(3284) NO. 2661 HYDE. Add one-story
Owner.....A. Craviotto, 2663 Hyde,
San Francisco.
Architect...Paul F. De Martini, 2123
Powell, San Francisco.
Day's work. COST, \$1500

FRAME DWELLING
(3285) E FORTY-SIXTH AVE 185 S
Irvine. One-story and basement
frame dwelling.
Owner.....L. Aydukovich, 1238 Hol-
lister, San Francisco.
Architect...None.
Day's work. COST, \$1400

FRAME APARTMENTS
(3286) N WASHINGTON 148-10 E
Leavenworth. Three-story and base-
ment frame (6) apartments.
Owner.....F. W. Lurmann, 1246 Sac-
ramento, San Francisco.
Architect...None.
Day's work. COST, \$10,800
NOTE:—Interior finish being put on.

FRAME APARTMENTS
(3287) N WASHINGTON 117-6 E
Leavenworth. Three-story and base-
ment frame (6) apartments.
Owner.....F. W. Lurmann, 1246 Sac-
ramento, San Francisco.
Architect...None.
Day's work. COST, \$10,800
NOTE:—Interior finish being put on.

FRAME DWELLING
(3288) W FORTY-FIFTH AVE 191 S
Geary. Two-story and basement
frame dwelling.
Owner.....Lyon & Hoag, 660 Market,
Architect...None.

Contractor...C. H. Bessett, 343 29th Ave
San Francisco.
COST, \$2700

FRAME DWELLING
(3289) W FORTY-FIFTH AVE 141 S
Geary. Two-story and basement
frame dwelling.
Owner.....Lyon & Hoag, 660 Market,
San Francisco.
Architect...None.
Contractor...C. H. Bessett, 343 29th Ave
San Francisco.
COST, \$2600

FRAME DWELLING
(3290) W FORTY-FIFTH AVE 166 S
Geary. Two-story and basement
frame dwelling.
Owner.....Lyon & Hoag, 660 Market,
San Francisco.
Architect...None.
Contractor...C. H. Bessett, 343 29th Ave
San Francisco.
COST, \$2900

FRAME DWELLING
(3291) W FORTY-FIFTH AVE 108 S
Geary. Two-story and basement
frame dwelling.
Owner.....Lyon & Hoag, 660 Market,
San Francisco.
Architect...None.
Contractor...C. H. Bessett, 343 29th Ave
San Francisco.
COST, \$3000

FRAME STORE
(3292) E VIENNA 100 N Persia. One
story frame store.
Owner.....Tony Vercelli, 683 Vienna,
San Francisco.
Architect...None.
Day's work. COST, \$500

REPAIRS
(3293) NO. 879 MARKET. Minor re-
pairs for stores.
Owner.....Schwartz & Goodman, 879
Market, San Francisco.
Architect...Joseph Cahen, 45 Kearny,
San Francisco
Day's work COST, \$1000

PLATFORM, ETC.
(3294) ELDORADO, bet. Kentucky &
Tennessee. Construct platform and
house.
Owner.....Pacific Fruit Express Co.,
1015 Flood Bldg., S. F.
Architect...J. H. Christie, 1142 Flood
Bldg., San Francisco.
Day's work. COST, \$1400

ALTERATIONS
(3295) SE BRANNAN AND SECOND.
Cut bearing in wall to receive angle
irons for 15 elevator openings to re-
ceive new doors for elevators open-
ings.
Owner.....Felton Estate Co., Mills
Bldg., San Francisco.
Architect...None.
Day's work. COST, \$1200

ELECTRIC SIGN
(3296) NO. 947 MARKET. Electric
sign.
Owner.....Sunset Cafeteria No. 2, 947
Market, San Francisco.
Architect...None.
Contractor...Brumfield Elec. Sign Co.,
18 7th, San Francisco.
COST, \$400

HEATING PLANT
(3297) NO. 1045 SEVENTEENTH. In-
stall steam heating plant.
Owner.....Berger & Carter Co., Prem
Architect...None.
Contractor...L. D. Fraser, 699 36th, Okd.
COST, \$450

FRAME DWELLING
(3298) E NEWTON 150 N Morse. One
story and basement frame dwelling.
Owner.....N. Peterson, 3342 27th,
San Francisco.
Architect...None.
Day's work. COST, \$1800

ADDITION
(3299) S VALLEJO 100 W Hyde. Add
porch.
Owner.....Miss Thomas, 1225 Vallejo,
San Francisco.
Architect...None.
Contractor...E. J. Montgomery, 1320
Broadway, S. F.
COST, \$100

ALTERATIONS
(3300) NO. 529 HYDE. Alter dining
room.
Owner.....F. Bizzl, 1378 Jackson,
San Francisco.
Architect...None.
Contractor...B. Becas, 915 Pacific, S. F.
COST, \$400

(Correction in Location)
ALTERATIONS
(3301) NO. 26 O'FARRELL. Alter
store.
Owner.....Kohler & Chase, Premises.
Architect...None.
Contractor...The Fink & Schindler Co.,
228 13th, San Francisco.
COST, \$500

FRAME DWELLING
(3302) N STILLINGS 100 E Congo.
One-story and basement frame dwlg.
Owner.....S. Wilstrup, 32 Josiah Ave
San Francisco.
Architect...S. Wilstrup, 32 Josiah Ave
San Francisco.
Contractor...P. A. Thelander, 292 4th,
Oakland. COST, \$800

REPAIRS
(3303) NO. 566 FREDERICK. Repair
fire damage.
Owner.....C. A. Werle, Premises.
Architect...None.
Day's work. COST, \$500

FRAME SHED
(3304) W CAPP 150 N 18th. One-story
frame shed.
Owner.....I. D. and F. Klopstock,
3320 18th, San Francisco.
Architect...None.
Day's work. COST, \$500

FRAME FLATS
(3305) E ASHBURY 100 N Grove N 25
E 100 N 12-6 E 15-8 S 37-6 W 115-8.
All work for two-story and basement
frame flats.
Owner.....Emilie A. Dulip.
Architect...Plans by Contractor.
Contractor...Jacob Witzelsberger, 176
Rousseau, San Francisco.
Filed Nov. 18, '15. Dated Nov. 17, '15.
Frame up & roof boards on. \$1637.50
Brown coated. 1637.50
Completed and accepted. 1637.50
Usual 35 days. 1637.50
TOTAL COST. \$6550.00

Bond, \$3275. Sureties, Geo. Wollenschlager and Elmo Collins. Limit, 90 days. Forfeit, \$10. Plans and specifications filed.

ADDITION

(3306) NO. 1762 FIFTEENTH. All work for addition to City Rough Dry Laundry building.

Owner.....D. Gallagher.
Architect...None.
Contractor...Storr & Bury, 1465 O'Farrell, San Francisco.
Filed Nov. 18, '15. Dated Nov. 18, '15.
On completion\$1250
TOTAL COST, \$1250
Bond, none. Limit, 30 days. Forfeit, plans and specifications, none.

BRICK BUILDING

(3307) NW TOWNSEND 289 NE Sixth NE 70xNW 125. All work for two-story and basement brick building.

Owner.....Moody Estate Co.
Architect...None.
Contractor...H. H. Larsen & Bro., 62 Post, San Francisco.
Filed Nov. 18, '15. Dated Nov. 17, '15.
Foundations completed\$8000
2nd floor joists laid..... 5000
Completed 6500
Usual 35 days..... 6500
TOTAL COST, \$26,000
Bond, \$13,000. Sureties, H. N. McClure and Jabobini Larsen. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

(3308) N VALLEJO 103-1½ E Divisadero E 34-4½xN 137-6. All work for two-story and basement frame residence.

Owner.....Henry R. Williar, 260 California, San Francisco.
Architect...W. H. Crim Jr., 424 Kearny, San Francisco.
Contractor...W. T. Commary & Co., 742 Market, San Francisco.
Filed Nov. 18, '15. Dated Nov. 13, '15.
1st floor joists on.....\$ 972
Roof on 1000
Exterior plastered and interior brown coated 1972
Standing finish on ready for painter 1972
Completed and accepted..... 1972
Usual 35 days..... 26,518
TOTAL COST, \$10,518
Bond, \$5260. Surety, New England Equitable Insurance Co. Limit, 120 days from recording. Forfeit, \$15. Plans and specifications filed.

RESIDENCE

(3309) W LEAVENWORTH 37-6 N Filbert 25xN7-6. All work for two-story and basement residence.

Owner.....Mr. and Mrs. Louis Torre, 525 Filbert, S. F.
Architect...Louis Mastropasqua, 580 Washington, S. F.
Contractor...Paul Maffei, 2221 Filbert, San Francisco.
Filed Nov. 18, '15. Dated Oct. 13, '15.
Frame up and roof on.....\$1117.50
1st coat plaster on..... 1417.50
Completed and accepted..... 1417.50
Usual 35 days..... 1417.50
TOTAL COST, \$5790.00
Bond, \$2895. Sureties, Nick Capurro and V. Lenzl. Limit, 90 days from issuing of building permit. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

(3310) W COLLING 310 N Geary. Two-story and basement frame dwelling.
Owner.....Jeanette Yates, 335 21st Ave., San Francisco.
Architect...None.
Contractor...Wm. F. Yates, 335 21st Ave., San Francisco.
COST, \$3900

FRAME DWELLING

(3311) W COLLINS 315 N Geary. Two-story and basement frame dwelling.
Owner.....Jeanette Yates, 335 21st Ave., San Francisco.
Architect...None.
Contractor...Wm. F. Yates, 335 21st Ave., San Francisco.
COST, \$3900

FRAME DWELLING

(3312) E CLAYTON 875 N Frederick. Two-story and basement frame dwlg.
Owner.....Henry Jacob, 549 18th Ave., San Francisco.
Architect...None.
Contractor...James Welsh, 549 18th Av San Francisco.
COST, \$3000

FRAME DWELLING

(3313) W SHOTWELL 109-4 S 22nd. Two-story and basement frame dwlg.
Owner.....G. Angerstein.
Architect...None.
Contractor...John B. Woolfrey, 10 Bartlett, San Francisco.
COST, \$2000

CONCRETE FLOOR

(3314) NO. 3027 SIXTEENTH. Concrete floor.
Owner.....A. C. and S. C. Nielsen, 146 Central Ave., S. F.
Architect...None.
Day's work.....
COST, \$300

FRAME FLATS

(3315) S TURK 150 E Baker. Two-story and basement frame (2) flats.
Owner.....William Tyson.
Architect...None.
Contractor...John B. Woolfrey, 10 Bartlett, San Francisco.
COST, \$4000

FRAME DWELLING

(3316) W BRYANT 146 N Army. One- and one-half-story and basement frame dwelling.
Owner.....John H. Mitchell, 246 York San Francisco.
Architect...None.
Contractor...Joseph Cuneo, 152 Tiffany, San Francisco.
COST, \$1500

FRAME DWELLING

(3317) W BRYANT 124 N Army One and one-half-story and basement frame dwelling.
Owner.....John H. Mitchell, 246 York San Francisco.
Architect...None.
Contractor...Joseph Cuneo, 152 Tiffany, San Francisco.
COST, \$1500

FRAME DWELLING

(3318) S BRUNSWICK 100 W Newton. One-story and basement frame dwlg.
Owner.....A. M. Samuelson, 3732 21st, San Francisco.
Architect...None.

Contractor...H. Olsen, 338 Hooloway, San Francisco.
COST, \$1150

ALTERATIONS

(3319) NO. 40 CARL. Raise and move to rear of lot present building and alter into two flats.
Owner.....Mrs. Norton, Premises.
Architect...None.
Contractor...L. A. Kein, 3646 17th, S. F.
COST, \$2300

ALTERATIONS

(3320) NO. 1345 FILLMORE. Alter lunch counter.
Owner.....Peter Costifos, Premises.
Architect...None.
Contractor...Steve Kordarilis, 16 Ritch, San Francisco.
COST, \$100

ALTERATIONS

(3321) NO. 130 LOBOS. Alter and add to dwelling.
Owner.....G. Kellejles, 262 Beverly, San Francisco.
Architect...None.
Contractor...Olof Olsen.
COST, \$500

FRAME DWELLING

(3322) SW JARBOE & PUTNAM. One-story and basement frame dwelling.
Owner.....Frank Sharman, 523 Linden, San Francisco.
Architect...None.
Day's work.....
COST, \$1000

FRAME GARAGE

(3323) NO. 1701 TWELFTH AVE. One-story frame garage.
Owner.....L. E. Argus, Premises.
Architect...None.
Contractor...J. W. Mullen, 2201 Ellsworth, Berkeley.
COST, \$425

FRAME DWELLING

(3324) W ANDERSON 50 N Powhattan One-story and basement frame dwlg.
Owner.....John C. Schmitt, 91 Ellsworth, San Francisco.
Architect...None.
Day's work.....
COST, \$800

FRAME DWELLING

(3325) W EDINBURGH 125 N Brazil. One-story and basement frame dwlg.
Owner.....S. Travia, 401 Brazil, S. F.
Architect...None.
Day's work.....
COST, \$1500

FRAME GARAGE

(3326) SW ARGUELLO BLVD. AND Locust. One-story frame garage.
Owner.....L. L. Roos, 3800 Jackson, San Francisco.
Architect...Maybeck & White, Lincoln Bldg., San Francisco.
Contractor...J. P. Michalsen, 1633 Alcatraz Ave., S-Berkeley.
COST, \$100

FRAME FLATS

(3327) N FULTON 137-6 W Franklin. Two-story frame store and flat.
Owner.....Oscar H. Curtaz, 1120 Market, San Francisco.
Architect...Plans by owner.
Day's work.....
COST, \$1000

FRAME STORES

(3328) S GEARY 40 W Sixteenth Av One-story frame (2) stores.

Owner.....A. Magrane, 601 Buena Vista Ave., San Francisco.
 Architect...Theo. W. Lenzen, Humboldt Bank Bldg., S. F.
 Day's work. COST, \$3000

CHURCH

(3329) NW GEARY AND TWENTY-third Ave. Cast iron and steel work for superstructure for St. Monica Church building.

Owner.....Roman Catholic Archbishop of San Francisco, 1100 Franklin, S. F.

Architect...Frank T. Shea and Jno. O. Lofquist, 742 Market, S. F.

Contractor...Central Iron Works, 651 Florida, San Francisco.

Filed Nov. 19, '15. Dated Nov. 4, '15.

Completed and accepted.....\$2863

Usual 35 days.....955

TOTAL COST, \$5818

Bond, none. Limit, 35 days. Forfeit, \$10. Plans and specifications filed.

(3330) GRADING, CONCRETE, REINFORCEMENTS, rat proofing, carpentry, mill work, etc., on above.

Contractor...A. Lynch.

Filed Nov. 19, '15. Dated Nov. 4, '15.

Payments same as above.....

TOTAL COST, \$19,000

Bond, none. Limit, 90 days. Forfeit, \$10. Plans and specifications filed.

ALTERATIONS

(3331) W SIXTEENTH AVE 75 N (Clement 23x120. Alterations and additions to residence.

Owner.....Mrs. E. P. Roma.

Architect...J. C. Hladik, Monadnock Bldg., San Francisco.

Contractor...Walter F. Bishop.

Filed Nov. 19, '15. Dated Nov. 19, '15.

Building raised, 1st floor walls in and plumbing roughed in.....\$450

Brown coated.....450

Completed and accepted.....450

Usual 35 days.....450

TOTAL COST, \$1800

Bond, none. Limit, 45 days. Forfeit, \$5. Plans and specifications filed.

CLASS "C" GARAGE

(3332) E VALENCIA 85 S McCoppin S 50x12 167-6. All work for one-story Class "C" garage.

Owner.....Millie Langley Wright.

Architect...Smith O'Brien, Humboldt Bank Bldg., S. F.

Contractor...L. N. Vezina, 180 Jessie, San Francisco.

Filed Nov. 19, '15. Dated Nov. 19, '15.

Brick work up to bottom of

trusses.....\$2377

Roof completed and flashed.... 2377

Completed and accepted..... 2378

Usual 35 days..... 2378

TOTAL COST, \$9510

Bond, \$4755. Sureties, F. H. Ellis and W. T. Davies. Limit, Feb. 1, 1916. Forfeit, \$10. Plans and specifications filed.

STORE AND FLAT

(3333) E CHURCH — S Army S — xE —: No. 1461 Church. All work except plate glass, glass, mirrors, light fixtures, window shades and finish hardware for alterations and additions to make two-story frame store and flat.

Owner.....C. Eriksen, 1461 Church, San Francisco.

Architect...Ernest U. Essmann, 24th & Church, San Francisco.

Contractor...Chas. Anderson, 448 Fair Oaks, San Francisco.

Filed Nov. 19, '15. Dated Nov. 16, '15.

Frame of alterations and additions completed.....\$556

Interior wall brown coated..... 556

Completed..... 556

Usual 35 days..... 557

TOTAL COST, \$2255

Bond, \$1112.50. Sureties, John Nelson and W. J. Kenney. Limit, 75 days from recording. Forfeit, none. Plans and specifications filed.

PAINTING

(3334) SW FOLSOM AND TWENTY-sixth W 170 S 150-9 1/4 m or 1 S 86 deg 35 min E 175 m or 1 N 173. Painting for three-story Class "A" school.

Owner.....Jas W. Kerr et al as Board of Trustees of Cogswell Polytechnical College by Lange & Bergstrom, Sharon Bldg., San Francisco.

Architect...Frederick H. Meyer, Bankers' Investment Bldg., S. F.

Contractor...H. Maundrell, 320 Hayes, San Francisco.

Filed Nov. 19, '15. Dated Nov. 5, '15.

On 10th of each month..... 75%

Usual 35 days..... 35%

TOTAL COST, \$2655

Bond, limit, forfeit, none. Plans and specifications, none.

LEASES.

Nov. 17, 1915—NW GEARY AND HYDE W 87-6xN 87-6. Emily S Karns to Standard Securities Co. 50 years. \$21,600.

Nov. 17, 1915—NO. 351 THIRD. J M McGee to Leon Karaydas. 2 years. \$1200.

Nov. 19, 1915—N CALIFORNIA bet. Polk and Larkin; No. 1544 California. Zellerbach Levison Co to Grace M Richabaugh. 5 years. \$300 per month.

Nov. 19, 1915—S TWENTY-SECOND 95 E Bartlett E 30xS 80. J G Klumpke to Ernest Beyer. 6 years. \$7920.

Nov. 19, 1915—NO. 2323 CLEMENT. Margaret Whitman to Louis Schelling. 5 years. \$1800.

Nov. 15, 1915—NW HOWARD 275 NE Fourth NE 40xNW 80. Bert Schlesinger to Edw Lee and Tom Johnson (as Lee & Johnson). 2 years. \$2400 with option to renew.

Nov. 16, 1915—NE Beale, 183-4 NV Howard, NW 91-8xNE 137-6. Richard Burke, Wm. P. Burke, Alice M. Newland, Edith Carroll and Richard Burke, Jr., to Krogh Manufacturing Company, 10 years, \$18,600.

INCORPORATIONS

Walliser's Mailing System. Capital stock, \$25,000; subscribed, 15 shares, \$1 each. Directors—W. D. Walliser, C. W. Humphrey, C. S. Johnston, C. M. Steffen, E. M. Walliser, 1 share each. Place of business, San Francisco.

Trinity Gold Mining & Power Co. Capital Stock, \$50,000; subscribed, \$5; shares, \$1 each. Directors—J. M. Shook, B. A. Wlbrand, C. P. Collonan, J. F. Sullivan, P. A. Schmitz, 1 share each. Place of business, S. F.

COMPLETION NOTICES

San Francisco

RECORDED

ACCOMPTED

Nov. 13, 1915—E EIGHTEENTH AVE 185 N Judah N 25xE 120; E 18th Ave 160 N Judah N 25xE 120. The Hind Estate Co to Leigh & Schultz

Nov. 13, 1915—W FORTY-FIFTH Ave 200 N Judah 25x120. Alexander Neil to Neil Morris. Nov. 13, '15

Nov. 13, 1915—SW BUSH AND JONES W 77-6xS 77-6. Gerard Invt Co to Fred Koldenstrodt.....Nov. 5, 1915

Nov. 13, 1915—S TWENTY-THIRD 100 E Rhode Island E 25xS 100. Nellie Warren to G Cavaglieri.....Nov. 13, 1915

Nov. 13, 1915—NE KIRKHAM AND 12th Ave 32-6x100. Carl Schwaderer to Robert Earl Davis.....Nov. 12, 1915

Nov. 13, 1915—W BRYANT 127 S Alameda. Rainier Brewing Co to Turner Co.....Nov. 4, 1915

Nov. 15, 1915—W FILLMORE 100 S Post W 94-6xS 25. Shean Est Co to Brandt & Stevens.....Nov. 13, 1915

Nov. 15, 1915—NOS. 2130-32 VALLEJO Anita Bertheau to whom it may concern.....Completed —

Nov. 15, 1915—NW NINETEENTH & Shotwell. Christine Rochex to Petterson & Persson.....Nov. 11, 1915

Nov. 15, 1915—W OCTAVIA 60 S Oak W 77-6 N 30 E 77-6 S 30. Catherine A Carberry, M J Carberry, Moreton & Celestine B Carberry to Higginson Co, Inc.....Nov. 10, 1915

Nov. 15, 1915—W TWENTY-FIRST Ave 75 N Irving N 25x95. Michael Cain to whom it may concern.....Nov. 15, 1915

Nov. 15, 1915—N CARL AND SE Arguello Blvd E 101-6 N 25 W 98-10 SW 25-1 1/2. Mary C Ryan to C J Keenan.....Nov. 15, 1915

Nov. 15, 1915—S PACIFIC 91-9 W Powell 22-9x60. G Armando to G Moriconi and G Passarino.....Nov. 15, 1915..

Nov. 16, 1915—N DAY 205 W Church W 25xN 114. Louise Corder to E. A. Reynolds.....Nov. 5, 1915

Nov. 16, 1915—SW RITCH, 275 SE Bryant, SE 25xSW 75. George W. Renish and William Boyle to whom it may concern.....Nov. 16, 1915

Nov. 16, 1915—N MISSION, 255 W 6th, N 85xW 20. Globe Realty Co. to Barrett & Hilp.....Nov. 15, 1915

Nov. 16, 1915—N BUSH, 77-6 W Powell, W 60xN 60. Isidor Rosenberg and Joseph Cahen to Lacey Bros., Conrad Mollath, Pacific Manufacturing Co, Union Floor Co, Atlas Heating and Ventilating Co, Nic Muriale, American Electrical Engineering Co, Jack Barman, Weintraube & Moore.....Nov. 12, 1915

Nov. 17, 1915—LOT 62 Gift Map No. 2. Mary E Wynn to whom it may concern.....Nov. 17, 1915

Nov. 17, 1915—N CLEMENT 80 W 15th Ave W 25xN 104. Sam Obwald to whom it may concern.....Nov. 16, 1915

Nov. 17, 1915—LOT 38 BLK 11, Lakeview. Maria S Dorff to Gus Carlson.....Nov. 17, 1915

Nov. 17, 1915—E SEVENTH AVE 392 N Lake N 30xE 120. W I Smith to Paul K Jones.....Nov. 18, 1915

Nov. 18, 1915—W BRYANT, bet. Ala-

media and 15th. Rainier Brewing Co to Sound Constr Co., Nov. 15, 1915
 Nov. 18, 1915—S CLEMENT 82-6 E 19th Ave E 25xN 100. Chester Williamson to whom it may concern. Nov. 18, 1915
 Nov. 18, 1915—S LAKE 57-6 W 12th Ave W 75xS 120. Grace Yager to whom it may concern. Nov. 17, 1915
 Nov. 18, 1915—SW CALIFORNIA & Mason W 77-6xS 60. S F Morshead to Sibley Grading & Teaming Co. Nov. 11, 1915
 Nov. 18, 1915—E WERSEER, bet. Sacramento and Clay. The Board of Trustees of The Leland Stanford, Jr University to H S Tittle. Nov. 17, 1915
 Nov. 18, 1915—W RAUSCH 25x112; Nos 56 and 56-A Rausch. A and E Erickson to Geo D Gilmour. Nov. 17, 1915
 Nov. 18, 1915—SE HOLLISTER AVE and Jennings 25x100. Ferruccio Lombardi and Sante De Santi to L Pastorini and A Lindelli. Nov. 18, 1915

LIENS FILED

San Francisco

Nov. 13, 1915—NW PARIS 300 SW Persia Ave SW 25xNW 100 Ptn Blk 11, Excl Hd. Gordon Electrical Co vs Caroline and A Chellini and Chas Smith et al. \$26.92
 Nov. 13, 1915—S NINETEENTH 206-8 W Douglas S 114xW 25-8. F R Ritchie & Co vs Henry Stoll. \$144
 Nov. 16, 1915—NE COLUMBUS AVE and Chestnut, E 163-11, S 137-6, W 49 5-14, NW 178 11-18. Central Electric Co vs Lewis Packing Co Rouda & Spivock. \$43.68
 Nov. 17, 1915—W FORTY-SIXTH Ave 145 N Cabrillo N 25xW 120. Acme Lumber Co vs D Condon. \$23.56
 Nov. 17, 1915—E TAYLOR 92-6 S Washington S 30xE 100. E Scott vs Wm B and Maud P Geiser. \$440
 Nov. 17, 1915—N NINETEENTH 250 E Sanchez E 25xN 114. F A Crown vs G C Adams. \$40

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

Nov. 15, 1915—NOS. 820½, 805, 805½, 807½ Treat Ave. E E Sherman to F Edwards and Ford Motor Car Co
 Nov. 12, 1915—SE BRANNAN 275 NE Sixth NE 137-6xSE 250. W H Berry to John Deere Plow Co of S. F.
 Nov. 12, 1915—W TENTH Ave 300 N Balboa N 33-4xW 120. Wm P Goss to F T Stroh, Geo Peck and Arthur W Draper (as Peck & Draper).
 Nov. 15, 1915—E SEVENTEENTH AV 57-4½ S Rivera (R) S 25xE 134. Reinhardt Lumber & Planing Mill Co to E R and Bessie E Hayden.
 Nov. 15, 1915—E SEVENTEENTH AV 37-4½ S Rivera E 100xS 25. Geo N Zaro to E R and Bessie G Hayden

Mr. City Official:

A proposal ad in the "Building and Engineering News" will bring you inquiries and real competition on your public work; that's what you want!

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Am't.
2442	Moffitt	Kennedy	1235
2443	Baker	Mallahan	500
2441	Morgan	Pearce	600
2415	Howard	Howard	12000
2446	Howard	Howard	2500
2447	Engle	Thornalley	1420
2448	Hayley	Arthur	900
2449	Cuthbert	Cox	1200
2451	Oakland Bldg.	Hart	1000
2452	Barnett	McPherson	800
2453	Warner	Warner	2000
2454	Doggola	Gardlo	1200
2455	Dice	Dice	1500
2456	Elliott	Elliott	500
2457	O'Connor	O'Connor	4500
2458	Squoyah Bldg.	Northrup	500
2460	Durnan	Durnan	20000
2461	Miller	MacGregor	3500
2462	Martin	Anderson	1800
2463	Myers	Myers	400
2464	Glantz	Glantz	1600
2465	Franken	Franken	1500
2466	S P Co.	Owner	400
2467	Bedford	Bedford	500
2468	Rutherford	Greuner	10000
2475	Snook	Bushe	800
2476	Neary	Neary	3000
2477	McCoy	Walsbury	500
2479	Brockhage	Chambers	2000
2480	Jackson	Nelson	1000
2481	Barker	Schnebley	650
2482	Gray	Thompson	150
2483	Isakson	Isakson	500
2484	Wright	Wright	400
2495	Phillips	Waid	1832
2496	Gaynor	Couture	1500
2497	Nunes	Nunes	2500
2498	Farmer	Farmer	2250
2499	Packard	Packard	2500

TILING FOR THEATRE

(2442) S ELEVENTH 125 E Broadway E 175 S 100 W 175 N 100, Oakland. All work for everlasting tiling for Class "A" theatre.

Owner. James Moffitt Estate Co.
 Architect. Cunningham & Politeo, 1st National Bank Bldg., S. F.
 Contractor. David E. Kennedy, Inc., New Jersey.

Filed Nov. 12, '15. Dated Nov. 12, '15.
 15th of each month. 75%
 Usual 35 days. 25%

TOTAL COST, \$1595

Bond, \$798. Surety, Massachusetts Bonding & Insurance Co. Limit, 15 days. Forfeit, \$100. Plans and specifications filed.

DWELLING

(2443) NE HUNTINGTON AND HYACINTH, Oakland. One-story 4-room dwelling.

Owner. Mrs. Florence M. Baker, P. O. Box 78.

Architect. None.

Contractor. J. H. Mallahan, Oakland.
 COST, \$500

ALTERATIONS

(2444) E VALE 300 N Evelyn, Oakland Alterations and additions.

Owner. C. L. Morgan.
 Architect. None.

Contractor. J. C. Pearce, 6932 Lockwood, Oakland.

COST, \$600

(2445) FIRST AND MARKET, Oakland

Repair wharf.
 Owner. Howard Co., Premises.
 Architect. None.

Day's work. COST, \$12,000

REPAIRS

(2446) FIRST & MARKET, Oakland. Repair coal bunkers.

Owner. Howard Co., Premises.
 Architect. None.

Day's work. COST, \$2500

REPAIRS

(2447) NOS. 3818-20 E-TWELFTH.

Oakland. Fire repairs.

Owner. E. Engle, Premises.
 Architect. None.

Contractor. W. G. Thornalley, 3027 E-16th, Oakland.

COST, \$1420

ALTERATIONS

(2448) NO. 2536 NINTH AVE., Oakland Alterations.

Owner. W. W. Haley, Premises.
 Architect. None.

Contractor. L. Arthur & Son, 1230 1st Ave., San Francisco.

COST, \$900

DWELLING

(2449) NE SIXTIETH AND LOWELL, Oakland. One and one-half-story 4-room dwelling.

Owner. R. B. Cuthbert, 1019 61st, Oakland.

Architect. None.

Contractor. L. W. Cox, 2014 13th Ave., Oakland.

COST, \$1200

DWELLING

(2451) E STAR 25 S Suttler, Oakland.

One-story 4-room dwelling.
 Owner. Oakland Building Co.

Architect. None.
 Contractor. Nick H. Hart.

COST, \$1000

REPAIRS

(2452) S ELEVENTH 150 W Franklin, Oakland. Repairs.

Owner. Barnett & Meyerstein.
 Architect. None.

Contractor. S. McPherson, 2155 Ashby Ave., Berkeley.

COST, \$800

DWELLING

(2453) N PRINCETON 45 W Fairfax, Oakland. One-story 6-room dwlg.

Owner. S. A. Warner, 326 Hobart, Oakland.

Architect. None.
 Day's work. COST, \$2000

DWELLING

(2454) E TALBOT 400 S Marlin, Albany. One-story 4-room dwelling.

Owner. Mr. Doggiola.
 Architect. None.

Contractor. P. Garello & Co.

COST, \$1200

DWELLING

(2455) LOTS 154 TO 156 Carmel June Tract on Pomona Ave., Albany. One-story five-room dwelling.

Owner. B. A. Dice.
 Architect. None.

Contractor. J. M. Dice.

COST, \$1500

DWELLING

(2456) W EIGHTY-SECOND AVE 180 N E-14th, Oakland. One-story two-room dwelling.

Owner. F. H. Elliott, 560 33rd, Oakland.

Architect. None.

Day's work. COST, \$500

DWELLING

(2457) E CARLTON 160 S Prospect Ave., Oakland. Two-story 8-room dwelling.

Owner. J. C. O'Connor, 5311 Bryant Ave., Oakland.

Architect...M. I. Diggs, 2444 Bowditch, Berkeley.
Day's work. COST, \$4500

FOOT BRIDGE
(2458) SEQUOYAH HILLS, Oakland.
Foot bridge.
Owner.....Sequoyah Hill Realty Co., Sequoyah Country Club, Oakland.
Architect...None.
Contractor...Northrup & Kundrus, 2200 90th Ave., Oakland.
COST, \$500

APARTMENTS
(2460) E JACKSON 50 S 15th, Oakland. Three-story 36-room apartments.
Owner.....E. Durnan, 32 Randwick Ave., Oakland.
Architect...None.
Contractor...Sommarstrom Bros., 202 E-12th, Oakland.
COST, \$20,000

DWELLING
(2461) E EVERETT AVE 76 N Wellington, Oakland. Two-story 7-room dwelling.
Owner.....Miss J. W. Miller.
Architect...None.
Contractor...C. M. MacGregor, 470 13th, Oakland.
COST, \$3500

DWELLING
(2462) E 107TH AVE 200 S Voltaire, Oakland. One-story 6-room dwlg.
Owner.....N. W. Martin, 2723 107th Ave., Oakland.
Architect...None.
Contractor...L. W. Anderson, 821 16th, Oakland.
COST, \$1800

ALTERATIONS
(2463) NO. 614 TWENTY-THIRD AVE Oakland. Alterations and additions.
Owner.....J. S. Myers 3rd & Webster, Oakland.
Architect...None.
Day's work. COST, \$400

DWELLING
(2464) E EIGHTY-SEVENTH AVE 180 N E-14th, Oakland. One-story 5-room dwelling.
Owner.....C. W. Glantz, 1464 87th Ave., Oakland.
Architect...None.
Days work. COST, \$1600

DWELLING
(2465) N MAINE 400 E Laurel Ave., Oakland. One and one-half-story 6-room dwelling.
Owner.....John Franken, 3354 Maine, Oakland.
Architect...None.
Days work. COST, \$1600

REPAIRS
(2466) WEST OAKLAND YARDS, Oakland. Roof repairs.
Owner.....Southern Pacific Co., 13th and Broadway, Oakland.
Architect...None.
Day's work. COST, \$400

ALTERATIONS
(2467) NO. 821 W BROOKHURST, Oakland. Alterations.

Owner.....W. Bedford, Premises.
Architect...None.
Day's work. COST, \$500

APARTMENTS
(2468) N YOSEMITE AVE 110 W Fairmont, Oakland. Two-story 18-room apartments.
Owner.....V. Z. Rutherford, 314 Thomson Bldg., Oakland.
Architect...None.
Contractor...W. Greuner, 310 Thomson Bldg., Oakland.
COST, \$10,000

CLASS "C" DWELLING
(2474) LOTS 4 AND 5 Map Craig Ppty and Lots 15, 17 and W 1/2 Lot 19, Piedmont Tract, Piedmont. Heating for one-story Class "C" dwelling.
Owner.....Juliette Alexander, 1006 16th, Oakland.
Architect...C. W. Dickey, Central Bk. Bldg., Oakland.
Contractor...L. D. Frazee, 699 36th, Oakland.
Filed Nov. 17, '15. Dated Nov. 15, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$1493
Bond, \$750. Surety, American Surety Co. Limit, as soon as possible. Forfeit, none. Plans and specifications filed.

ALTERATIONS
(2475) NO. 119 BONITA AVE., Piedmont. Alterations.
Owner.....Mrs. Snook, New York.
Architect...None.
Contractor...Walter Bushe, 593 62nd, Oakland.
COST, \$800

BUNGALOW
(2476) W YORK DRIVE 300 N Holly Place, Piedmont. One and one-half-story 5-room bungalow.
Owner.....W. F. Neary, 1723 Telegraph Ave., Oakland.
Architect...C. C. Walde, 1723 Telegraph Ave., Oakland.
Day's work. COST, \$3000

STABLE
(2478) N NINTH 100 W Grove, Oakland. One-story stable.
Owner.....M. Schick, San Mateo.
Architect...None.
Contractor...A. Oisen, 289 Fell, S. F.
COST, \$1500

DWELLING
(2479) E VIEW 175 N Mather, Oakland. One-story 6-room dwelling.
Owner.....C. H. Brockhage, Plaza Bldg., Oakland.
Architect...None.
Contractor...J. F. Chambers, Plaza Bldg Oakland.
COST, \$2000

ALTERATIONS
(2480) W CLAY 50 N 13th, Oakland. Alterations.
Owner.....Jackson Furniture Co., Premises.
Architect...John Hudson Thomas, 1st National Bank Bldg., Bkly.
Contractor...Nelson & Carlson, 1627 Parker, Oakland.
COST, \$1000

GARAGE
(2481) NO. 1060 WALKER AVE., Oakland. Garage.

Owner.....Henry Barker, Key Route Inn, Oakland.
Architect...None.
Contractor...Schnebly, Hostrawser & Pedgrift, 6th and Jackson, Oakland.
COST, \$650

ALTERATIONS
(2482) NO. 687 FAIRMONT AVE., Oakland. Alterations.
Owner.....D. B. Gray, Premises.
Architect...None.
Contractor...E. S. Thompson & Son, 3650 Broadway, Oakland.
COST, \$450

DWELLING
(2483) W THIRTY-EIGHTH AVE 205 N Hopkins, Oakland. One-story 5-room dwelling.
Owner.....S. A. Isakson, 1464 55th Ave., Oakland.
Architect...None.
Day's work. COST, \$1500

ALTERATIONS
(2484) NO. 964 THIRTY-FOURTH, Oakland. Alterations.
Owner.....E. C. Wright, Premises.
Architect...A. Howard Peterson, 1055 E-20th, Oakland.
Day's work. COST, \$400

DWELLING
(2495) TODD ST., near California St., Oakland. All work for one-story 5-room dwelling.
Owner.....J. W. Phillips.
Architect...L. F. Hyde, Oakland.
Contractor...A. F. Waid, 636 65th, Okd.
Filed Nov. 18, '15. Dated Nov. 17, '15.
Frame up and roof on..... 1/4
Brown coated..... 1/4
Completed and accepted..... 1/4
Usual 35 days..... 1/4
TOTAL COST, \$1832
Bond, \$900. Sureties, F. H. Brandt and N. W. Parker. Limit, 40 days. Forfeit, none. Plans and specifications filed.

DWELLING
(2496) E FIFTY-SECOND AVE 115 S Wentworth, Oakland. One-story 5-room dwelling.
Owner.....Mrs. M. Gaynor, 4118 Agua Vista, Oakland.
Architect...None.
Contractor...Jos. Conture, 4118 Agua Vista, Oakland.
COST, \$1500

DWELLING
(2497) N CHABOT ROAD 270 E Claremont Ave., Oakland. Two-story six-room dwelling.
Owner.....Geo. W. Nunes, 5430 Dover, Oakland.
Architect...None.
Day's work. COST, \$2500

DWELLING
(2498) NE ELEVENTH AVE AND E-24th, Oakland. One-story store and dwelling.
Owner.....Robert Farmer, 2526 11th Ave., Oakland.
Architect...Chas. W. McCall, Central Bank Bldg., Oakland.
Day's work. COST, \$2250

(2499) W THOMAS 100 S Prospect Ave., Oakland. One and one-half-story seven-room dwelling.
Owner.....Walter H. Packard, 701 Syndcate Bldg., Oakland.

Architect...Chas. W. McCall, Central Bank Bldg., Oakland.
Day's work. COST, \$2500

Building Contracts Awarded Berkeley.

No.	Owner	Contractor	Amt.
40	Maurer	Courtright	\$3525
41	Bowles	Littlefield	1477.5
50	Koenig	Smith	400
59	Gills	Anderson	3000
78	Schlick	Olsen	1500
83	1st Phes Ch.	Montgomery	500
86		Kollmer	650
87	Maurer	Courtright	1525
88	Same	Same	2000
90	Ala Bldgs	Wiley	1500
90	Garretson	Garretson	2225
91	Connon	Coward	4000
92	Johnson	Johnson	3000
93	Garretson	Garretson	2150
94	Mason	McDuffie	3000
00	Wright	Boehrer	7209

FRAME DWELLING

4401 E STANTON — S Ashby Ave., Berkeley. All work for two one-story frame dwellings.
Owner.....George J. Maurer, 814 Cabrillo, San Francisco.
Architect...Ralph Wychoff, 5856 Ocean View Drive, Oakland.
Contractor...T. D. Courtright, 1624 Woolsey, Berkeley.
Filed Nov. 13, '15. Dated Nov. 12, '15.
Frames up ¼
Plastered ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$3525.50
Bond, \$1763. Surety, New Amsterdam Casualty Co. Limit, 60 days. Forfeit, Plans and specifications filed.

BRICK STORES AND BANK

4411 PPN LOTS 24, 25 AND 26, Terminal Tract, Berkeley. All work for one-story brick stores and bank.
Owner.....P. E. Bowles, Union Cor. McAdam, Oakland.
Architect...John Hudson Thomas, 1st National Bank Bldg., Bkly.
Contractor...R. W. Littlefield, 609 Sycamore, Oakland.
Filed Nov. 12, '15. Dated Nov. 3, '15.
Excavation and foundation work completed\$1500.00
Ready for plaster..... 3193.75
Plastered 3193.75
Accepted 3193.75
Usual 35 days..... 3193.75
TOTAL COST, \$14,775.00
Bond, \$3000. Certified deposit of \$3000 1st Savings Bank of Oakland. Limit 60 days. Forfeit, none. Plans and specifications filed.

ADDITION

2450 NO. 2937 GROVE, Berkeley. Addition.
Owner.....Mrs. Koenig.
Architect...None.
Contractor...C. Smith.
COST, \$400

ALTERATIONS

2459 N ASHBY 120 E College, Berkeley. Alter three-story dwelling into apartments.
Owner.....John D. Gills, 419 North, Berkeley.
Architect...Clara W. Burnett, 2011 Shattuck Ave., Berkeley.
Contractor...N. Anderson, 1927 Napa, Berkeley.
COST, \$3000

ALTERATIONS

(2177) SE CHANNING WAY & Fulton, Berkeley. Alterations and additions.
Owner.....H. J. McCoy, 1205 Arch, Berkeley.
Architect...None.
Contractor...E. L. Walsbury, 2333 Fulton, Berkeley.
COST, \$500

FLOORING

(2455) SE CHANNING AND DANA, Berkeley. Flooring of gallery.
Owner.....1st Presbyterian Church, Premises.
Architect...None.
Contractor...W. S. Montgomery, 2321 Ward, Berkeley.
COST, \$500

ADDITION

(2486) NO. 2710 CHANNING WAY, Berkeley. Addition.
Owner....., Premises.
Architect...None.
Contractor...Jacob Kollmer, 2813 Stuart, Berkeley.
COST, \$650

DWELLING

(2487) E STANTON 100 S Ashby Ave., Berkeley. One-story 4-room dwlg.
Owner.....G. J. Maurer, Flood Bldg., San Francisco.
Architect...Ralph Wychoff, 5856 Ocean View Drive, Oakland.
Contractor...T. D. Courtright, 1624 Woolsey, Berkeley.
COST, \$1525

DWELLING

(2488) E STANTON 135 S Ashby Ave., Berkeley. One-story 5-room dwlg.
Owner.....G. J. Maurer, Flood Bldg., San Francisco.
Architect...Ralph Wychoff, 5856 Ocean View Drive, Oakland.
Contractor...T. D. Courtright, 1624 Woolsey, Berkeley.
COST, \$2000

DWELLING

(2489) W GROVE 40 N Rose, Berkeley. One-story 4-room dwelling.
Owner.....Alameda County Home Bldrs., 1st Nat'l Bk., Bkly.
Architect...None.
Contractor...J. M. Wiley, 1718 Hearst Ave., Berkeley.
COST, \$1800

DWELLING

(2490) S JULIA 273½ W California, Berkeley. One-story 5-room dwlg.
Owner.....John D. Garretson, 4119 Manila Ave., Oakland.
Architect...Hutchinson & McLean, 470 13th, Oakland.
Day's work. COST, \$2225

DWELLING

(2491) E MENDOCINO 175 N Marin, Berkeley. One and one-half-story 7-room dwelling.
Owner.....K. Connon, 1507 Marin, Berkeley.
Architect...None.
Contractor...Joseph Coward, 6081 Claremont, Berkeley.
COST, \$4000

(2492) W BENVENUE AVE 360 S Webster, Berkeley. One-story six-room dwelling.

Owner.....Chas. M. Johnson, 2317 Carlton, Berkeley.
Architect...None.
Day's work. COST, \$3000

DWELLING

(2493) S JULIA 240 W California, Berkeley. One-story 4-room dwlg.
Owner.....John D. Garretson, 4119 Manila Ave., Oakland.
Architect...Hutchinson & McLean, 470 13th, Oakland.
Day's work. COST, \$2150

DWELLING

(2494) S GARBER 315 W Oak Knoll Terrace, Berkeley. Two-story seven-room dwelling.
Owner.....Mason-McDuffie Co., Cor. Shattuck Ave & Addison, Berkeley.
Architect...H. H. Gutterson, 68 Post, San Francisco.
Day's work. COST, \$3000

BRICK STORES

(2500) SW ASHBY AND TELEGRAPH Aves S 79.41 W 100 N 74.33 E 119.74, Berkeley. All work for one-story brick stores.
Owner.....J. H. Wright, 3020 Telegraph Ave., Berkeley.
Architect...J. Henry Boehrer, Delger Bldg., Oakland.
Contractor...J. Henry Boehrer and Alfred Legault, Delger Bld Oakland.
Filed Nov. 19, '15. Dated Nov. 19, '15.
Ceiling joists in place..... ¼
Brown coated ¼
Completed and accepted..... ¼
Usual 35 days..... ¼
TOTAL COST, \$7209

Bond, \$3604.50. Sureties, Mary J. Boehrer and Henrietta Legault. Limit, 90 days. Forfeit, \$3. Plans and specifications filed.

Building Contracts Awarded

Alameda

No.	Owner	Contractor	Amt.
2469	Surf Beach	Strehlow	4800
2470	Roth	Roth	2000
2471	Suellhorn	Suellhorn	3000
2472	Montague	Montague	1400
2473	Starico	Almquist	1600
2474	Alexander	Praze	1413

TOWER STATION

(2469) CENTRAL AVE near Webster, Alameda. Tower station, fence and entrance.
Owner.....Surf Beach Amusement Co.
Architect...Edwin J. Symmes, Pacific Bldg., San Francisco.
Contractor...Strehlow, Freese & Petersen, Gough and Lombard, S. F.
COST, \$4800

DWELLING

(2470) SCHILLER & BUENA VISTA Aves., Alameda. One-story 5-room dwelling.
Owner.....Conrad Roth, 2117 Pacific Ave., Alameda.
Architect...None.
Day's work. COST, \$2000

DWELLING

(2471) NO. 478 CENTRAL AVE., Alameda. Two-story dwelling and store
Owner.....R. F. Suedlöhn, Premises
Architect...None.

Contractor..G. H. Suchbohn, 478 Central Ave., Alameda.

COST, \$3000

DWELLING

(2472) NO. 1052 CENTRAL AVE., Alameda One-story 5-room dwelling.
Owner.....F. P. Montague, 2911 E-16th, Oakland.

Architect...None.

Day's work. COST, \$1400

DWELLING

(2473) NO. 1221 NINTH, Alameda. One-story 5-room dwelling.
Owner.....C. T. Starico, 1223 9th, Alameda.

Architect...None.

Contractor..Almquist & Barbagelata, 464 42nd, Oakland.

COST, \$1600

NOTICE OF NON-RESPONSIBILITY.

ALAMEDA COUNTY.

Nov. 18, 1915—OAKLAND RACE-Track, Emeryville. The Mee Estate as to improvements on leased property
Nov. 13, 1915—PTN LOTS 21, 22 AND 25 Blk 2 Map Berkeley Square, Berkeley. Berkeley Development Co as to improvements on leased property

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED AMOUNT

Nov. 13, 1915—LOT 20 Map Luning Tract No. 2, Okd. Sarah Silverman to F C Forbes.....Nov. 8, 1915
Nov. 15, 1915—LOT 11 Map Sylvan Crest Tract, Okd. Hannah Goldstein to W A Whitaker.....Oct. 26, 1915
Nov. 15, 1915—LOT 1 Gorrill Glen Tract, Okd. A M Werum to W C Brown.....Nov. 15, 1915
Nov. 15, 1915—NE NEVIL 300 E 38th Ave, Okd. A H Nelmes to Wm H Sims.....Nov. 9, 1915
Nov. 15, 1915—LOT 26 Redivision Hillside Terrace, Okd. Louis O Hansen to whom it may concern.....Nov. 8, 1915
Nov. 15, 1915—PTN LOTS 31 AND 32 Blk "E" Revised Map Claremont Ave Tract, Okd. M Myrtle Chamberlain to George W Nunes.....Nov. 15, 1915
Nov. 15, 1915—LOT 12 Map Sylvan Crest Tract, Okd. Simon Hartman to W A Whitaker.....Oct. 26, 1915
Nov. 16, 1915—LOT 13 BLK "P" Harmon Tract, Bkly. Mrs E Madsen to Marshall Hopper.....Nov. 16, 1915
Nov. 17, 1915—W COLUSA AVE 70 N Posen Ave, Bkly. F R Peake Co to Ed A J and Carl E Anderson and C M Swanson.....Nov. 15, 1915
Nov. 17, 1915—LOT 37 Map Santa Fe Tract No. 17, Okd. Cora B Sanford to Standard Bldg Co.....Nov. 12, '15
Nov. 17, 1915—LOT 78 Sheet No. 2, Map Nova Piedmont, Piedmont. V N Strang to whom it may concern.....Nov. 15, 1915
Nov. 17, 1915—LOT 75 Sheet No. 2, Map Nova Piedmont, Piedmont. F N Strang to whom it may concern.....Nov. 15, 1915

LIENS FILED

ALAMEDA COUNTY.

Nov. 13, 1915—PLOT 12 AND PTN Plot 10, Boardman's Map Rancho Arroyo De la Alameda. Brode Iron Works vs Masonic Homes of California and Tos. (as recorded) H Days Sons\$191.43
Nov. 13, 1915—SE MABLE & DERBY S 34xE 80, Bkly. Charles Bolles vs F R Peake Co.....\$81.25
Nov. 13, 1915—E MABLE 34 S Derby S 34xE 80, Bkly. Chas Bolles vs F R Peake Co.....\$81.25
Nov. 13, 1915—W GROVE 40 N Channing Way N 28xW 90, Bkly. Chas Bolles vs F R Peake Co.....\$81.25
Nov. 13, 1915—W GROVE 73 N Channing Way N 40xW 120, Bkly. Chas Bolles vs F R Peake Co.....\$81.25
Nov. 13, 1915—NE DELAWARE 291.87 SE Peralta Ave SE 40xNE 100, Okd. Sunset Lumber Co vs William and Bessie Street.....\$378.59
Nov. 15, 1915—LOTS 64 AND 65 BLK 11, Regents Park Tract No. 4, Albany. C Sampietro, \$29.75; G F Thompson, \$75 vs John Larsen.....
Nov. 15, 1915—W 25 LOT 11 and E 12-6 Lot 12 Blk "G." Map Leonard Tract, Bkly. F W Posa Co vs J W Jewell\$150.29
Nov. 18, 1915—LOT 17 Map Kelton Terrace, Oakland. R M Barton vs A L Young.....\$235.18
Nov. 18, 1915—LOT 17 Map Kelton Terrace, Okd. Pacific Fuel & Bldg Material Co vs A L Young and R M Barton.....\$169.20

RELEASE OF LIENS

ALAMEDA COUNTY.

Nov. 12, 1915—LOTS 7 AND 8 BLK "J" Map Broadway Terrace, Okd. Redwood Manufacturers Co to Eva Vand Mynard Anslyn and W C Brown\$1227.16
Nov. 11, 1915—S TWENTY-SECOND 85 E San Pablo Ave E 45xS 129.25, Okd. F P Gallagher, \$171.06; J F Ellis as National Roofing Co, \$76 to Emily Brunsen et al.....
Nov. 10, 1915—N ORANGE AND SE Oakland Ave N 21.40 N 121.5 SE to pt distant 135 NE pt begin SW 135, Okd. Oscar Olsen to Abraham Fry\$261.50
Nov. 4, 1915—LOT 38 BLK 4, Hopkins Terrace No. 4, Bkly. A V Jory, \$25; Walter E Schott, \$480 to Chas R Roberts.....
Nov. 4, 1915—HOPKINS & E-35TH, Okd. C L Cummins to Robert Trost and The Altenheim.....\$530
Oct. 27, 1915—SE TWENTY-FIFTH & Grove S 60xE 90, Okd. R W Bartram to St. George Hall Ass'n....\$365
Oct. 22, 1915—NE 38.34 AND NE 107.73 Lot 14 Map Ardsley Heights, \$1130; Robert Howden, \$55; H L Manning, \$123.55 to R W Oakley and C J Plunkett.....

BUILDING CONTRACTS

SANTA CLARA COUNTY.

ALTERATIONS

NOS. 167-169 JULIAN, San Jose. Alterations.

Owner.....J. A. Lamerix, 869 S-11th St., San Jose.

Architect...None.

Day's work. COST, \$2000

COTTAGE

W LOCUST, bet. Grant and Virginia, San Jose. Four-room cottage.
Owner.....Antonio Sevente.

Architect...None.

Day's work. COST, \$1700

COTTAGE

E DELMAS, bet. Home and Brown Sta., San Jose. Four-room cottage.
Owner.....Romona Glasby, 371½ E-William St., San Jose.

Architect...None.

Contractor..H. A. Bridges 725 S-7th St., San Jose.

COST, \$1500

ADDITION

NO. 49 S-FOURTEENTH ST., San Jose. Four-room addition.
Owner.....L. E. Wood, Premises.

Architect...None.

Contractor..J. E. Perkins, SE 34th and E-Santa Clara, San Jose.

COST, \$1500

ADDITION

NO. 877 S-ELEVENTH ST., San Jose. Addition.
Owner.....A. H. Nolte, Premises.

Architect...None.

Day's work. COST, \$900

ALTERATIONS

NO. 26 S-SEVENTH ST., San Jose. Alterations.
Owner.....Dr. Crawford.

Architect...None.

Contractor..Harry H. Artman, 306 S-Second St., San Jose.

COST, \$800

ALTERATIONS

NO. 79 N-MARKET ST., San Jose. Alterations.
Owner.....Mrs. E. K. Yocco...

Architect...None.

Contractor..Wm. J. Moore, 75 Duane, San Jose.

COST, \$654

ALTERATIONS

TWELFTH AND REID STS., San Jose. Alterations.
Owner.....G. Muzzio, Premises.

Architect...None.

Day's work. COST, \$400

ADDITION

NO. 506 GREGORY AVE, San Jose. Two-room addition.
Owner.....Sal Bonviverno, 506 Gregory, San Jose.

Architect...None.

Contractor..G. Donali.

COST, \$400

COTTAGE

W EIGHTH between Virginia and Martha, San Jose. Five-room cottage.
Owner.....C. J. Ames, 215 Auzauala avenue, San Jose.

Architect...None.

Contractor..Sullivan & Leet, 418 So. 15th, San Jose.

COST, \$1900

COTTAGE

NO. 357 NORTH FOURTEENTH, San Jose. Five-room cottage.
Owner.....J. W. Carson.
Architect....Charles McKenzie, Bank of San Jose Bldg., San Jose.
Contractor...F. E. Keisling, 38 Coe avenue, San Jose.

COST, \$1500

OFFICE

S MARKET between Post and San Fernando, San Jose. Office.
Owner.....Elmer Bros. Nursery, 24th and William, San Jose.
Architect....None.
Contractor...Wm. Itheinhold, 346 North 12th, San Jose.

COST, \$560

COTTAGE

SAN CARLOS AND ROYAL, San Jose. Four-room cottage.
Owner.....G. Montanelli.
Architect....None.
Day's work.

COST, \$500

DWELLING

TWENTY-THIRD AND JEFFERSON, San Jose. Four-room house.
Owner.....Emily Moores, Premises.
Architect....None.
Day's work.

COST, \$500

ALTERATION

NO. 528 SOUTH SECOND, San Jose. Alterations.
Owner.....Mrs. S. C. Coyle, Prem.
Architect....None.
Day's work.

COST, \$500

ALTERATIONS

NO. 757 SOUTH THIRD, San Jose. Alterations.
Owner.....J. Garcaia, Premises.
Architect....None.
Contractor...H. A. Bridges, 725 South 7th, San Jose.

COST, \$450

COTTAGE

NO. 710 WEST SAN SALVADOR, San Jose. Four-room cottage.
Owner.....Tony Curce, Premises.
Architect....None.
Contractor...N. Lamari.

COST, \$1500

BUILDING CONTRACTS**SAN MATEO COUNTY.****STORE AND APARTMENTS**

LOT 27, BLK 2, Subdivision No. 1 of Crocker Estate Tract, San Mateo County. All work for two-story frame store and four-room apartments.
Owner.....W. N. Rettiger and Esther E. Rettiger, 1320 Union, S. F.
Architect....O. E. Evans & Co., 2861 Mission, S. F.
Contractor...O. E. Evans & Co., 2861 Mission, S. F.

Filed Nov. 17, '15. Dated Nov. 11, '15.
Frame up\$700
Brown plastered 700
Completed 700
Usual 35 days 700

TOTAL COST, \$2800

Bond, Sureties, Forfeit, none. Limit, 75 days. Plans and specifications filed.

MAUSOLEUM

CYPRESS LAWN CEMETERY, San Mateo County. All work for Mausoleum.
Owner.....F. W. Dohrmann, Jr., S. W. Stockton and Geary, S. F.
Architect....B. J. S. Cahill, 571 California, S. F.

Contractor...California Granite Company, Sharon Bldg., S. F.
Filed Nov. 16, '15. Dated Nov. 13, '15.
Granite work is set up.....\$3,000.00
All granite work is finished. 2,212.50
Usual 35 days 1,737.50

TOTAL COST, \$6,950

Bond, Sureties, Forfeit, none. Limit, 60 days. Plans and specifications filed.

RESIDENCE

PORTIONS OF LOTS 11 AND 12, BLK 11, Stanford Park, Map 2, San Mateo County. All work, including sidewalks, garage, runways and fences, for one and one-half story house.
Owner.....Rosa H. Lyon, San Mateo, Cal.

Architect....W. S. C. Stevens, San Mateo.
Contractor...W. S. C. Stevens and Lloyd Douglas, San Mateo, Cal.

Filed Nov. 17, '15. Dated Nov. 10, '15.
Roof on\$600
Plastered 600
Completed 600
Usual 35 days 600

TOTAL COST, \$2400

Bond, Sureties, Forfeit, none. Limit, 60 days. Plans and specifications filed.

DWELLING

LOT 1, BLK 102, South San Francisco. plat No. 1, South San Francisco, San Mateo County. All work for two-story frame dwelling.
Owner.....F. S. Dolley, South San Francisco, Cal.

Architect....None.
Contractor...Edward Jorgensen, South San Francisco, Cal.

Filed Nov. 17, '15. Dated Nov. 16, '15.
Foundation and roof completed. \$350
Brown plastered 350
Completed 350
Usual 35 days 350

TOTAL COST, \$1400

Bond, Sureties, none. Forfeit, \$5. Limit, 30 working days. Plans and specifications filed.

BUILDING

PORTION LOT 14, BLK 7, Burlingame Land Co. Burlingame, Cal. Excavation, concrete work, carpenter work, brick work, mill work, glazing, plastering, hardware, plumbing, sewerage, etc., for one-story and partly basement frame building.

Owner.....Louis P. Meaney, 519 Market, S. F.

Architect....H. Gellfuss & Son, 204 Maskey Bldg., S. F.
Contractor...M. E. Hopper & Sons, 90 Glen avenue, Oakland.

Filed Nov. 4, '15. Dated Oct. 28, '15
Frame up\$681
Brown coated 581
White coated 581
Completed 582
Usual 35 days 775

TOTAL COST, \$3100

Bond, \$1550. Sureties, John Meyer and August Schwall. Forfeit, \$5. Limit, 50 days. Plans and specifications filed.

BUILDING CONTRACTS.**MARIN COUNTY.****FRAME BUILDING**

YOLANDIO, San Anselmo. All work for one and one-half-story frame building.

Owner.....J. A. Byrnes, San Francisco
Architect....None.
Contractor...Wallace & Lanpher, San Anselmo.

Filed Nov. 17, '15. Dated Nov. 15, '15.
Frame up\$732
Brown coated 732
When completed 732
Usual 35 days 732

TOTAL COST, \$2928

Bond, \$1464. Surety, Massachusetts Bonding & Insurance Co. Limit, 90 days. Forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS.**CONTRA COSTA COUNTY.****FRAME COTTAGE**

LOTS 1 AND 2 BLK NO. 54 of Original Survey of Town of Martinez at SW Corner of Jones and Estudello Sts., Martinez. All work for one-story frame cottage or bungalow.

Owner.....Frank S. Soto, 712 Jones, Martinez.

Architect....None.
Contractor...Peterson Bros., Martinez.

Filed Nov. 6, '15. Dated Nov. 4, '15.
Frame up\$412.50
Outside plastering completed. 412.50
Work completed 412.50
Usual 35 days 412.50

TOTAL COST, \$1650.00

Bond, none. Limit, within 30 days. Forfeit, none. Plans and specifications filed.

BRICK BUILDING

LOT NE MAIN AND CASTRO STS., Martinez. All work for one-story brick building, as plans and specifications by Oser Bros.
Owner.....Mrs. Simon Blum, 515 Las Juntas St., Martinez.

Architect....None.
Contractor...W. H. Ecker.
Filed Nov. 5, '15. Dated Nov. 5, '15.
Brick work to ceiling joists. \$2250.00
Plastering completed 850.00
Upon acceptance 2888.75
Usual 35 days 1996.25

TOTAL COST, \$7985.00

Bond, \$3992.52. Surety, Southwestern Surety Insurance Co. Limit, within 50 days. Forfeit, none. Plans and specifications filed.

FRAME BUNGALOW

LOT IN MARTINEZ. All work except electric work and supplying same for one-story frame bungalow.

Owner.....Christ Koch, Martinez.
Architect....None.
Contractor...Sam L. Gilroy and Wm. Mattson.

Filed Nov. 3, '15. Dated Aug. 23, '15.
Frame up 25%
Roof shingled & plaster on.... 25%
Building finished 50%

TOTAL COST, \$1000

Bond, limit, forfeit, none. Plans and specifications filed.

COMPLETION NOTICES.**MARIN COUNTY.**

RECORDED ACCEPTED
Nov. 13, 1915—SAN RAFAEL. Antonio Soldavini to whom it may concern..... Completed —

BUILDING CONTRACTS**FRESNO COUNTY.**

DWELLING
LOTS 19 AND 20, Smith Tract, Fresno. Dwelling.
Owner.....Gede & Gede, 451 Poplar Ave., Fresno.
Architect...None.
Contractor..Gede & Gede, 451 Poplar Ave., Fresno.
COST, \$2750

BRICK BUILDING

75 FEET LOTS 27 TO 32 BLK 144, Fresno. All work for one-story brick building.
Owner.....James Porteous, 1041 T St., Fresno.
Architect...E. Mathewson, 206 Forsyth Bldg., Fresno.
Contractor..J. A. & S. E. Manning, 846 Franklin St., Fresno.
Filed Nov. 16, '15. Dated Nov. 15, '15.
Structural steel in place & brick work up one story.....\$1320
Plastered.....1320
Completed.....1320
Usual 35 days.....1320
TOTAL COST, \$5250
Bond, \$2640. Sureties, Mary A. Huber and Tessie H. Manning. Limit, 60 working days. Forfeit, \$10. Plans and specifications filed.

STORE

LOTS 20 AND 21 BLK 92, Fresno. All work for store.
Owner.....F. J. Dow, 1010 Butler St., Fresno.
Architect...Bowen & Davis, 207 McKenzie Bldg., S. F.
Contractors..G. C. Cannon, 312 Abby St., Fresno.
COST, \$4000

ADDITION

NEAR TULARE ST., depot building, Fresno. All work except roofing and electrical work for addition to depot.
Owner.....Wells Fargo & Co.
Architect...Jas. H. Humphreys, Wells Fargo Bldg., San Francisco
Contractor..C. W. Smith.
Filed Nov. 16, '15. Dated Nov. 16, '15.
On 15th and 30th of each month 75%
Usual 35 days.....Balance
TOTAL COST, \$2516
Bond, \$1260. Sureties, J. S. Tannahill, A. M. Loper and J. A. Webster. Limit, 30 working days. Forfeit, none. Plans and specifications filed.

DWELLING

LOTS 1 TO 4 BLK 4, Riverdale Add'n., Fresno. All work for dwelling.
Owner.....J. R. Church, 1221 U St., Fresno.
Architect...None.
Day's work.....
COST, \$1200

THEATRE

LOT 27 BLK 72, Fresno. Theatre.

Owner.....Alfred and Adolph Kutner.
Architect...None.
Contractor..Riggins & Palmer.
COST, \$4000

LIENS FILED.**FRESNO COUNTY.**

RECORDED AMOUNT
Nov. 17, 1915—LOTS 33 TO 36 SEC 17-13-18, Fresno. Geo E Evans, \$143; F O Roberts, \$156 vs H J Goudge, J E Blenkiron and Edward Haag.

COMPLETION NOTICES.**FRESNO COUNTY.**

RECORDED ACCEPTED
Nov. 12, 1915—LOTS 34 AND 35 BLK 1, Fortcamp Add'n No. 2., Fresno. Mary J Caldwell to whom it may concern.....Nov. 3, 1915

NOTICE OF NON-RESPONSIBILITY.**FRESNO COUNTY.**

Nov. 13, 1915—E ½ LOT 28 in Sec 5 13-29, Fresno. Bullard Co as to improvements on leased property

BUILDING CONTRACTS.**SACRAMENTO COUNTY.**

CAFETERIA
NO. 1116 NINTH, on N ½ Lot 5 Blk K, L, 8th and 9th Sts., Sacramento. One-story denison inter-locking tile building, cafeteria.
Owner.....George W. Peltier, 4th and J Sts., Sacramento.
Architect...None.
Contractor..Ira C. Boss, Sutter Club, Sacramento.
COST, \$19,500

REPAIRS

NO. 3931 J ST., on S ½ Lot 15 McIntyre Tract, Sacramento. Repair fire damage in residence.
Owner.....P. J. Ford, Premises.
Architect...None.
Contractor..G. Edward Hook, 718 18th St., Sacramento.
COST, \$2000

REMODEL BUILDING

ORANGE AVE, bet. 30th and 31st., on Lot 7 Blk 24, South Sacramento. Remodel building into (2) flats.
Owner.....H. M. Fields, 3028 Orange, Sacramento.
Architect...None.
Day's work.....
COST, \$700

CAFETERIA

NINTH ST., bet. K and L Sts., Sacramento. Excavating, concrete, brick and tile work for one-story cafeteria.
Owner.....Geo. W. Peltier, 4th and J Sts., Sacramento.
Architect...None.
Contractor..Ira C. Boss, Sutter Club, Sacramento.
Sub-Contractor..Henry Feinmigan.
Filed Nov. 13, '15. Dated Nov. 11, '15.
COST, \$2740

FRAME FLATS

NO. 1517 TWENTY-EIGHTH on N ¼ Lot 8, O, P, 28th and 2th Sts., Sacramento. Two-story 9-room and 2 baths frame flats.

Owner.....W. B. Ellis, 502½ 20th St., Sacramento.
Architect...None.
Day's work.....
COST, \$4500

ALTERATIONS

NO. 1800 K ST., on Blk K, L, 18th and 19th Sts., Sacramento. Remove fire escapes and build fire runway in Sacramento High School.
Owner.....Board of Education.
Architect...None.
Contractor..Walter J. Mathews.
COST, \$500

REPAIRS

NO. 700 K ST, on lot L, J-K, 7th and 8th, Sacramento. Install iron grating and make general repairs to U. S. post office building.
Owner.....United States Government.
Architect...None.
Contractor..William Murcell. Ochsner Bldg., Sacramento.
COST, \$3500

NO. 2709 O ST, on W ½ of lot 7, blk N-O, 27th-28th, Sacramento. Raise and remodel residence.

Owner.....Mrs. S. Sprague.
Architect...None.
Contractor..W. R. Saunders, 2810, I, Sacramento.
COST, \$1250

CORNER THIRTY-SECOND AND SACRAMENTO, lot 16, blk 5, South Sacramento. All work for frame and brick church building.

Owner.....Rev. W. F. Ellis, 2519 32nd, Sacramento.
Architect...Shea & Lofquist, Bankers' Investment Bldg., S. F.
Contractor..Barton & Hilp, 1009½, 9th Sacramento.
COST, \$12,618

Filed, Nov. 17, '15. Dated, Nov. 17, '15.

REMODEL

NO. 1300 J ST, on N 110 ft of lot 1, blk J-K, 13-14, Sacramento. Remodel into public garage.
Owner.....Phoenix Milling Co., corner 12th and C, Sacramento. Geo. C. Davis, lessee.
Architect...None.
Contractor..Geo. C. Davis.
COST, \$1000

BUILDING CONTRACTS**SAN JOAQUIN COUNTY.**

LODGE BUILDING
NE CALIFORNIA AND WEBER AVE., Stockton. All masonry work for brick store and lodge building.

Owner.....P. A. Jordan, Care Dodge & Sweeney, Oakland, or National Cash Register, Stockton.
Architect...F. E. Warner, H. C. White and R. S. Chew, San Joaquin Bank Bldg., Stockton.
Contractor..A. P. Brady, 822 Clayton, San Francisco.
Filed Nov. 10, '15. Dated Nov. 8, '15.
Monthly payments of..... 75%
36 days after.....Balance
TOTAL COST, \$5550

Pond, \$2775. Surety, The Aetna Accident & Liability Co. Limit, forfeit, none. Plans and specifications filed.

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over door, when Bracket will be sent to fit.

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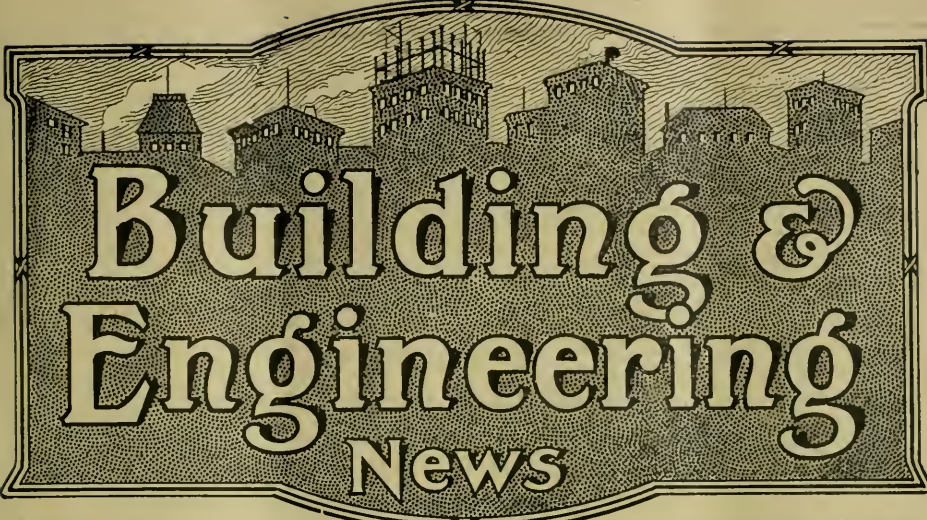
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George Nelson, C. E., Editor.

Devoted to the Engineering, Architectural, Building and Industrial Activities of the Pacific Coast.

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Publisher and Proprietor.
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560 Mission Street.
Telephone—Douglas 2372.

W. D. Manville, News Editor.

December 1, 1915

Leading Articles in this Issue:

Have Cracksmen Abandoned Attempts To Force Bank Vaults?

By S. Forry Laucks, Vice President and General Manager York Safe and Lock Co., York Pa.

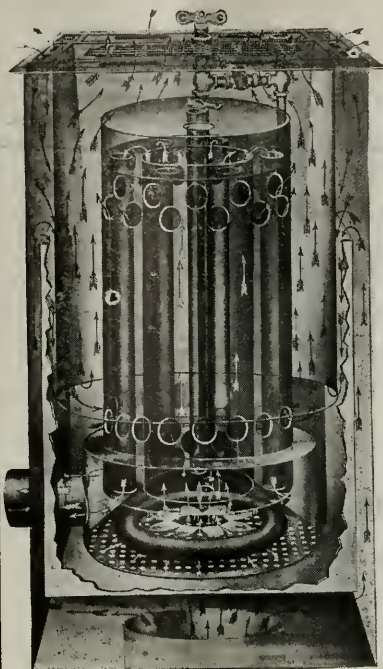
Over Three Million Tons of Pig Iron In October:

Alloy Steels.

By George L. Norris, Pittsburg, Pa.

Railroad Commission News.

Water Commission News.



FLOOR FURNACE STYLE B
Size 14½ in. square by 2 ft. high
Has 8-in. Fresh Air Intake with Damper.
Has 3-in. Outlet Vent
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A. Floor Furnace with fresh air intake on side. For use in buildings having sufficient fresh air circulation under same. For artificial gas only.

B. Floor Furnace with fresh air intake at bottom. For use in buildings where it is desirable to obtain air directly from outside of cellar or basement. For artificial gas only.

NOTE—Style A and B are built alike except for position of fresh air intake.

C. Wall Furnace with fresh air intake at bottom. For artificial gas only.

D. Wall Furnace with fresh air intake at back. For artificial gas only.

NOTE—Style C and D are built alike except for position of fresh air intake.

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Scientific—Built like a real hot air furnace reduced in size.

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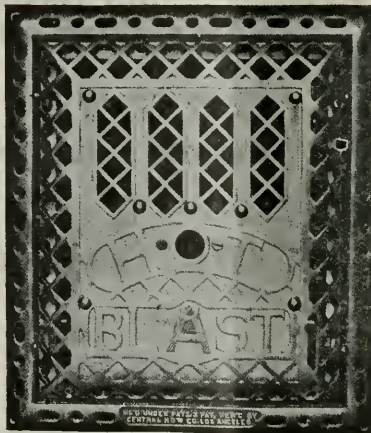
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Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
of the Pacific Coast.

Issued Weekly, \$3.00 per year

San Francisco, December 1, 1915

Fifteenth Year, No. 48

Have Cracksmen Abandoned Attempts To Force Bank Vaults.

By S. Forry Laucks, Vice-President
and General Manager York Safe
and Lock Co., York, Pa.

No properly constructed bank vault, not one, has, for many years past, been forcibly entered by burglars whatever the measure of their skill or the means employed.

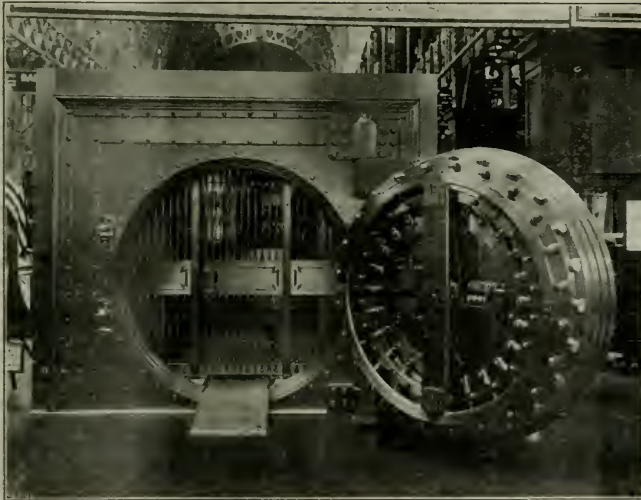
Surprising as this assertion may appear, in view of the prevalent opinion to the contrary, it is literally true and for the one qualification that it applies alone to bank vaults scientifically constructed and of the first class.

It is frankly admitted that public opinion inclines to the belief that no bank vault has ever been, or can be, built that will successfully withstand

If, then, we persist in cherishing such impressions, the possession of which we cannot explain or justify, and without subjecting them to the ordeals of investigation and proof, it can only be because we are indifferent to the truth, or that we lack the initiative and mental energy to descend to the "Bottom of the well," where, we are told, "lies Truth" awaiting discovery by the earnest seeker and indefatigable toiler. Moreover, and assuming that we have endeavored to ascertain the truth as to any matter of alleged fact, we should

taken, belief to the contrary must be ascribed to an amazing credulity as to the burglar's reputed skill and to an utter absence of knowledge of the mechanical devices and processes by which bank and safe deposit vaults have, by their makers, been brought to their present state of impregnability.

Nor is the public's indifference and ignorance in this regard surprising when it is reflected that it is not the masses who purchase these vaults; and for which reason, doubtless, the public deems itself to be without interest in the subject and without any



an assault by expert cracksmen; but popular opinion is more frequently wrong than right, and especially so as to matters with all the phases of which the public is not accurately and fully informed.

We sometimes, and innocently, mistake mere mental impressions, subconsciously acquired, for opinions—but there usually comes a time, and inevitably if our perceptive faculties are not willfully restrained, when the failure of these impressions to comport with the established order of things, or the logic of passing events, becomes acutely obvious.

It is not true that all bank vaults can be forcibly looted by cracksmen and the prevalent, though utterly mis-

incentive to ascertain whether such structures are or are not actually burglar-proof. It is that relatively small part of the community, namely, the bankers, and individuals and corporations who, as custodians of funds and securities intrusted to them by others must select and provide means for their safe keeping. The incentive to ascertain the relative merits of differently constructed types of vaults is theirs, for theirs is the responsibility for the final determination and selection. No one better than the writer knows with what conscientious care and intelligent discrimination

numerous of the leading bankers of the country have approached and performed this duty.

Many thousands of dollars, in the aggregate, are annually expended for security vaults—single contracts sometimes running into a quarter of a million of dollars. It is absurd to pretend to believe, and willfully wrong to assert, that the expenditure of such huge sums fails of its purpose to provide absolute protection for moneys and treasure against the peradventure of theft by burglars; or their destruction, whether by the agencies of fire, or riotous attack or of mob violence.

It is manifestly and inexorably wrong to seek to impair the faith of bank and safe deposit patrons in the impregnability of bank and safe deposit vaults—if there be no warrant for such impairment—and yet, that very result is well nigh unavoidable if self-constituted oracles—not caring or seeking to know the truth—and not knowing it—are permitted, without rebuke, to persist in the practice of proclaiming broadcast their impressions—acquired they know not when or how—that "There's nothing that's burglar-proof."

To all who desire to be accurately informed as to what constitutes a burglar-proof bank or safe deposit vault, the sources of information are easily accessible and ample. No financial institution or safe deposit company, if possessed of the proper type of vault, presents an inspection by the public of that particular feature of its equipment. On the contrary such inspection is usually invited and appreciated.

In like manner, reputable vault builders invite and welcome the most searching investigation by the public into their methods of construction, and into the character and qualities of material employed. There is no desire on the part of its designer and builder, and no occasion, if he be honest in his intentions and capable in practice, to make a mystery of the structural features of a bank or safe deposit vault any more than there is, or should be, any wish or need to obscure the processes by which great bridges and towering skyscrapers are created.

The thousands upon thousands of bank depositors and patrons of safe deposit companies; the officials and shareholders in financial institutions; and the corporations engaged in vault building, with their thousands of skilled artisans, all have a community interest in progressing that particular mechanical art to the highest possible plane of efficiency.

It is the constant policy of my company to promote and conserve that interest and to bring the general public to a wider and better knowledge of what has been and is being accomplished in that line of mechanical endeavor. And it was in furtherance of that policy, more than from any other consideration, that my company sent seven carloads of safes and vault work across the continent for display at the Panama-Pacific International Exposition.

Whether the exhibit has created a greater popular interest in, and promoted the public knowledge of, scientific vault construction is better told by an editorial entitled:

"PRIZE BANK VAULTS AND SAFES. The Big and Remarkably Varied Exhibit That Won the Grand Prize."

which appeared in the September, 1915, issue of the *Cost Banker*, San Francisco; and from which we quote as follows, and in part only:

"One of the largest and, admittedly, one of the most complete and elaborate of the many thousands of exhibits at the Exposition, occupying an entire block in the Palace of Machinery, and a floor space of 3,300 square feet, the display by the York Safe & Lock Co. is of a character and upon a scale and at a cost never before attempted at any international exposition at home or abroad by any manufacturer of safes and vaults.

"The value of the company's products displayed by the York Safe & Lock Co. is approximately \$100,000. In addition, the cost of installing and maintaining the exhibit has exceeded \$30,000—the freight charges alone amounting to over \$8,000.

A surprising measure of interest is being manifested in this company's exhibit, but it is the massive bank and safe deposit vault erected within the exhibit space precisely as such vaults are built for banks and other financial institutions, with no single detail of construction or equipment having been omitted, that is proving to be the crowning feature of the display and a sensational interest to visitors.

"This is especially true of visitors from foreign parts who are frank to say that they had never before seen anything approaching this vault's wondrous mechanism and the surpassing beauty of its finish.

"It is of interest to note, and gratifying to record, in connection with this exhibit, that the York Safe & Lock Co. attained the highest honors at the Panama-Pacific International Exposition, its entire line of safes and vaults having made, under the rules of the international jury of awards, a perfect score (100 points out of a possible 100) and thereby winning the Grand Prize."

While the limits of this article do not permit us to describe or to discuss in detail the technical engineering and constructive features of modern vault building of the first class, we ought, perhaps, to make brief reference to the general features of the completed product and for this purpose the writer has selected the vault, now being exhibited at the Panama-Pacific International Exposition by his company, and an illustration of which accompanies this article.

This particular vault is twenty-four feet long, twelve feet wide, and ten feet high.

A concrete foundation bed, four feet thick, sustains its weight of 310,396 pounds.

The circular entrance door—eighty inches in diameter—though weighing sixteen tons, can be moved with one finger, so exquisitely is it balanced on its specially designed ball bearing hinges.

The massive bolt-work by which this door is locked—when closed—the ingenious operating mechanism, and its control by combination and time locks, have proved never-ending sources of astonishment and delight to visitors who daily through the exhibit space,

A rear entrance to this vault, for

emergency use only, is an exact counterpart of the main entrance except that the diameter of its opening is but twenty-two inches.

Among the several metals of which these doors are composed are "non-burnable" composite plates which can not be drilled, or penetrated with the electric arc or the oxy-acetylene flame. This metal was invented, patented, is owned by and used exclusively by the York Safe & Lock Co.

The walls of the vault are of concrete in which is embedded a heavy drill-proof steel grille (erected on the foundation before the concrete is poured.) In addition, the interior walls, floor and ceiling are lined throughout with successive layers of open-hearth and five-ply welded drill-proof steel plates all bolted together and secured with steel angle frames.

Entrance to the vault, after great circular door has been opened, is had through the gate of a heavy grille of beautifully polished steel.

The interior of the vault is divided by a second grille and gate of polished steel into two compartments—one for the use of the bank, and the other for the safe deposit patrons.

The safe deposit section contains many hundreds of safe deposit boxes, of varying sizes. These boxes are made of the finest grade steel, with heavy steel doors mounted on polished brass hinges and with bronze case locks, fitted with both the deposit and master key tumblers. Each deposit box has an interior metal bond-box, handsomely finished. The steel doors to all the safe deposit boxes are finished by first being polished and coppered and then nickel plated, buffed and jiggered.

The bank department of the vault is completely equipped with Reserve and Collateral Safes, Money Safes, Tellers' Chests, Coin Lockers, etc., together with units of metal filing devices, such as roller hook shelves, cupboards, check, deposit slip, document and letter files, all of the latest pattern, style and finish.

The ceiling of the vault is finished with steel plates and mouldings, forming panels, all draw filed and highly polished.

The interior is electric lighted, with a switch at the vault entrance, and the floor is tiled throughout with hexagon vitrified tile.

Both the Main and Emergency entrance doors, their goose-neck crane hinges, bolt-work systems, frames for the glass doors protecting the bolt-work and locks, and the architraves are drawn and beautifully polished. The pressure system, hocks and housings are nickel plated and buffed, and the six-spoke pilot wheel by which they are actuated is equipped with polished hard rubber grips, as is the six-spoke pilot wheel which projects and retracts the locking bolts.

If that which is here written shall serve to incite an interest, where none has heretofore existed; and if it creates a desire to be better informed, and the determination to be possessed of the truth as to bank vaults, and their capacity to successfully resist every device designed and employed to overcome them, it will have not only served its avowed purpose but will have justified the time given by the reader to its perusal.

Over Three Million Tons Of Pig Iron In October.*

For the first time in the history of the industry, pig-iron production in the United States passed the 3,000,000-ton mark in October. At the opening of the month statistics showed that production was proceeding at the rate of 36,000,000 gross tons a year. Further additions to the list of active furnaces were made as the month advanced. Returns received largely by wire show that the output of coke iron in the 31 days of last month reached the altogether unprecedented figure of 3,125,491 tons, or 102,822 tons a day against 2,852,561 tons in September, or 95,085 tons a day. Thus for the first time the daily output of pig iron runs into six figures. The steel companies produced at the rate of 73,595 tons a day, their total for the month being 2,281,456 tons, or more than twice that of January. The merchant furnaces

also gained, their daily rate being 26,227 tons, against 24,108 tons in September.

There was a net gain in active furnaces last month, or from 268 to 276 furnaces, and the capacity active November 1 was 101,819 tons a day, against 97,535 tons a day on October 1. Estimating charcoal iron, pig iron was

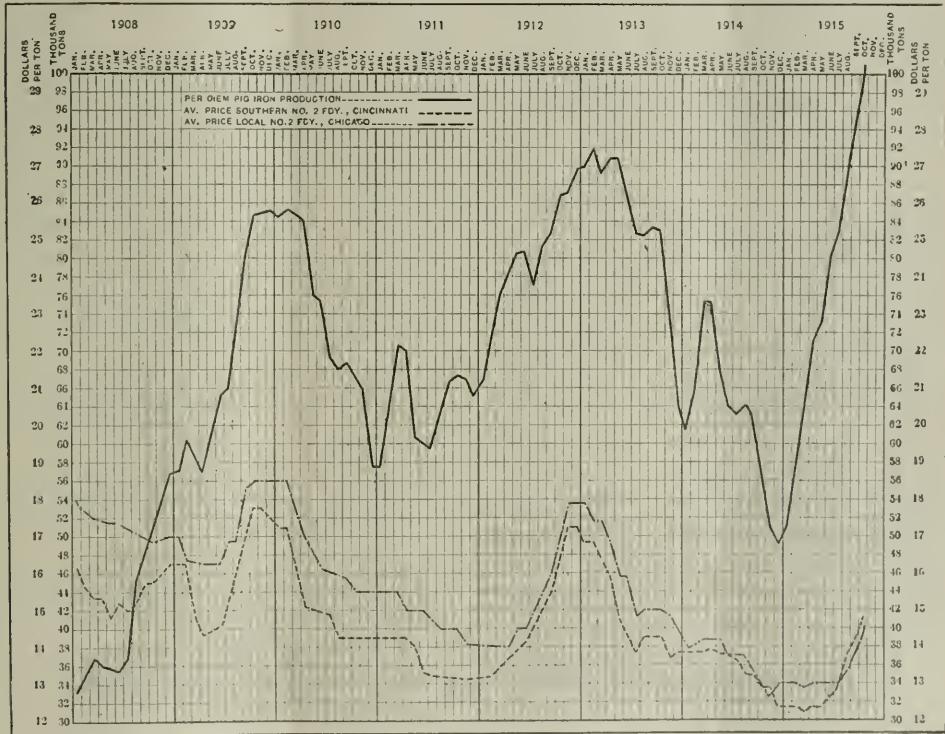
being made on November 1 at the prodigious rate of 37,500,000 tons a year, against a rate of 36,000,000 tons a year one month previous.

Daily Rate of Production.

The daily rate of production of coke and anthracite pig iron by months, from October, 1914, is as follows:

Daily Rate of Pig-Iron Production by Months—Gross Tons.

	Steel works	Merchant	Total
October, 1914	11,026	16,335	27,361
November	35,305	15,306	50,611
December	33,381	15,515	48,896
January, 1915	35,998	15,661	51,659
February	14,192	15,621	29,813
March	20,056	16,759	36,815
April	32,804	17,716	50,520
May	54,655	18,360	73,015
June	59,022	20,339	79,361
July	62,895	19,796	82,691
August	67,801	21,865	89,666
September	70,977	24,108	95,085
October	73,595	26,227	100,822



The New High Mark in American Pig Iron Output—A Daily Rate of 100,822 Gross Tons.

Diagram of Daily Average Production by Months of Coke and Anthracite Pig Iron in the United States from Jan. 1, 1908, to Nov. 1, 1915. Also Monthly Average Prices of Southern No. 2 Foundry Iron at Cincinnati and Local No. 2 Foundry Iron at Chicago District Furnace.

*The Iron Age, Nov., 1915.

Production of Steel Companies

Returns from all furnaces of the United States Steel Corporation and the various independent steel companies show the following totals of product month by month. Only steel-making iron is included in the figures below, together with ferromanganese and spiegeleisen. These last, while stated separately, are also included in the columns of "total production,"

The net gain of eight in the number of active furnaces last month is represented by ten furnaces blown in and two furnaces blown out or banked. Furnaces blown in include Robeson and one Bird Coleman in the Lebanon Valley, one Edgar Thomson in the Pittsburgh district, Ella in the Shenango Valley, Newburgh in northern Ohio, Belmont in the Hanging Rock district, Bessie in the Hocking Valley, Max Meadows in Virginia, one Ashland in Kentucky and one Bessemer in Alabama.

Among furnaces blown out were Lawrence in the Hanging Rock district (banked) and La Follette in Tennessee.

Diagram of Pig Iron Production and Prices.

The fluctuations in pig iron production from January, 1908, to the present time are shown in the accompanying chart. The figures represented by the heavy lines are those of daily average production, by months, of coke and anthracite iron. The two other curves on the chart represent monthly average of prices of Southern No. 2 foundry pig at Cincinnati and of local No. 2 foundry iron at furnace at Chicago. They are based on the weekly market quotations of The Iron Age. The figures for daily average production, beginning January, 1908, are as follows:

The following table shows the daily capacity in gross tons of furnaces in blast Nov. 1 and Oct. 1 by districts:

Coke and Anthracite Furnaces in Blast.					
Location of furnaces	Total Number of stacks	Nov. 1		Oct. 1	
		Number in blast	Capacity per day	Number in blast	Capacity per day
New York:					
Buffalo	19	16	5,986	16	5,766
Other New York	7	3	632	3	622
New Jersey	7	1	119	1	268
Pennsylvania:					
Lehigh Valley	22	12	3,526	12	3,352
Spiegel	2	2	294		204
Schuylkill Valley	15	8	2,762	2	1,470
Lower Susquehanna	7	1	1,353	1	1,095
Lebanon Valley	10	3	536	1	249
Pittsburgh District	52	30	21,888	19	23,021
Ferro	4	2	323	3	362
Shenango Valley	19	17	5,710	16	5,607
Western Pennsylvania	21	16	5,579	16	5,121
Ferro	1	1	56	1	56
Maryland	3	2	851	2	888
Ferro	1	1	114	1	113
Wheeling District	17	10	3,850	10	4,115
Ohio:					
Mahoning Valley	25	22	10,310	22	10,185
Central and Northern	24	18	7,765	17	7,148
Hocking Val & Hanging R'k.	15	9	1,110	8	1,281
Illinois and Indiana	25	1	1,186	30	14,590
Ferro	1	62	1		0
Mich., Wis., and Minn.	10	7	1,971	7	1,865
Colorado and Missouri	7	2	752	2	658
The South:					
Virginia	24	7	925	6	725
Kentucky	5	3	622		420
Alabama	46	24	6,895	23	6,160
Tennessee	20	5	515	6	640
Total	416	276	101,819	268	91,535

Daily Average Production of Coke and Anthracite Pig Iron in the United States by Months Since Jan. 1, 1908—Gross Tons.

	1908	1909	1910	1911	1912	1913	1914	1915
January	33,948	37,475	84,148	56,752	66,361	90,172	67,458	51,639
February	31,163	60,976	85,616	64,090	72,442	92,269	67,808	51,639
March	39,619	59,232	82,159	70,066	71,591	92,269	67,458	51,639
April	39,619	59,232	82,159	70,066	71,591	92,269	67,458	51,639
May	37,602	60,453	77,102	61,003	69,841	91,759	73,665	70,501
June	36,144	64,656	75,516	59,585	81,258	87,419	73,665	70,501
July	39,287	67,192	69,305	55,811	77,758	82,601	63,150	82,691
August	39,287	67,192	69,305	55,811	77,758	82,601	63,150	82,691
September	47,300	79,507	64,476	62,150	81,016	82,601	63,150	82,691
October	50,534	83,856	67,520	67,811	86,722	82,601	63,150	82,691
November	51,595	81,917	63,659	66,618	87,497	71,123	50,611	50,611
December								

The Record of Production

The Record of Production.

Production of Coke and Anthracite
Since Jan. 1, 1911—Gross Tons.

	1991	1992	1993	1994	1995
January	1,750,826	2,057,911	2,493,321	1,888,670	1,691,421
February	1,774,609	2,100,513	2,581,337	1,888,670	1,691,421
March	2,171,111	2,405,478	2,956,563	2,083,534	1,888,670
April	2,371,111	2,405,478	2,956,563	2,083,534	1,888,670
May	1,893,456	2,131,436	2,581,337	1,888,670	1,691,421
June	1,757,566	2,440,736	2,956,563	2,083,534	1,888,670
July	1,753,068	2,440,736	2,956,563	2,083,534	1,888,670
August	1,956,637	2,440,736	2,956,563	2,083,534	1,888,670
September	1,956,637	2,440,736	2,956,563	2,083,534	1,888,670
October	2,102,147	2,440,736	2,956,563	2,083,534	1,888,670
11 months	19,258,068	22,607,839	26,507,221	20,515,654	18,342,136
November	2,043,470	2,380,851	2,433,122	1,918,752	1,691,421
December	2,043,470	2,380,851	2,433,122	1,918,752	1,691,421
Total	22,331,711	25,439,190	30,724,101	23,049,152	20,033,978

ALLOY STEELS.*

By George L. Norris, Pittsburgh, Pa.

Steel can broadly be defined as an alloy of iron and carbon that can be forged and rolled. From expediency and necessities of manufacture, certain impurities beneficial or otherwise are present, but not in sufficient amounts to materially alter the characteristics of the pure alloy of iron and carbon.

Under this definition, steel, or as it is now often referred to, carbon steel, is usually within the following maximum composition:

Carbon, 1.50%.
Manganese, 1.00%.
Silicon, 0.35%.
Phosphorus, 0.05%.
Sulphur, 0.05%.

An "alloy" steel is steel alloyed with one or more metals, in sufficient amounts to influence or change the characteristics of steel, and still possible of forging or rolling.

The usual steel alloying metals are manganese, silicon, nickel, chromium, tungsten and vanadium. As these metals will all alloy with each other, it is evident that it is possible to obtain a great variety of alloy steels.

Steel containing upwards of 1.50% manganese is not commonly considered an alloy steel, although this percentage of manganese undoubtedly has some effect on the characteristics of steel. This is due no doubt to the fact that manganese is always present in steel.

The alloy steels are usually divided into two groups: "ternary" steel, with one metal alloyed, and "quaternary" steels, with two metals alloyed. The more complex alloy steels are practically limited to high-speed tool steels.

The general characteristics of alloy steels are high elastic limit and great strength, combined with a high degree of toughness as compared with the carbon steel with which they are alloyed. The strength and hardness can be enormously increased by heat-treatment (quenching and tempering) and still have the steel retain great toughness.

Alloy steels are not as a rule placed in service in the condition as forged or rolled. The forging and rolling temperatures are usually so high that the steel requires heat-treatment to refine the grain and develop the exact combination of strength, hardness and toughness desired. It is frequently necessary to anneal after forging in order to facilitate machining operations. This, of course, necessitates subsequent heat-treatment.

Most of the alloy steels are of medium or low carbon content. The corresponding simple or carbon steels are only slightly or moderately improved in strength by heat-treatment.

The use of alloy steels in cutting tools dates back nearly a hundred

years, although it was not until after 1850 or 1860 that alloy steels for this purpose became firmly established.

With the advent of iron-clad warships began the struggle for supremacy between projectile and armor plate that has been so fruitful in the development of alloy steels. Chromium, nickel and nickel-chromium steels are largely the result of this struggle.

The publication in 1888 by Hadfield of the results of an extensive research of the alloys of manganese and steel, which resulted in the discovery of a remarkable new alloy steel, marks a period of active investigation into the effect of other metals on steel, the most important of these were the investigations on nickel steels by Jas. Kiley in 1889, which demonstrated that a mild open-hearth steel, such as used for structural, general forging and machinery purposes, when alloyed with 3% or 4% nickel had considerable higher elastic limit and tensile strength, with practically the same or greater ductility. One of the earliest and most extensive applications of nickel steel was for armor plate. For many years nickel alloy steel was the principal alloy steel in use.

During this same period referred to, Hadfield made investigation of the effects of silicon on steel, and also a very complete study of chromium steels, which for some time had been used in a small way for springs and special forgings, but principally for tools and armor piercing projectiles.

The development of high-speed steel about 1900, making it possible to readily machine heat-treated alloy steels, and the advent of the automobile with its demand for superior steel, have brought about the present extensive use and development of alloy steels.

The automobile industry, with its demand for steel of high strength and durability, has been undoubtedly the most important factor in the development of commercial alloy steels, and the largest consumer. Alloy steels are used extensively for transmission gears and shafting, axles, steering levers and spindles, springs, chassis frames, crank shaft, cam shaft, connecting rods, valves and many other parts of automobiles.

They are also extensively employed in forgings for high-speed engines, marine engines, locomotives, electrical machinery, mining machinery and other mechanical engineering structures.

The use of alloy steels in bridge construction has been limited, but there is undoubtedly a field in long span bridges for an alloy steel of high strength that can be used in the condition as rolled, preferably, or at most with a simple annealing.

Coincident and having a marked influence on the development of alloy steels, was the discovery of large de-

posits of vanadium ore in Peru, thus assuring a source of supply at a reasonable cost of this rare metal, which is the most powerful yet discovered for alloying with steel, that is, in small amounts.

The most important of the engineering or constructional alloy steels are those containing nickel, chromium and vanadium, singly or in combination. With all these steels it is possible, through heat treatment, to obtain a tremendous range in strength, in round numbers varying from 100,000 to 250,000 pounds per square inch, depending also, of course, upon the size of the section.

It is not possible nor within the province of this paper to go deeply into the technology of alloy steels, but only to briefly describe the principal alloy steels and their characteristics.

Manganese Steel.

This steel usually contains 10% to 12% of manganese and approximately 1% of carbon. It is practically non-magnetic and has a peculiar hardness to which it owes a remarkable resistance to abrasion. It is extremely difficult to machine. It has high strength and toughness, but relatively low elastic limit. With care it can be forged and rolled. It has found its principal application in castings for crushing and grinding machinery and railroad crossings. Manganese steel has the peculiar property of being toughened and softened by quenching in water, resembling copper in this respect. All manganese steel castings are subjected to this treatment to remove brittleness.

Silicon Steel.

There are two types of silicon steel, one of which has found some application as an engineering steel. This steel, frequently called silico-manganese steel, is generally covered by the following limits of composition:

Carbon, 0.15% to 0.65%.
Silicon, 1.50% to 2.00%.
Manganese, 0.50% to 0.80%.

The manganese is normal, contrary to what is indicated by the name. The principal application of this steel is for automobile springs, and to some extent for gears. It fibers readily through heat treatment, and is very brittle in the direction at right angles to rolling. It is very sensitive to heat-treatment, and a relatively small variation in annealing temperature after quenching has a strong effect on the results obtained.

The other type of silicon steel contains 2% to 5% silicon, is low in carbon and manganese, and is extensively used for electrical transformer sheets on account of its high permeability and electrical resistance. Structurally, it is weak and has no constructional value.

Nickel Steel.

Nickel alloy steel has been in all probability the most important of the alloy steels in engineering standpoint, as the low and medium

*A paper presented at the International Engineering Congress, San Francisco, 1915.

carbon steel with 3% to 4% of nickel, commonly known as $3\frac{1}{2}\%$ nickel steel. The presence of manganese in nickel steel is very essential, as it has a marked effect on the mechanical properties. The amount of manganese should range from 0.50% to 0.80%. This steel has been extensively used since its introduction in 1889, and is a good all-round engineering and structural steel with considerably higher elastic limit and tensile strength than the corresponding carbon steel, and with practically the same degree of ductility. The low-carbon steel, 0.10% to 0.20% carbon, is used extensively for case-hardening parts. It case-hardens more readily than carbon steel and gives a harder casing with a strong, tough, fibrous core. A great deal of nickel steel with carbon from 0.20% to 0.35% has been used in shapes and plates as rolled, and in annealed eye-bars for bridge construction. In this condition, which is not to be recommended for forgings, the following are typical physical properties:

Elastic limits, lbs. per sq. in., 45,000 to 60,000.

Tensile strength, lbs. per sq. in., 80,000 to 100,000.

Elongation in 2 inches, per cent., 20% to 15%.

Reduction of area, per cent., 40% to 25%.

Annealed nickel steel forgings have only slight advantage in strength over carbon steel, and consequently are not advantageous either from an engineering standpoint or commercially unless heat-treated. With heat-treatment it gives considerably higher strength than carbon steel, combined with greater ductility or toughness. It does not give as high values as the nickel-chromium and chromium-vanadium steels. Nickel steel rolls and forges readily and machines easily. It develops a very thick, hard scale which is apt to give considerable trouble in drop-forging and is hard on the dies. Nickel steel is very liable to develop seaminess, especially when made in large heats and cast into large ingots, as is now customary. It requires a large discard to ensure soundness. The use of nickel steel in forgings, and particularly drop-forgings, is falling off in favor of other alloy steels with greater values.

Chromium Steel.

The use of this steel is confined principally to a few specialties and it is not in general use for an all-round engineering steel. One of the principal uses is for ball and ball races. The great mineralogical hardness obtained by quenching is very desirable for this purpose. The steel for this application contains approximately 1% each of carbon and chromium.

Chromium steel is also used for stamp mill shoes, and in combination with soft steel in laminated plates for construction of burglar-proof safes, and in the same combination in bars for jails.

The low- and medium-carbon types, containing 0.30% or less of chromium, have somewhat higher mechanical properties than the corresponding carbon steel. It is not used to any great extent, other alloy steels being superior, both in static and dynamic strength. Chromium steel is also very liable to crack and check in heat-treatment.

Nickel-Chromium Steel.

The addition of chromium to nickel steel has a marked effect, greatly increasing the strength and resistance to shock and particularly the mineralogical hardness. It is more difficult to forge and heat-treat and harder to machine, and is also liable to the seaminess frequently present in nickel steel. There are three types of this steel, differing both in the percentage of nickel and chromium, and all with low or medium carbon:

	Nickel	Chromium	Carbon
1st	3.5%	1.50%	0.25% to 0.45%
2nd	2.00%	1.00%	0.10% to 0.15%
3rd	1.15%	0.50%	0.10% to 0.45%

The first type is used principally for armor plate and armor-piercing projectiles and came into use about 1895, superseding the nickel plates and chromium projectiles. The other two types were developed by the automobile industry. The second type is largely for automobile forgings. It gives high strength with heat-treatment, has great hardness and good shock and fatigue resisting qualities. The third type is largely used for all-round engineering steel. It is used for automobile forgings and for a variety of miscellaneous drop-forgings and machine parts. It is an excellent case-hardening steel, carbonizing readily. This type is more tractable in working, heat-treatment and machining than the other two. It is also somewhat lower in tensile strength.

Vanadium Steel.

The additions of small amounts of vanadium, generally under 0.25%, to simple carbon steel or any of the alloy steels increases very considerably—about 30% or more—the elastic limit and breaking strength, without materially affecting the ductility. To an even greater extent it increases the resistance to shock and fatigue.

The vanadium steel which has been up to now most generally used is a chromium-vanadium steel of the following typical composition:

Carbon, 0.10% to 0.55%.

Manganese, 0.50% to 0.80%.

Chromium, 0.80% to 1.00%.

Vanadium, over 0.15%.

The lower carbon type, 0.10% to 0.20%, is used mainly for case-hardening and is the best steel for this purpose. It carbonizes readily, gives the highest maximum carbon and finest grain. The casing is very strongly coherent to the core, very hard, tough and strong and practically free from any tendency to flake or powder. The core is remarkably strong and tough.

The higher limits of carbon, 0.45% to 0.55%, are extensively used for automobile and locomotive springs, giving remarkable resiliency and endurance. It is also extensively used for oil-tempered gears.

The range in carbon from 0.35% to 0.45% is largely employed for crank shafts, locomotive axles, crank pins, connecting rods, hammer piston rods, automobile transmissions and rear-axle shafts.

The range from 0.25% to 0.35% carbon is used for automobile forgings of all kinds and a great variety of miscellaneous work requiring the best combination of static and dynamic strength.

As illustrating the wonderful shock and fatigue enduring qualities of

chrome-vanadium steel, drop-hammer piston rods of this material are giving many times the length of service of carbon, nickel and chromium-nickel steel rods.

Vanadium steels have a much wider heat-treatment range than other steels. The desired physical properties can be obtained with a higher draw-back or annealing temperature, which is very advantageous as more completely removing quenching strains, and also as a manufacturing proposition.

Chromium-vanadium steel forges and machines better than nickel-chromium steel, is not as liable to injury in heating for forging, is not so liable to crack or check in heat-treatment and is free from the seamy tendency of steel containing nickel.

Carbon steel with a small percentage of vanadium, from 0.15% to 0.20%, has been used extensively for locomotive frame castings with great success. The failures of these frames from all causes over a period of nearly ten years has been only a fraction of one per cent.

In tool-steel grades, this steel has better cutting qualities, hardens deeper and more uniformly, and has remarkable toughness. In what are termed battering tools, chisels, cutters, dies, etc., it gives several times the length of service of ordinary carbon tool steel.

The handicap of high cost of vanadium has almost disappeared, and simple carbon-vanadium steel in the ordinary forging grades will undoubtedly soon become very widely used as an all-round engineering steel, when a better steel than carbon is required. It is remarkably clean and is as easily worked as carbon steel. It is free from the seaminess and ugly scale of nickel steels and the tendency to check and crack of the chromium steels, particularly nickel-chromium.

Tests of carbon-vanadium steel rails in curves are showing about 20% less wear than rails with 0.15% to 0.20% higher carbon, and are also considerably stronger. The difference in wear will doubtless be much greater when the carbon percentage in the vanadium rails is increased to that of the standard rails.

In simple annealed forgings, plain vanadium steel has physical properties well above those specified for heat-treated (quenched and tempered) carbon steel.

This type of vanadium steel has a wider range of quenching temperature than nickel or nickel-chromium steels; and for mechanical properties after heat-treatment is practically on an equality with $3\frac{1}{2}\%$ nickel or the low nickel-chromium steels in general use, and apparently has higher fatigue resisting qualities.

While nickel and chromium interfere seriously with the welding quality of steel, vanadium does not, but on the contrary improves this quality. Vanadium steel wire is in common use for autogenous welding.

Tungsten Steel.

This is principally used for magnets for magnetos and to some extent in hack saws and special tool steels. Tungsten is seldom used in engineering constructional steels, and then usually in combination with chromium.

The following table shows the typical engineering alloy steels and their tensile properties for the same heat-treatment draw-back temperature. This is in all cases 600 degrees Centigrade (about 1100 degrees Fahrenheit). The specimens in most cases were heat-treated in the form of inch rounds and were machined after treatment.

Lately the addition of cobalt to high-speed steel has been meeting with favor as still further improving the endurance of the steel. The amount of cobalt generally used is 3% to 4%, with no change in the percentage of the other metals—tungsten, chromium and vanadium.

Park, San Mateo County, and which is controlled and managed by the University of California. The new rates go into effect in 30 days, and reduce the flat rate for unmetered service to \$1.50 from \$2, and rearranges the metered charges so as to distribute them upon the different classes of consumers more equitably.

The order also disposes of a complaint of J. W. Leggett and other residents of Menlo Park, who more than two years ago claimed before the commission that the water supply was inadequate and its quality wretched. The water is now excellent and ample.

The complaint against the rates was by John Billesback and others, and was chiefly against the \$2 minimum for domestic use.

The Ingiewood Water Company and the Hyde Park Water Company of Los Angeles County have filed with the Railroad Commission an application for authority for the first named concern to purchase all the assets of the latter, except real estate, for the Ingiewood Company to change its water rates, to issue bonds to refund indebtedness of the Company, to buy the plant and system of the Hyde Park Water Company and provide for additions and betterments.

The price fixed for the system of the Hyde Park Company is \$20,000 payable in bonds of the Ingiewood Company.

Railroad Commission News.

The Railroad Commission has issued an order fixing water rates to be charged by the San Gabriel Valley Water Company for domestic and irrigation purposes. The rates for domestic, industrial and commercial use are \$1 a month for 600 cubic feet or less; 12 cents per 100 cubic feet, up to 5,000 cubic feet, and 10 cents over 5,000.

For municipal use 10 cents a 100 cubic feet is fixed, with a minimum of \$250 a month for fire hydrant service, and fire hydrants \$2 a month each.

For irrigation the charge is to be 50 cents a 1,000 cubic feet or less.

A complaint against the company was brought by Granada Park Water Committee, and the San Gabriel Company asked the Commission to examine its schedule of rates, saying that they did not return the cost of maintenance and interest on its investment. The company further said that the rates in San Gabriel, San Marino, Oak Knoll, and Los Angeles County, do not bring the company the annual charges on the various plants supplying the municipalities with water.

The Commission estimated the reasonable cost new of the physical properties of the company, exclusive of the real estate, at \$378,797, and the reasonable cost now of the plant of the company, combining all elements of value at \$504,117. The rates fixed by the Commission are aimed to return a fair interest on this amount, and at a slight raise over present rates.

The Railroad Commission has issued an order adjusting the rates to be charged for water by the Bear Gulch Water Company, which serves Menlo

the City of San Fernando, Los Angeles County, has filed with the Railroad Commission an application for authority to build Jessie street over the tracks of the Southern Pacific Company.

Water Commission News.

LUMBER AND EARTH DAM.

The State Water Commission is kept busy with the many applications submitted to it for the appropriation of water from the various sources in the State. Of interest to this section in general is the permit just granted by the Commission to J. W. Squires and R. B. Gilmour of Stockton to use 160 miner's inches, or four cubic feet of water, from Littlejohn Creek, which has its rise in the foothill region of Calaveras and San Joaquin counties, and empties into the San Joaquin River through the French Camp Slough south of Stockton. The permit was granted for the purpose of irrigating 142 acres of farming land. The water is to be diverted at a point 60 feet west of 1836 feet north of the southwest corner of Section 35, T. 1 N., R. 7 E., M. D. M. The creek is to be dammed with a lumber and earth dam, 5 feet high, 35 feet on top and 20 feet on bottom, and the main ditch is to be three-eighths of a mile long. Littlejohn Creek carries storm waters and is available for irrigation only a portion of the year. No protests were filed against the use of the water from this source. The permit does not guarantee the supply, and was granted by the Water Commission subject to the rights before existing on the stream.

Complex Alloy Steel.

Practically none of the constructional steels contain three or more alloy metals. The only steel in this class to be considered is what is commonly known as high-speed steel. Robert Mushet developed and patented about 1860 an air-hardening steel that was very very much superior to carbon tool steel for machining hard material. Mushet steel, as it was known, had about the following composition:

Carbon, 2.00%.
Manganese, 1.75%.
Silicon, 0.75%.
Chromium, 0.40%.
Tungsten, 5.50%.

At the Paris Exposition in 1900, the Bethlehem Steel Company exhibited a new tool steel that took wonderfully heavy cuts at high speeds, the point of the tool heating up to a strong blue color without losing its edge. This steel, which immediately became known as high-speed steel, was the culmination of the research work carried on for many years by Mr. F. W. Taylor and later published in his monograph "The Art of Cutting Metals." The difference between this steel and Mushet steel is apparent from the following typical composition:

Carbon, 0.60%.
Manganese, 0.20%.
Silicon, 0.10%.
Tungsten, 18.00%.

With this steel, cutting speeds of over 90 feet per minute were obtained.

Within three or four years it was found that the addition of vanadium to high-speed steel made it possible to still greatly increase the speed and size of cut. At first only about 0.30% vanadium was added, but this has been increased until now 1.00% is practically the standard amount in most high-speed steels, and speeds of 140 feet and upward per minute have been attained.

Carbon %	Manganese %	Nickel %	Chromium %	Vanadium %	Residual Loss, per sq. in.	Tensile Strength Lbs. per sq. in.	Elongation in 2 in. Per cent.	Reduction of Area Per cent.
1.75	1.75	.....	.....	.....	49,000	80,000	30	65
1.75	1.75	.....	.....	.....	66,000	98,000	25	52
1.75	1.75	.....	.....	.....	58,000	90,000	27	60
1.75	1.75	.....	.....	.....	82,500	103,000	23	57
1.75	1.75	.....	.....	.....	65,000	95,000	23	52
1.75	1.75	.....	.....	.....	96,000	122,000	21	52
1.75	1.75	.....	.....	.....	102,000	127,500	21	58
1.75	1.75	.....	.....	.....	75,000	105,000	25	67
1.75	1.75	.....	.....	.....	118,000	142,000	17	55
1.75	1.75	.....	.....	.....	119,000	149,500	21	60
1.75	1.75	.....	.....	.....	139,000	170,000	18	53
1.75	1.75	.....	.....	.....	102,000	124,000	25	70
1.75	1.75	.....	.....	.....	120,000	134,000	20	57
1.75	1.75	.....	.....	.....	145,000	161,500	16	53
1.75	1.75	.....	.....	.....	117,500	124,500	16	58
1.75	1.75	.....	.....	.....	140,000	157,500	17	54
1.75	1.75	.....	.....	.....	90,000	105,000	20	50
1.75	1.75	.....	.....	.....	106,000	124,000	21	66
1.75	1.75	.....	.....	.....	112,000	157,000	20	61
1.75	1.75	.....	.....	.....	122,500	149,500	16	54
1.75	1.75	.....	.....	.....	170,000	186,000	15	45

Technical Societies.

SAN FRANCISCO ASSOCIATION OF MEMBERS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.

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Regular meetings are held bi-monthly at such time and place as may be appointed by the board of directors. The established custom is to meet on the third Fridays of February, April, June, August, October and December.

Address E. T. Thurston, Secretary, 313 Mechanics' Institute Bldg., Post street, San Francisco.

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Regular meetings third Tuesday in each month. Address all communications to C. G. Pyle, Secretary, Standard Underground Cable Co., 914 Hibernian Bldg., Los Angeles.

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Regular meetings second Tuesday evening each month. Address all communications to A. R. Walker, Acting Secretary, 1403 Hibernian Building.

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 Address all communications to Ford W. Harris, 1029 Higgins Bldg., Los Angeles.

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Address all communications to Frank C. Ayars, Secretary, 505-6 Douglas Bldg., Los Angeles.

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UNITED STATES.

Baron Eichi Shibusawa, a leading banker of Japan, who is visiting the United States to study banking facilities and to further trade relations between the two countries, has arrived in Seattle, Wash., with the party of seven that is accompanying him on his tour. From Seattle he will proceed to Chicago, arriving in the Illinois city on November 22. After spending three days in Chicago, the visitors are due in Pittsburgh November 25 for a two days stay, Philadelphia the 27th, one day; New York, the 28th; Boston the 29th, two days; return to New York, the 30th, for five days; Washington, December 5, two days; Houston, Tex., December 8, two days; Los Angeles, December 12, one day; and will conclude the tour at San Francisco on December 14.

ADVANCE CONSTRUCTION NEWS.

Classified According to Character of Work.

APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 4 story and base, frame, \$15,000. Architect, Benj. G. McDougall, Sheldon Bldg., S. F. Owner, Arthur Arlett, Sheldon Bldg. Location, Powell near Washington. Will contain a number of two and three room suites with private baths and wall beds. Interior finish pine and elm panels and some hardwood floors. Steam heat and a hot water system. Bath rooms will have composition floors. Marble and tile entrance. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 4 story and base, brick and steel, \$20,000. Architect, George C. Thomas, Russ Bldg., S. F. Owner, A. Penziner. Location, east Hyde north of Ellis. Will contain fifteen apartments of two and three rooms. All suites will have wall beds and private baths. Interior finish pine and elm panels. Some hardwood floors. Steam heat, automatic elevator and hot water system. Bath rooms tile. Marble and tile entrance. Exterior faced with cement plaster and pressed brick. Plans complete and figures to be taken shortly.

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$10,000. Architect, Edward E. Young, 251 Kearny street, S. F. Owner, Thomas Scooble, 363 14th avenue, S. F. Location, northeast corner Geary and 19th avenue, covering an area of 52½ by 67 feet. First floor arranged for a store. Upper floor will contain four suites of four rooms and bath. Interior finish pine and elm with some white enamel and hardwood floors. Hot water system and wall beds. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 4 story and base. Class C construction, \$40,000. Architect, J. C. Hladik, Monadnock Bldg., S. F. Owner's name not given. Location, south Bush east of Hyde. Will contain a number of two and three room suites with private baths and wall beds. Interior finish pine, gum and white enamel. Some hardwood floors. Steam heat, automatic elevator and hot water supply. Bath rooms will have composition floors and tile wainscot. Marble and tile wainscot in lobby. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and figures being taken.

SACRAMENTO, CAL.—Apartment house, 2 story and base, frame, \$8,000. Architect, F. J. Harold, Forum Bldg., Sacramento. Owner, George B. Stack. Location, corner of 15th and M streets. Will contain 20 rooms arranged en suite, besides private baths. Interior finish pine with some hardwood floors.

Hot water supply. Wall beds. Exterior covered with cement plaster. Plans complete and a contract for the carpentry and mill work awarded to Chatterton Bros. Bids being taken for the balance of the work.

BANKS

WALNUT GROVE, SACRAMENTO CO., CAL.—Bank, 2 story and base, brick and steel, \$13,228. Architect, W. H. Weeks, 75 Post street, S. F. Owner, Bank of Alex Brown. Contractor, H. F. Smith, Walnut Grove. Contract price, \$13,228.

BONDS.

FORTUNA, HUMBOLDT CO., CAL.—The \$24,000 school bonds voted by the Fortuna High School District are now being advertised for sale. A new school building will be erected when the bonds have been sold.

THERMALITO, BUTTE CO., CAL.—A meeting held by landowners to form an irrigation district resulted unanimously in favor of the plan. Petitions will be sent out immediately. Bonds will be voted to raise funds to finance the improvements necessary.

COLUSA, COLUSA CO., CAL.—E. H. Rollins & Sons have purchased from Colusa County \$120,000 state highway bonds.

EUGENE, ORE.—An election will be held in the near future to vote bonds for the construction of a bridge across the Willamette River at Harrisburg.

HOLLYWOOD, LOS ANGELES CO., CAL.—A petition bearing 3,900 names has been forwarded from Hollywood to the Los Angeles City Council asking them to set a date to vote water bonds.

HILLSBOROUGH, SAN MATEO CO., CAL.—Road bonds of \$40,000 were sold by the Hillsborough Trustees to the Anglo and London-Paris National Bank at a premium of \$1,273.

ALAMO, CONTRA COSTA CO., CAL.—The Mount Diablo Boulevard Commission has set December 18th as the date for the \$50,000 bond election. The proposition includes five towns, and will mean 31 miles of highway to cost \$120,000. Contra Costa County is to appropriate \$50,000 of the cost.

ESCONDIDO, SAN DIEGO CO., CAL.—An election has been called by the City Trustees for November 30th to vote on the issuance of \$50,000 in bonds for the acquisition of an electric light and gas plant, \$40,000 for the former and \$10,000 for the latter.

SAN ANSELMO, MARIN CO., CAL.—A local exchange says: "The opinion of Goodfellow, Eells, Moore & Orish on the legality of additional bond issues of a sanitary district clears the way for White's Hill-to-the-Day sewer. It makes possible the addition of the Fairfax and Manor territory as well as the Bon Air tract below Kentfield to the present district No. 1."

SACRAMENTO, CAL.—State Treasurer Frank S. Richardson and State Comptroller J. S. Chambers have decided that irrigation bonds will be accepted in the future as security for state deposits. The decision was arrived at after a visit to the Oakdale and South San Joaquin irrigation districts. This is a reversal of the policy adopted in the past.

MADERA, MADERA CO., CAL.—Steps are now well under way for the formation of the Madera Irrigation district, comprising 250,000 acres of land, the system as outlined including a dam near Pollasky on the San Joaquin River. Preparation of a map showing the lands of the proposed district available for irrigation is now in progress.

FRESNO, FRESNO CO., CAL.—The city administration is preparing to call a bond election in January for larger sewers in the city and additions with the corporate limits, for a storm sewer and other public improvements. City Engineer Cronkite will prepare plans for the improvements to be made.

REDDING, SIESTA CO., CAL.—The Anderson-Cottonwood Irrigation district has been notified by bond experts that the \$100,000 bonds voted by them are legal. The proceeds of the sale of these bonds will be used in irrigation improvements.

RIVERBANK, YOLO CO., CAL.—The Riverbank Improvement Club will suggest at the Supervisors' next meeting that they appropriate \$10,000 to build a city hall.

MT. DIABLO BOULEVARD DISTRICT, CONTRA COSTA CO., CAL.—Bids are now being advertised for sale for the purchase of bonds of \$50,000. The proceeds will be used in the construction of a boulevard.

CHINO, SAN BERNARDINO CO., CAL.—It is probable that the election to vote improvement bonds in this city will not be held until next spring.

When the election is called it is expected that the road bonds will amount to \$73,000 while the sewer bonds will be \$52,000, making a total bonded indebtedness for roads and sewers of \$125,000.

SAN RAFAEL, MARIN CO., CAL.—The directors of the Marin Municipal Water district are preparing to advertise for bidders for the sale of \$500,000 worth of bonds on December 21st, \$300,000 to be delivered in January, 1916, and \$200,000 in April.

The plan of the directors is to use \$165,000 of this money in the purchase of the Howard-Shafter properties, \$120,000 for road and tunnel work on the Alpine dam site and the purchase of the right of way over the Jorey and Cascade ranches, and the balance of \$239,000 for the purchase of the North Coast Water Co. property.

MARICOPA, MARICOPA CO., CAL.—Bids for the purchase of bonds in the sum of \$15,000 are being received by the County Supervisors to finance the erec-

tion of a school building in the Maricopa School district.

BULLARD SCHOOL DISTRICT, FRESNO CO., CAL.—Bonds of \$15,000 have been voted by the Bullard School district and are being advertised for sale. On the sale of these bonds plans for a school will be ordered.

SAN LEANDRO, ALAMEDA CO., CAL.—The proposition of voting bonds of \$125,000 carried by a large majority. The proceeds of the sale will be used in school improvements.

WOLTERS SCHOOL DISTRICT, FRESNO CO., CAL.—Bonds of \$12,000 have been voted and are now on sale. When sold a new school will be erected from the proceeds of the sale.

BRIDGES, DAMS AND HARBOR WORK

RED BLUFF, TEHAMA CO., CAL.—Bridge, steel and reinforced concrete. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. The County Surveyor was instructed at the last meeting of the County Supervisors to prepare plans and specifications for a steel and concrete bridge across Brickyard Creek on the Red Bluff and Corning road in Road District No. 2. Bids will be called for on the completion and acceptance of the plans by the County Board.

RED BLUFF, TEHAMA CO., CAL.—Bridges, etc. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. At the last meeting of the County Supervisors the County Surveyor was instructed to prepare plans for the following work: That the County Surveyor be ordered to prepare specifications for trenching a portion of the Paynes Creek road beginning at Seven Mile Creek and continuing on to Hog Lake. The county to furnish the rock crusher and the bidders to state the amount charged per cubic yard for crushed rock and placing same on the road. The County Surveyor was also ordered to prepare plans and specifications for repairing the Minger Creek bridge and for the construction of jetties near the lower Deer Creek bridge in Road District No. 5. It was moved by Supervisor Samson that Supervisor Kauffman be authorized to have the east approach to the bridge across the Sacramento River at Tehama repaired.

MARYSVILLE, YUBA CO., CAL.—Bridge removal. Cost not stated. Engineer, County Surveyor, Marysville. Owners, Yuba County. The bid of A. C. Knox and K. W. Gordon for the removal of the old Yuba River bridge was rejected by the Supervisors at their last meeting. It is the intention of the Board to have the bridge removed to make way for a new structure to be erected there. The work of removing will now be done under the direction of the County Surveyor.

GRASS VALLEY, NEVADA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Grass Valley. Owners, Nevada County. The old bridge over Little Wolf Creek on the Colfax road is being razed to make way for the new concrete bridge to be constructed. The work is under the supervision of C. J. Miller, chairman of the Board of Supervisors. Bids for the new structure will be called for shortly.

Contracts Awarded

SACRAMENTO, CAL.—Levee repairs. \$11,250. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, A. Teichert & Son, Ochsner Bldg., Sacramento. Contract price, \$11,250.

HANFORD, KINGS CO., CAL.—Bridges and culverts. Cost as follows. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractor, S. G. Smart, Bakersfield. Contract price, No. 1A, laying concrete, \$7.19 per cubic yard; No. 1B, \$7.19 per cubic yard; No. 2, laying steel, half cent per pound.

CHURCHES

SAN FRANCISCO—Church, 1 story and base, frame and concrete, \$15,000. Architect, Leo J. Devin, Pacific Bldg., S. F. Owners, St. Charles Church. Location, 18th and Shotwell streets. Designed in the Mission style. Will contain main auditorium and Sunday school rooms. Interior finished in pine and ornamental plaster. Art glass windows. Exterior covered with cement plaster. Plans being prepared.

SAN FRANCISCO—Church addition, 1 story, frame, \$4,000. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owners, Bethany Church. Location, Mission and Richmond avenue. Addition will contain Sunday school rooms and social room. Interior finish pine. Exterior covered with cement plaster. Plans complete and figures being taken.

FAIRFIEL SOLANO CO., CAL.—Church, 1 story and base, frame, \$7,500. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owners, Fairfield Methodist Church. Will contain main auditorium, Sunday school rooms, social parlors and pastor's study. Interior finish pine and ornamental plaster. Some art glass windows. Exterior covered with cement plaster. Plans being prepared.

Contracts Awarded.

BRIHACH, MERCED CO., CAL.—Church completion, frame, \$5,000. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Roman Catholic Church. Contractor, A. Wayne. Atwater. Contract price, \$5,000.

LA JOLLA, SAN DIEGO CO., CAL.—Church, 1 story and base, brick and hollow tile. Cost not stated. Architects, Reginald Johnson and C. M. Winslow, Grant Bldg., San Diego. Owners, Union Congregational Church. Contractor, Ralph Tillinghast, La Jolla. Contract price not stated.

COURT HOUSES.

SACRAMENTO, CAL.—City hall and jail, 4 story and base, reinforced concrete, \$175,000. Architects, Shea & Loquist, Bankers' Investment Bldg., S. F. Owners, City of Sacramento. The closing date for figures on this work has been officially announced as December 9th between 10 and 11 a. m. Plans can be secured only from the City Clerk at Sacramento. An official proposal appears in another column of this issue.

FACTORIES AND WAREHOUSES

MARTINEZ, CONTRA COSTA CO., CAL.—Winery, 2 story, brick and frame. Cost not stated. Architect, none. Owner, J. E. Colton, Martinez. J. E. Colton has purchased a site 50 by 100 feet on Howard street and will erect an addition to his present winery building. A two-story frame and part brick addition will be erected on the additional ground. Work will be started shortly.

LOS ANGELES, CAL.—Factory group, 1 and 2 story and base, steel and reinforced concrete, \$500,000. Engineer, Engineering Dept. American Can Co., New York City. Owners, American Can Co. The American Can Co., C. J. Gordon representative, Los Angeles Investment Bldg., has purchased a five-acre site on the west side of Santa Fe avenue, between 45th and 49th streets, and will establish a branch factory. Several large factory buildings and machine shops will be erected.

CAMARILLO, VENTURA CO., CAL.—Storage building, 1 story and base, reinforced concrete. Cost not stated. Architect, Alfred F. Priest, Fay Bldg., L. A. Owners, J. F. Lewis & Son. Will cover an area of 100 by 135 feet. Designed for cold storage and refrigerating plant. Interior finish pine. Carrier system, metal window sash and frames and metal covered doors. Exterior faced with cement plaster. Plans complete and work to be done by Day Labor under direction of the architect.

FIRE REPORT

SAN FRANCISCO—The warehouse of Scott, Magner and Miller and the Western Planing Mill, together with a number of smaller structures, were destroyed by fire last Saturday. The loss is estimated at \$.65,000. The loss is partly covered by insurance.

SAN JOSE, SANTA CLARA CO., CAL.—The grill room building in Luna Park was destroyed by fire last week, causing a loss of \$5,000.

SANTA CRUZ, SANTA CRUZ CO., CAL.—The foundry building owned by Walter Ruffcorn & Co., was destroyed last week. The loss is estimated at \$5,000.

WOODLAND, YOLO CO., CAL.—The residence of J. H. Taylor of Woodland was destroyed by fire, causing a loss of \$3,500.

SAN FRANCISCO, CAL.—Offices and living quarters in the Weinhart Brewery, Harrison near Eighth street, were destroyed by fire last week. The loss is covered by insurance.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$6,000. Architect, none. Owner, W. W. Rednall, 2500 Filbert street, S. F. Location, west Baker south Filbert. Will contain two flats of five and six rooms. Interiors finished in pine, gum and hardwood. Hardwood floors and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 3 story and base, frame, \$8,000. Architect, Edward E. Young, 251 Kearny street, S.

E. Owner, Edward E. Young, Location, south Clay west of Leavenworth, covering an area of 25 by 5 feet. Will contain six flats of four and five rooms, interiors finished in pine, gum and hardwood. Hardwood floors and open fire places. Wall beds. Mantels tile or brick. Special kitchen equipment. Exterior covered with brick veneer and shiplap. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL.—Flats, 2, 2 story and base, brick. Cost not stated. Architects, Elsen & Sons, Wilcox Bldg., 1. A. Owner, Milton Metzler, Location, corner of 8th and New Hampshire streets. Will contain six five-room flats in each building. Interiors finished in pine hardwood and white enamel. Hardwood floors. Open fire places and tile mantels. Wall beds. Bath rooms tile. Exteriors faced with pressed brick. Plans complete and work to be done by Day Labor.

GOVERNMENT WORK & SUPPLIES

Ice Plant, Peking, China.

All bids received October 16 for ice making and cold storage plant to be delivered f. o. b. at San Francisco for use at Peking, China, have been rejected on account of lack of funds.

Carson City, Nev., Repairs, Etc.

The contract for repairs and painting at the U. S. mint, Carson City, Nev., has been awarded to W. G. McGinty & Son at \$1,676.

Shoshone Irrigation Project, Wyoming.

The contract for excavation, etc., at the Shoshone irrigation project, Wyoming, has been awarded as follows: 357,000 cubic yards excavation at 117,000 cubic yards of overhaul to Threet Bros. & Jolley, Lovell, Wyo., at \$78,760; 186,000 yards of excavation and 25,000 yards overhaul to R. H. Lynn, Lovell, Wyo., at \$27,076.

Hanford, Cal., Shelving.

The contract for installing metal vault shelving in the U. S. post office at Hanford, Cal., has been awarded to the H. H. Shults Co., Gowanda, N. Y., at \$295.

Pasadena, Cal., Shelving.

The contract for installing metal vault shelving in the U. S. post office at Pasadena, Cal., has been awarded to American Bank Protection Co., Minneapolis, Minn., at \$382.

Pearl Harbor, Marine Railway.

Attention is invited to official advertisement appearing elsewhere in this issue extending the time of opening bids for the marine railway at Pearl Harbor, Hawaii, from November 27 to December 18.

Salem Indian School, Addition.

The following bids were received by the Commissioner of Indian Affairs, Washington, D. C., for the construction of an addition to brick assembly hall, Salem Indian School, Ore.:

Fred A. Erickson, Salem, Ore., \$7,215; 100 days.

L. C. Denison, 185 S. 19th street, Salem, Ore., \$7,200; 130 days.

Edward J. Barrett, Portland, Ore., \$7,860; 90 days.

Stewart & Engstrom, Salem, Ore., \$5,750; 90 days.

Southwick & Hendrick, Salem, Ore., \$6,661; 150 days.

A. J. Anderson, Salem, Ore., \$7,980; 120 days.

Washington Navy Yard, Gas Engines.

The following bids were received by the supply officer, U. S. navy yard, Washington, D. C., for furnishing four gasoline engines for delivery at the Puget Sound navy yard, under N. S. A. requisition 93:

Buffalo Gas Engine Co., Buffalo, N. Y., \$6,867; 60 days.

Gas Engine and Power Co., and Charles L. Seabury Co., Morris Heights, N. Y., \$7,920; time 45 days.

Van Blerck Engine Co., Washington, D. C., bid A, \$8,115.50 B, \$7,761.50; 45 days.

Sterling Engine Co., Buffalo, N. Y., \$8,151; 50 days.

Idaho Falls, Construction.

In the construction of the U. S. post office at Idaho Falls, Idaho, for which the Sound Construction and Engineering Co., Portland, Ore., has the contract, fixtures and material manufactured by the following firms will be used: Pendant switches, Perkins; canopy switches, Cutler-Hammer Mfg. Co.; keyless sockets, Weber; reflectors and glassware, Macbeth-Evans Co.; lighting fixtures manufactured by the Reading chandelier Works will be used in lieu of those previously approved.

Denver, Colo., Painting.

The contract for painting plastering in the U. S. post office at Denver, Colo., has been awarded to D. J. Imman, Danville, Ill., at \$1,923; time to complete 120 days.

Panama Canal Barges.

The Panama Canal, purchasing department, Washington, D. C., has issued the following circular under file M-10-2, for dump barges:

The Panama Canal contemplates purchasing four strongly-built wooden or steel dump barges in good working condition, either new or second hand, of from 1,000 to 1,500 cubic yards capacity, capable of handling and passing heavy rock masses through the bottom doors. Barges with door lifting gear operated by steam are desired, but consideration may be given to barges with hand-operated gear. The barges should be well found in every respect, and the bidder shall dock the barges for purpose of inspection if so required by the Panama Canal.

The Panama Canal would be glad to receive quotations in triplicate for barges of the above description. Alternative prices are desired for the barges delivered (1) at seaport in United States and (2) at Colon or Balboa, Isthmus of Panama.

Bidders should state in their quotations a separate price per barge for dry docking the barges in case the Panama Canal desires to dock same.

Information concerning barges offered for sale should include whether the barges are of wood or steel construction, when and where built, place

where barges may be examined, and time and place of delivery. Tenders should be accompanied by drawings sufficiently complete to show general construction and method of manipulating hopper doors.

It should be understood in submitting quotations under this inquiry that the Panama Canal is not bound to purchase any barges, but that it may purchase the barges under the price submitted if it desires to do so.

Quotations should be submitted at the earliest practicable date.

Perplexities of the Eight-Hour Law.

The Army and Navy officers who have to do with the application of the eight-hour law still find themselves perplexed with the provisions of that measure at every turn. One Army engineer recently suggested that in calls for bids hereafter there should be inserted something which should be a guide to bidders as to the operation of the law such as announcing that the law is construed to apply to all field work and not to subcontracts for the materials nor to the fabrication in the shop where work under these contracts forms but a small part of the work on the project. The War Department does not approve of this aid to bidders. It is believed that the government has gone as far as it may reasonably be expected to go. The opinions on the subject from the law officers are considered as being well known to contractors, and bidders are furnished with all possible information on the subject when they submit questions. It is believed that, until the effect of the law upon the industrial world is better understood by a longer period of application, the incorporation of explanation of the law in the calls for bids should be very restricted, if incorporated at all. It is appreciated that contractors, on the other hand, are more or less apprehensive of the scope of the law and seek to obtain advice from the department that no costly mistakes may be made.

ISLAND OF GUAM—Radio towers, steel. Cost not stated. Engineers, Bureau of Yards and Docks, Washington, D. C. Owners, United States Government. Bids will be received until December 21st for the construction of a 100-foot steel radio tower at the Island of Guam.

HALLS AND SOCIETY BUILDINGS

SAN FRANCISCO—Women's gymnasium and club, 4 story and base. Class A construction, \$100,000. Architects, Bliss & Paville, Balboa Bldg., S. F. Owners, Women's Athletic Association. Location, north Sutter between Mason and Taylor. Will cover a large ground area. Complete steel frame, exterior walls of brick, faced with pressed brick trimmed with terra cotta. Hollow tile interior partitions. Metal window sash and frames. Steam heat, elevator service, vacuum cleaning and hot water system. Special plunge. Interior finish pine and hardwoods. Plans complete and figures being taken.

SAN DIEGO, SAN DIEGO CO., CAL.—Lodge hall, 3 story and base, brick, \$30,000. Architects, W. S. Hebard and C. M. Winslow, Grant Bldg., San Diego.

Owners, University Club. Location, east 7th between A and Ash streets. Will contain offices, dormitories, club rooms, banquet hall and kitchen. Interior finish pine and hardwood with hardwood floors. Central heating system and hot water supply. Exterior faced with cement plaster. Plans complete and figures being taken.

HOSPITALS

PRESIDIO OF SAN FRANCISCO—Hospital addition, 2 story and base, reinforced concrete, \$24,000. Architect, Constructing Quartermaster's Office, Fort Mason. Owners, United States Government. D. Zelinsky submitted the low figure for the general construction of Addition B to the Nurses Dormitory at the Letterman General Hospital at \$18,550. Frank M. Garden Co. were low on the entire work at \$21,996. No awards have been made.

OAKLAND, CAL.—Hospital day hall and dormitories, 2, 2 story and base, brick and steel. Cost not stated. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, Alameda County. Under the new proposal issued last Friday for the construction of these buildings bids will be opened on December 20th at 10 a. m. Plans and specifications can be secured from the offices of the County Clerk.

EUREKA, HUMBOLDT CO., CAL.—Hospital addition, 1 story, frame. Cost not stated. Architect, E. J. Burke, Eureka. Owners, Humboldt County. Bids will be received until December 14th for the construction of an addition to the present County Hospital. Plans can be secured from the architect.

LIBRARIES

SAN FRANCISCO—Library granite work and ornamental plaster. Cost as follows. Architect, George William Kelham, Sharon Bldg., S. F. Owners, City and County of San Francisco. Bids opened for the exterior granite facing show the McGilvray-Raymond Granite Co. low for the exterior facing at \$360,730 and Lyden & Bickel low for the ornamental plaster and artificial Roman Travertine stone at \$42,396. A contract for the granite work will be let to the low bidders at once. Bids for the other work have been taken under advisement. A complete list of the figures will be found under the heading of San Francisco in this issue.

TURLOCK, STANISLAUS CO., CAL.—Library, 1 story and base, brick and concrete, \$19,000. Architects, Bowen & Davis, McKenzie Bldg., Fresno. Owners, Town of Turlock. Will be designed in the classic style and will contain two main reading rooms, children's room and offices of the librarian. Interior finish pine with hardwood floors. Metal book stacks. Central heating system. Exterior faced with cement plaster. Plans being prepared.

EAST HOLLYWOOD, LOS ANGELES CO., CAL.—Library, 1 story and base, brick or hollow tile, \$30,000. Architect, C. H. Russell, Story Bldg., L. A. Owners, City of East Hollywood. Will contain main reading room, children's room, offices and stack room on the main floor. Auditorium seating 300 people and work room will occupy the

basement. Interior finish pine and hardwood. Hardwood floor. Steam heat, metal book stacks. Exterior faced with pressed brick. Plans being prepared.

IRRIGATION PROJECTS

LOS ANGELES, CAL.—Irrigation work. Cost not stated. Engineer, County Surveyor, L. A. Owners, Los Angeles County. Owing to alleged irregularities, the bids for the construction of an irrigation system in water works district No. 1 were rejected by the Supervisors and the mechanical department of the county was instructed to prepare new plans and specifications. It was said the specifications were vague in a number of respects and the bidders felt compelled to go outside of them in figuring on the work to be done.

POST OFFICES

BAKERSFIELD, KERN CO., CAL.—Post office, 2 story and base. Class A construction. Cost not stated. Architect, Supervising Architect, Washington, D. C. Owners, United States Government. Location, 15th and G streets, covering an area of 100 by 132 feet. Interior finish pine and hardwood with tile, hardwood and cement floors. Steam heat, oil burning equipment and vacuum cleaning. Exterior faced with pressed brick. Plans complete and figures to be called for shortly.

RAILROAD CONSTRUCTION AND EQUIPMENT

SAN FRANCISCO—Hetch-Hetchy railroad construction, \$1,620,000. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. F. Rolandi, Bank of Italy Bldg., S. F., submitted the lowest figure for the construction of 67 miles of single track railroad into the Hetch-Hetchy site and will probably be awarded the contract. A complete list of the bids received appears under the heading of San Francisco in this issue.

Contracts Awarded.

SAN FRANCISCO—Steel sand bins. Cost as follows. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Ocean Shore Iron Works, S. F. Contract price, \$310 for bins 15 feet 11 inches and \$115 for bins 24 feet 9 inches.

RESIDENCES

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, Charles J. H. Schultz, 3709 Geary street, S. R. Location, east 18th avenue south of Anza. Will contain six rooms and bath. Interior finish pine and elm panels. Some hardwood floors. Open fire places and tile or brick mantels. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$3,000 each. Architect, none. Owner, W. R. Kenny, 129 Arguello Boulevard, S. F. Location, east 19th avenue south of Balboa. Each

will contain seven rooms, bath and sleeping porches. Interiors finished in pine, elm and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Bath rooms tile. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$2,500 each. Architect, none. Owner, F. Nelson, 30 Presidio Terrace, S. F. Location, west 27th avenue north Irving and west Hillway south of Carl. Will contain six rooms and bath with sleeping porches and basement garage. Interior finish pine, white enamel and elm panels. Hardwood floors and open fire places. Mantels tile and brick. Imitation tile in bath rooms. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 and 3 story and base. Class A construction, \$170,000. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Andrew Welch, Jr. Location, Broadway between Broderick and Baker. Will contain 26 rooms, a number of baths, sleeping porches, conservatory and large hall rooms. Separate garage and servants' rooms. Complete steel frame, concrete walls and floors. Hardwood interior trim, marble and tile mantels, tile bath rooms, steam heat, oil burning equipment, hot water circulating system and vacuum cleaning. Exterior faced with terra cotta and brick. Plans complete and figures being called for at once.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect none. Owner, J. S. McLelland, 530 12th avenue, S. F. Location, east 12th avenue north of Cabrillo. Will contain seven rooms, bath and sleeping porch. Interior finish pine, elm and white enamel. Hardwood floors. Open fire places and tile mantels. Bath room tile. Automatic water heater. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 1 story and base, frame, \$4,000. Architect, Joseph A. Leonard, 85 Carritos avenue, S. F. Owners, Urban Realty Co. Location, west Urbano Drive north of Victoria. Will contain eight rooms, two baths, sleeping porch and basement garage. Interior finish pine, gum and white enamel. Hardwood floors. Tile bath rooms. Open fire places and furnace heat. Mantels tile or brick. Automatic water heater. Exterior covered with shingles. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, William J. Cuneo, 686 Capp street, S. F. Location, south 40th east of Sanchez. Will contain six rooms, bath and sleeping porch. Interior finish pine and elm panels. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$3,000. Architect, Harris Allen, Cen-

tral Bank Bldg., Berkeley. Owner, R. L. Underhill. Location, Tamalpais near Rose. Will contain nine rooms, baths and sleeping porch. Interior finish pine, gum and white enamel. Hardwood floors, open fire places and tile or brick mantels. Tile bath rooms. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Eunice C. Wiser, 1165 55th avenue, Oakland. Location, south Sequoia avenue east Arroyo. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Bath room tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$1,700. Architect, Walter C. Clifford, 1230 Jackson street, S. F. Owners, Sugg Bros. Realty Co., 408 12th street, Oakland. Location, Park Way south of Railroad. Will contain eight rooms, two baths, sleeping porch and separate garage. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Imitation tile in bath rooms. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$7,000. Architect, F. Holberg Reimer, 2125 Shattuck avenue, Berkeley. Owner, E. Dunham. Location, Rose street. Will contain nine rooms, baths and sleeping porch. A separate garage will be erected. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster and shakes. Plans being prepared.

BERKELEY, ALAMEDA CO., CAL.—Residences, 1, 1 story and 1, 2 story and base, frame, \$3,000 and \$5,000. Architect, none. Owner, Mr. Packard, care of Reed Real Estate, Syndicate Bldg., Oakland. Location, Claremont. The one-story dwelling will contain seven rooms, bath and sleeping porch and the two-story building eight rooms, baths and sleeping porch. Interiors finished in pine and hardwood with some white enamel. Hardwood floors, open fire places and tile or brick mantels. Tile bath rooms. Automatic water heaters. Furnace heat in one dwelling. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residences, 1, 1 story and base, frame, \$2,500. Architect, M. L. Diggins, 2414 Bowditch, avenue, Berkeley. Owner, J. C. O'Connor. Location, west Broadway north of College. Will contain six rooms and bath each. Interiors finished in pine, gum and white enamel. Hardwood floors and open fire places. Mantels tile and brick. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$2,600. Architect, none. Owner, Edward Larmer, 170 Boulevard Way, Oakland. Location, north Alcatraz west of Hillekass. Will contain six rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, William E. Roth, 2820 Summit street, Oakland. Location, north Brookdale west of Lila. Will contain six rooms, bath and sleeping porch. Interior finish pine, gum and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, F. R. Jordan, 1495 Oak street, Oakland. Location, south Harvard avenue east of College. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$3,000. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, Walter H. Packard. Location, west Thomas south of Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine, gum and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, Robert Farmer. Location, northeast corner 11th avenue and East 21st street. Will contain a store on the first floor and five living rooms above. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residences, 2, 2 story and base, frame. Cost not stated. Architect, Charles F. Mau, Macdonough Bldg., Oakland. Owners, Charles F. Mau and F. W. Denswell. Location, Grand avenue near Sunnyslope. Will contain six rooms, bath and sleeping porches. Interiors finished in pine, gum and white enamel. Hardwood floors, open fire places and tile or brick mantels. Imitation tile in bath rooms. Automatic water heaters. Exterior covered with cement plaster. Plans complete and architect taking sub figures.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$1,500. Architect, none. Owner, P. A. Dodge, 1011 69th avenue, Oakland. Location, south Noble west of 61st street. Will contain

five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire places and tile mantels. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, W. D. McKay, 3029 K street, Sacramento. Location, 2317 25th street. Will contain six rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Joseph Edenhofer, 2011 Cypress avenue, Sacramento. Location, 2208 28th street. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owners, Reese and Atkins, 713 Weldon street, Fresno. Location, Alta Vista Tract. Will contain six rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

Contracts Awarded.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$25,000. Architect, Julia Morgan, Merchants' Exchange Bldg., S. F. Owner, J. L. Lombard. Contractor, Bruce B. Burnett, 316 Oak avenue, Oakland. Contract price, \$25,000.

COTATI, SONOMA CO., CAL.—Residence, 2 story and base, frame, \$1,000. Architect, John J. Foley, 16 Kearny street, S. F. Owner, Roman Catholic Church. Contractor, A. Hermann, Pengrove. Contract price, \$1,000.

LOS ANGELES, CAL.—Residence, 2 story and base, brick and frame, \$45,000. Architects, Milwaukee Building Co., Wright and Callender Bldg., L. A. Owner, Harry Chandler. Contractors, Milwaukee Building Co., Wright and Callender Bldg., L. A. Contract price, \$45,000.

LOS ANGELES, CAL.—Residence, 2 story and base, frame, \$15,181. Architect, A. D. Hill, 775 South El Molin avenue, L. A. Owner, Joseph Cant Contractor, A. D. Hill, 775 South El Molin avenue, L. A. Contract price, \$15,181.

SCHOOLS

OAKLAND, CAL.—School addition, 2 story and base, frame. Cost not stated. Architect, John J. Donaghy, Dilzied Bldg., Oakland. Owner, City of Oakland. Bids will be received until December 14th for the construction of a two-story addition to the Fremont School. Plans can be secured from the Secretary of the Board of Education.

RICHMOND, CONTRA COSTA CO., CAL.—School, 1 story and base, brick. Cost as follows: Architect's name not

given. Owners, City of Richmond. The following contractors submitted the low bids for the first unit of the new Pullman School and will probably be awarded the contracts: General construction, Robert Glaze, Humboldt Bank Bldg., S. F., \$9,282; J. B. O'Mara, S. F., heating, \$635, and J. L. Collins, plumbing, \$1,011.

LODI, SAN JOAQUIN CO., CAL.—School, 2 story and base, reinforced concrete or brick, \$16,000. Architects, Stone & Wright, 21 South California street, Stockton. Owners, City of Lodi. Location, East Pine street. Will contain six class rooms and an assembly hall. Interior finish pine with maple floors. Stenna heat, oil burning plant. Exterior faced with cement plaster or pressed brick. Plans approved and bids to be called for shortly.

SANTA CRUZ, SANTA CRUZ CO., CAL.—School, 1 story and base, reinforced concrete, \$25,000. Architect, John I. Foley, 46 Kearny street, S. F. Owners, Santa Cruz Mission School. Will be designed along similar lines to the famous old Mission School at Santa Cruz. There will be six class rooms, special room for typewriting and an assembly hall. Interior finish pine. Central heating system, probably warm air. Exterior cement plaster. Clay tile roof. Plans being prepared.

COACHELLA, RIVERSIDE CO., CAL.—School, 1 story and base, hollow tile or concrete. Cost not stated. Architect, G. Stanley Wilson, Virginia Block, Riverside. Owners, Coachella School District. Will contain nine class rooms, assembly hall and office. Interior finish pine with maple floors. Central heating system, oil burning furnace. Exterior faced with cement plaster. Plans complete and ready for figures.

OXNARD, VENTURA CO., CAL.—School, 1 story and base, brick. Cost not stated. Architects, Allison & Allison, Hibernian Bldg., L. A. Owners, Town of Oxnard. Will contain six class rooms and an auditorium. Interior finish pine with maple floors in the class rooms. Central heating system. Exterior covered with pressed brick. Plans being prepared.

SANTA MARGARITA, SAN LUIS OBISPO CO., CAL.—School, 1 story, frame, \$1,500. Architects, J. J. Roth, Atascadero. Owners, Santa Margarita School District. The lowest bid received for this work was for \$1,875, and all figures were rejected. New bids are being called for and will be opened on December 11th. Plans can be secured from the architect.

Contracts awarded.

BERKELEY, ALAMEDA CO., CAL.—Granite facing, \$225,000. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. Contractors, Raymond Granite Co., S. F., exterior facing for Benj. Ide Wheeler Hall. Contract price, \$225,000.

SEWERS, STREET WORK & WATER SYSTEMS

OAKLAND, CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, Oakland. Owners, City of Oakland. At a recent meeting of the City Council plans and specifications were adopted for the sewerage of

Tompkins avenue from Vale avenue northwesterly, and recommending passage of resolution of intention of same. Bids on this work will be called for shortly.

OROVILLE, BUTTE CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Oroville. Owners, Butte County. All bids received by the Butte County Supervisors for the repair of the River road were rejected at the last meeting of the Board, as all were above the estimate. The work will now be done by the county. The following bids were received: J. L. Mery Co., \$5,825; Chico Construction Co., \$5,140; George Taber, \$5,537.

SAN ANDREAS, CALAVERAS CO., CAL.—Highway construction. Cost not stated. Engineer, County Surveyor, San Andreas. Owners, Calaveras County. The survey of the state highway lateral from San Andreas to the San Joaquin County line has been started. Included in the highway work is the construction of a bridge across the Calaveras River between San Andreas and North Branch, which has been declared unsafe, and for which plans have already been prepared. Further mention will be made of this work.

EUREKA, HUMBOLDT CO., CAL.—Street lighting system, \$3,500. Engineer, City Engineer, Eureka. Owners, City of Eureka. The proposition of maintaining and installing an ornamental lighting system on Second street is being considered by the business men and property owners on that thoroughfare. It is thought that the system could be placed at an estimate of \$4,500, this being for six blocks from the corner of G street to the Occidental Pavilion. Action will be taken shortly.

FREEMONT, SACRAMENTO CO., CAL.—Levee repair. Cost not stated. Engineer, E. A. Bailey, Sacramento. Owners, State of California. Owing to the dangerous condition of the east side of the Sacramento River at Portuguese Bend at Freemont, the Reclamation Board has instructed Flood Control Engineer E. A. Bailey to submit at the next meeting detailed estimates of the cost of permanent repair.

DAILY CITY, SAN MATEO CO., CAL.—Sewer construction. Cost not stated. Engineer, Town Engineer, Daly City. Owners, Town of Daly City. Bids will be received until December 13th for constructing an 8-inch salt-glazed, vitrified sewer pipe along Bellevue avenue, 2,662 feet; 12 feet of 12-inch diameter salt glazed, vitrified sewer pipe at the intersection of Bellevue avenue with Henrietta street; 12 feet of 15-inch diameter salt glazed, vitrified sewer pipe at intersection of Bellevue avenue with Oliver street; the construction of 4 manholes; 4 lampholes; 29 8x4 inch Y branches; 8 14x4 inch Y branches; 91 6 feet riser pipes of salt glazed, vitrified sewer pipe.

SAN MATEO, SAN MATEO CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. At the last meeting of the City Trustees, new specifications and a new resolution for the improvement of Parroiet and Peninsula avenues were adopted after the former had been rescinded, and the clerk was directed to call for bids for the work. Further information may

be had from the City Engineer at San Mateo.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Sewer construction. Cost not stated. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. At the last meeting of the City Trustees H. F. Sharp petitioned the board to construct a sewer on Pine avenue from Olive to Linden avenue. The City Engineer was instructed to have the work done.

MODESTO, STANISLAUS CO., CAL.—Street pavement. Cost not stated. Engineer, City Engineer, Modesto. Owners, City of Modesto. At a special meeting of the City Council the matter of paving McHenry avenue was taken up and a survey ordered. This will cover the portion of the street from the corner of Needham avenue and Annie street north to Stoddard avenue. The portion of the street from Stoddard avenue to the bridge over the canal will not be paved until some agreement with the county can be made. The east side of this portion of McHenry avenue is in the city and the west side in the county. It is probable that the same kind of construction as on the state highway, concrete base with oil surface will be tried out on this street. Further mention will be made of this work.

SANTA ROSA, SONOMA CO., CAL.—Highway construction. Cost not stated. Engineer, County Surveyor, associated with State Highway Commission. Owners, Sonoma-Marin Counties and State of California. The construction of the Black Point cut-off is now assured. At a special meeting held by the Sonoma County Supervisors the matter of Sonoma County's share of payment was satisfactorily arranged. Sonoma County has agreed to pay into the state treasury \$190,000 and Marin County \$35,000. Bids will be called for shortly.

LOS ANGELES, CAL.—Paved walks and road. Cost not stated. Engineer, State Engineer McClure, Sacramento. Owners, State of California. Bids will be received until December 27th at 12 noon for paved walks, road and gutters on the grounds of the State Normal School at Los Angeles. Plans can be secured from the State Department of Engineering. An official proposal appears in another column of this issue.

OLYMPIA, WASH.—Highway construction. Cost as follows. Engineer, State Highway Commission, Olympia. Owners, State of Washington. Bids will be received by the State Highway Commission until December 20th for the construction of 35 miles of the Inland Empire Highway as follows: Rosalia south, 7 miles, \$27,000; Pullman south, 9 miles, \$30,000; Touchet-Walula, 7 miles, \$34,000, and Kennewick west, 13 miles, \$34,000.

STIRLING CITY, BUTTE CO., CAL.—Water system. Cost not stated. Engineer, none. Owners, Diamond Match Co. The Diamond Match Company is putting in a complete system in its new lumber yard. A total of 2,500 feet of 8-inch and 1,500 feet of 4-inch water main will be used.

EUREKA, HUMBOLDT CO., CAL.—Furnishing water pipe. Cost not stated. Engineer, City Engineer, Eureka. Owners, City of Eureka. Bids will be opened on December 7th for furnishing f. o. b. steamer at San Francisco on or

before February 1st, 1916, 8,000 feet 2-inch black pipe and 1,500 feet of 1-inch galvanized pipe, standard weight, random lengths, for the Eureka Water Department.

SAN GABRIEL, LOS ANGELES CO., CAL.—Street paving, \$17,625. Engineer, City Engineer, San Gabriel. Owners, City of San Gabriel. The M. R. Company, 826 San Fernando Bldg., L. A., was the lowest bidder at approximately \$17,635 for improving a portion of Las Tunas drive. The work will include 240,000 square feet of macadam paving and 11,000 lineal feet of curb. No action was taken on awarding the contract.

SAWTELLE, LOS ANGELES CO., CAL.—Street paving and curbs. Cost not stated. Engineer, City Engineer, Sawtelle. Owners, City of Sawtelle. Bids will be received by the City Clerk up to 5 p. m. of December 20th for grading, macadamizing and constructing concrete curbs in Wabash street between Iowa avenue and Santa Monica Boulevard in accordance with plans and specifications on file in the office of the City Engineer.

LOS ANGELES, CAL.—Highway construction, \$68,962. Engineer, County Surveyor, Los Angeles. Owners, Los Angeles County. The Supervisors will soon issue a call for the construction of the first five miles of the Mint Canyon road. Plans for the work have been completed by Road Commissioner Joyner and will be adopted at the next meeting of the Board. Commissioner Joyner estimates the building of the first five miles of this road will cost \$68,962, or \$13,792 a mile. The road will be of concrete construction 20 feet wide and 5 inches thick.

LOS ANGELES, CAL.—Flood protection. Cost not stated. Engineer, County Surveyor, Los Angeles. Owners, Los Angeles County. The Road Commissioner has been authorized by the Board of Supervisors to do the necessary flood protection work connected with the construction of the Saugus-Palmdale road by force account. This work consists of the building of a number of short dykes along the banks of Santa Clara River.

Contracts Awarded

GLENDALE, LOS ANGELES CO., CAL.—Street improvement, \$25,988. Engineer, City Engineer, Glendale. Owners, City of Glendale. Contractor, Geo. H. Oswald, O. T. Johnson Bldg., L. A. Contract price, \$25,988.

HUNTINGTON BEACH, ORANGE CO., CAL.—Street improvements, \$81,480. Engineer, City Engineer, Huntington Beach. Owners, City of Huntington Beach. Contractors, Oswald Bros., O. T. Johnson Bldg., L. A. Contract price, \$81,480.

SAN DIEGO, CAL.—Sewer system completion, \$18,790. Engineer, City Engineer, San Diego. Owners, City of San Diego. Contractors, Dorra & Armstrong, San Diego. Contract price, \$18,790.

SAN MATEO, SAN MATEO CO., CAL.—Street paving, \$8,432. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Contractors, Federal Construction Co., Sharon Bldg., S. F. Contract price, \$8,432.

SANTA CRUZ, SANTA CRUZ CO.,

CAL.—Furnishing pipe. Cost as follows. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. Contractors, United States Pipe Co., 681 Market street, S. F., \$36.60 per ton; specials, \$50 per ton.

RICHMOND, CONTRA COSTA CO., CAL.—Sewers and pump, \$95,841.58. Engineer, City Engineer, Richmond. Owners, City of Richmond. Contractors, Richmond Dredging Co., Monadnock Bldg., S. F. Sublet to Chambers & Heafey, Bacon Bldg., Oakland.

NAPA, NAPA CO., CAL.—Street improvements and sewers. Cost as follows. Engineer, Town Engineer, Napa. Owners, Town of Napa. At a recent meeting of the City Council the following contracts were awarded: Geo. Errington, improvements of Ash street, \$911.37; F. A. Burge, improvement of Jackson street, \$1,562.11; F. A. Burge, sewer on Nursery street, \$257.07.

STORES AND OFFICES

SAN FRANCISCO—Auto distributing plant and sales rooms, 5 story and base, reinforced concrete, \$225,000. Architect's name not given. Owners, Willy-Overland Co. Location, Van Ness, Fern and Bush streets, covering an area of 120 by 220 feet. Construction fireproof. First floor for offices and sales rooms. Upper floors for storage space, shipping department and repairs. Interior of first floor finished in hardwood, tile and marble. Steam heat, elevator service, both freight and passenger, hot water supply, vacuum cleaning and special conveying equipment. Metal window sash and frames and fireproof doors. Exterior faced with cement plaster. Plans being prepared.

NAPA, NAPA CO., CAL.—Store, 1 story and base, reinforced concrete. Cost not stated. Architect, L. M. Turton, Napa. Owner, J. G. Platt, Napa. Location, Coombs street between 4th and 5th streets. Arranged for a number of modern stores. Patent store fronts and marble bases. Interior finish pine. Exterior faced with cement plaster. Plans complete.

Contracts Awarded.

SAN FRANCISCO—Store and office alteration, \$60,000. Architect, Willis Polk. Hobart Bldg., S. F. Owners, Frederick Estate. Contractors, Stockholm & Allyn, Monadnock Bldg., S. F. Contract price, \$60,000.

LOS ANGELES, CAL.—Bank and offices, 5 story and base. Class A construction. Cost not stated. Architect, John Parkinson. Security Bldg., L. A. Owners, Security National Bank. Contractor, F. O. Engstrom, 5th and San Antonio streets, L. A. Contract price not stated.

THEATRES

Contracts Awarded.

OAKLAND, CAL.—Theatre alteration Class C construction, \$66,000. Architect, Carl Werner, Phelan Bldg., S. F. Owner, C. J. Heisman. Contractor, Van Sant-Houghton Co., 303 Market street, S. F. Contract price, \$66,000.



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OFFICIAL PROPOSALS.

BIDS FOR RANGES.

BIDS will be received by the purchasing agent of the Los Angeles Board of Education up to 10 A. M. of December 1, 1915, for furnishing the school department with 112 ranges. Specifications may be obtained at the office of the purchasing clerk, 1137 San Pedro street, Los Angeles. For further particulars address same.

PROPOSALS FOR PAINTING.

PAINTING — Treasury department, Office of the Supervising Architect, Washington, D. C. — Sealed proposals will be received here until 10 A. M. December 8, 1915, for painting plastering in the U. S. public building at San Diego, Cal. For further information address the supervising architect.

SEALED PROPOSALS.

BIDS WILL BE RECEIVED BY THE City Commission in the Council Chamber, City Hall Building, on I street, between Ninth and Tenth streets, in the City of Sacramento, between the hours of ten o'clock a. m. and eleven o'clock a. m. on Thursday, December 9th, 1915, for furnishing all labor and materials for the general construction complete (excepting the jail work), of a Hall of Justice Building for the City of Sacramento, State of California, said buildings to be erected on portions of Lots Numbers One and Two in the block bounded by Sixth and Seventh and H and I streets in said City, in accordance with plans and specifications prepared by Shea & Lofquist, Architects, said plans and specifications having been heretofore adopted by the City Commission of said City, and said plans and specifications now being on file in the office of the City Clerk of said City, and open to the inspection of the public at all times during office hours, and copies thereof may be obtained by prospective bidders upon receipt of check on responsible bank made payable to City Clerk in the sum of Fifteen (\$15.00) Dollars, or deposit of cash in said sum, said check or cash deposit to be forwarded to bidder upon return of plans and specifications in good condition.

At the same time, on the same date, and in said Council Chamber, bids will also be received for the furnishing and erection complete of all jail cells and corridor work, concrete floors of same, etc., for said Hall of Justice Building, in accordance with plans and specifications prepared by Shea & Lofquist, Architects, subject to the same conditions as above stipulated for general construction of said building, including deposit for plans and specifications.

All work to be performed must be to the satisfaction of said City Commission of said City.

All such proposals must comply with the requirements of the New Charter of the City of Sacramento effective July 1st, 1912, and bidders are hereby cautioned that no bid which fails to comply therewith can be considered.

Bids must be submitted upon printed forms prepared by the City, copies of which, together with a circular of instructions, will be supplied free upon application to the undersigned, upon receipt of information from bidder whether form required would be personal bid, co-partnership bid, or corporation bid.

The successful bidder must give bond to the City of Sacramento conditioned for the faithful performance of the contract, and containing the stipulations prescribed in Section 102 of the said New Charter and Ordinance No.

186, Third Series of the City of Sacramento.

A certified check on a responsible bank, made payable to City Clerk for an amount not less than ten (10) per cent of the aggregate of the proposal must accompany each bid.

The right to reject any and all bids is reserved to the City by the provisions of said Charter.

M. J. DESMOND,
City Clerk of the City of Sacramento,
County of Sacramento, State of California.
Office City Hall Building, Sacramento, California.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 992—Proposals for Centrifugal Pumps, Dipper Lips, Steel and Iron Castings, Spring Plates, Pig Iron, Sheet Copper, Hatchets, Hammers, Hand Saws, Hackaws, Blades, Machetes, Rakes, Pliers, Spirit Levels, Anvils, Vises, Steel Clamps, Chisels, Carpenters' Braces, Pipe Tongs, Tinners' Shears, Planes, Drills, Drill Sockets, Bits, Pipe Dies, Taps, Files, Drill Sleeves, Copper, Perrules, Gauges, Grease Cups, Valves, Cocks, Wagon Wheels, Water Gauge Lamps, Lamp Chimneys, Fire Hose, Manila Rope, Coal Tar Pitch, Rock Salt, Lime, Canvas Shoes, Paper and Poplar Lumber.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 A. M. December 8, 1915, at which time they will be opened in public for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 992) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR STEEL TOWERS.

STEEL TOWERS—Sealed proposals indorsed "Proposals for Steel Towers" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. January 8, 1916, and then and there publicly opened, for two 400-foot steel towers at the radio station, Island of Guam. Plans and specifications may be obtained on application to the bureau. H. R. STANFORD, chief of bureau.

PROPOSALS FOR RAILROAD.

MARINE RAILWAY — Sealed proposals indorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. December 18, 1915, and then and there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Proposals are invited on separate component parts of the complete railway. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. The original date of opening was September 18, 1915, which was postponed to November 27, 1915. H. R. STANFORD, chief of bureau.

PROPOSALS FOR BUILDING.

BUILDING — Sealed proposals indorsed "Proposals for Five Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 10 o'clock a. m. January 4, 1916, and then and there publicly opened, for a power house and an operating building of reinforced concrete and steel construction and three quarters of wood construction for commanding officer, married operators and bachelor operators at the naval station, Cavite, P. I. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. Proposals will also be received at the naval station, Cavite, P. I., until 4:30 o'clock p. m. January 4, 1916, and opened at 10 o'clock a. m. January 5, 1916. H. R. STANFORD, chief of bureau.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, Noon, Monday, December 27, 1915, said bids then and there to be publicly opened and

read for furnishing all plant, materials and labor, and doing the work required for the complete construction of paved roads, walks, combined walks, and roads and for drains in the State Normal School Grounds, Los Angeles, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Five (\$5.00) Dollars will be required of plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Paved Roads, Walks, etc., State Normal School Grounds, Los Angeles, California."

(SIGNED) W. F. McCLURE,
State Engineer. (*)

PROPOSAL FOR PURCHASE AND REMOVAL OF AUSTRALIAN BUILDING.

PROPOSALS for the purchase and removal of the Australian Pavilion and Buildings at the Panama-Pacific International Exposition will be received by the undersigned up to Noon of Tuesday the 7th day of December, 1915. Proposals should be for lots as follows:

1. The buildings complete as they stand.
2. The buildings not including the items in Nos. 3 and 4.
3. Queensland Maple Panelling in Reception Hall.
4. Hoffman Heater and Arco Steam Boiler, Radiators and Plumbing and Lighting Fixtures.

Purchasers of Buildings will be required to grade the lot to the official grade in accordance with the conditions on which the land is held for Exposition purposes.

Proposals should be accompanied by a certified cheque for 10% of the amount of the proposal. No proposal necessarily accepted.

F. J. QUINLAN,
Australian Pavilion,
Exposition Grounds. (*)

PROPOSALS FOR BUILDING.

BUILDING — Sealed proposals indorsed "Proposals for Five Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 10 o'clock a. m. January 4, 1916, and then and there publicly opened, for a power house and an operating building of reinforced concrete and steel construction and three quarters of wood construction for commanding officer, married operators and bachelor operators at the naval station, Cavite, P. I. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. Proposals will also be received at the naval station, Cavite, P. I., until 4:30 o'clock p. m. January 4, 1916, and opened at 10 o'clock a. m. January 5, 1916. H. R. STANFORD, chief of bureau.

PROPOSALS.

OFFICE OF THE BOARD OF PUBLIC WORKS OF THE CITY AND COUNTY OF SAN FRANCISCO.

Sealed proposals will be received at this office between the hours of 2 o'clock p. m. and 3 o'clock p. m., on Wednesday, the 8th day of December, 1915, for doing the following work:

Furnishing and installing Directories and Bulletin Boards in the City Hall.

Progressive payments will be made. Said work must be done in accordance with the specifications on file in the office of the Board of Public Works, to which reference is hereby made. Work must be commenced within five (5) calendar days from the receipt of written notice from the Board of Public Works and completed within sixty (60) calendar days thereafter. The amount of bond for faithful performance of contract has been fixed at \$750.00.

All proposals offered must be accompanied by a check, certified by a responsible bank, payable to the order of the Clerk of the Supervisors, for an amount not less than ten per cent of the aggregate of the proposal.

Printed proposal forms will be furnished gratuitously upon application at the office of the Architect, and all proposals must be made upon such forms.

The Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works.
F. J. CHURCHILL,
Secretary.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals, inclosed "Proposals for Three Buildings" will be received at the naval station, Pearl Harbor, Hawaii, and at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. December 4, 1915, and then there publicly opened, for constructing one reinforced concrete power house, one reinforced concrete operating building and one wooden double quarters for chief operator at the naval station, Pearl Harbor, Hawaii. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. H. R. STANFORD, chief of bureau.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals, inclosed "Proposals for Five Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. January 4, 1916, and then there publicly opened, for a power house and an operating building of reinforced concrete and steel construction and three quarters of wood construction for commanding officer, married operators and bachelor operators at the naval station, Cavite, P. I. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. Proposals will also be received at the naval station, Cavite, P. I., until 4:30 o'clock p. m. January 4, 1916, and opened at 10 o'clock a. m. January 5, 1916. H. R. STANFORD, chief of bureau.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock p. m. on December 4, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:

Imperial County, from Dixie-land to El Centro (VII-Imp-12-C) about 12 miles in length, to be paved with Portland cement concrete.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the office of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated. The Division Engineers' offices are located at Willis, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
AUSTIN R. FLETCHER,
Highway Engineer.

WILSON R. ELLIS,
Secretary. (*)

Dated: November 9, 1915.

FOR CEMENT, SAND AND CRUSHED ROCK.

U. S. Engineer Office, 732 Central Building, Los Angeles, Cal., November 10, 1915.—Sealed proposals for furnishing American Portland cement, sand and crushed rock at San Pedro, Cal., will be received at this office until 11 A. M. December 10, 1915, and then opened. Information on application. R. H. RAYMOND, Major, Engineers.

PROPOSALS FOR THE SALE, WRECKING AND REMOVAL OF THE FRENCH BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

SEALED PROPOSALS for the sale, wrecking and complete removal of the French Building at the Panama-Pacific International Exposition at San Francisco, California, are asked by the French Commission.

PROPOSALS are desired for the sale, wrecking and complete removal of the building and clearing lot to official grade.

Proposals shall be securely sealed, accompanied by a certified check for ten per cent (10%) of the amount of the proposal, and mailed as follows: "P. J. Gregoire, Secretary, French Commission, French Building, Exposition Grounds, San Francisco, California."

Building may be inspected at any time between the hours of 11 A. M. and 4 P. M., Sundays excepted.

Proposals will be received up to and including noon of Friday, November 26th, 1915. The French Commission reserves the right to reject any or all bids.

FRENCH COMMISSION,
P. J. GREGOIRE,
Secretary. (*)

STATE OF CALIFORNIA.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock p. m. on December 27, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portions of State highway as follows:

Placer County, from Roseville to Penryn (III-Pla-17-A), about 7.5 miles in length, to be paved with Portland cement concrete.
Placer County, from Penryn to Auburn (III-Pla-17-B), about 6.5 miles in

length, to be paved with Portland cement concrete.

Tehama County, from Corning to Proberta (II-Teh-7-A and 3-B), about 10.2 miles in length, to be paved with Portland cement concrete.

Sonoma and Marin Counties, across Petaluma Creek at Green Point (IV-Son-Marin-8-A), a bridge comprising a steel truss span 148 feet long, two concrete and steel approach spans each about 80 feet long, and about 1122 feet of crescent pile trestle.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the offices of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated.

The Division Engineers' offices are located at Willis, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
AUSTIN R. FLETCHER,
Highway Engineer.
WILSON R. ELLIS,
Secretary. (*)

Dated: Nov. 23, 1915.

IDEAL HOME EXHIBIT IN AUSTRALIA.

[Sydney Morning Herald, Oct. 19; supplementing note on "Ideal Home Competition in Australia," in "Commerce Reports for Oct. 12, 1915.]"

An ideal home exhibition is to be opened by the Governor on Monday, October 25, in the Sydney Town Hall. The exhibition is being organized by the Institute of Architects. The idea is to build and furnish a home which will entail a minimum amount of work for the housewife and to demonstrate how a home can be made beautiful at comparatively little cost to the owner. A model cottage, costing £700 (\$3,406), is to be erected on the floor of the town hall, and it will be decorated and furnished in an artistic but inexpensive manner. Several of the large city firms will also erect rooms furnished in an artistic style. The arts-and-crafts section will show over 100 of its exhibits for the beautifying of the home. Commerce Reports.

E. R. Hoerchner

Attorney-at-Law

Phone Garfield 2856

Phelen Bldg.

San Francisco

ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, Charles J. H. Schultz, 5709 Geary street, S. F. Location, east 18th avenue south of Anza. Will contain six rooms and bath. Interior finish pine and elm panels. Some hardwood floors. Open fire places and tile or brick mantels. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$2,600 each. San Francisco. Architect, none. Owner, W. R. Kenny, 430 Arguello Boulevard, S. F. Location, east 19th avenue south of Balboa. Each will contain seven rooms, bath and sleeping porches. Interiors finished in pine, elm and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Bath rooms tile. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 1 story and base, frame, \$2,500 each. San Francisco. Architect, none. Owner, E. Nelson, 36 Presidio Terrace, S. F. Location, west 27th avenue north Irving and west Hillway south of Carl. Will contain six rooms and bath with sleeping porches and basement garage. Interior finish pine, white enamel and elm panels. Hardwood floors and open fire places. Mantels tile and brick. Imitation tile in bath rooms. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 and 5 story and base. Class A construction, \$150,000. San Francisco. Architect, Willis Polk, Hobart Bldg., S. F. Owner, Andrew Welch, Jr. Location, Broadway between Broderick and Baker. Will contain 26 rooms, a number of baths, sleeping porches, conservatory and large ball rooms. Separate garage and servants rooms. Complete steel frame, concrete walls and floors. Hardwood interior trim, marble and tile mantels, tile bath rooms, steam heat, oil burning equipment, hot water circulating system and vacuum cleaning. Exterior faced with terra cotta and brick. Plans complete and figures being called for at once.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, J. S. McClelland, 530 12th avenue, S. F. Location, east 12th avenue north of Cabrillo. Will contain seven rooms, bath and sleeping porch. Interior finish pine, elm and white enamel. Hardwood floors. Open fire places and tile mantels. Bath room tile. Automatic water heater. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$1,000. San Francisco. Architect, Joseph H. Leonard, 85 Cerritos avenue, S. F. Owners, Urban Realty Co. Location, west Urbano Drive north of Victoria. Will contain eight rooms, two baths, sleeping porch and basement garage. Interior finish pine, gum and white enamel. Hardwood floors. Tile bath rooms. Open fire places and furnace heat. Mantels tile or brick. Automatic water heater. Exterior covered with shingles. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, William J. Cuneo, 686 Capp street, S. F. Location, south 20th east of Sanchez. Will contain six rooms, bath and sleeping porch. Interior finish pine and elm panels. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—3 story and base, frame, \$15,000. San Francisco. Architect, Benj. G. McDougall, Sheldon Bldg., S. F. Owner, Arthur Arlett, Sheldon Bldg. Location, Powell near Washington. Will contain a number of two and three room suites with private baths and wall beds. Interior finish pine and elm panels and some hardwood floors. Steam heat and a hot water system. Bath rooms will have composition floors. Marble and tile entrances. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—1 story and base, brick and steel, \$20,000. San Francisco. Architect, George C. Thomas, Russ Bldg., S. F. Owner, A. Penziner. Location, east Hyde north of Ellis. Will contain fifteen apartments of two and three rooms. All suites will have wall beds and private baths. Interior finish pine and elm panels. Some hardwood floors. Steam heat, automatic elevator and hot water system. Bath rooms tile. Marble and tile entrance. Exterior faced with cement plaster and pressed brick. Plans complete and figures to be taken shortly.

APARTMENT HOUSE—2 story and base, frame, \$10,000. San Francisco. Architect, Edward E. Young, 251 Kearny street, S. F. Owner, Thomas Seohk, 363 14th avenue, S. F. Location, northeast corner of Geary and 15th avenue, covering an area of 32½ by 67 feet. First floor arranged for a store. Upper floor will contain four suites of four rooms and bath. Interior finish pine and elm with some white enamel and hardwood floors. Hot water system and wall beds. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—1 story and base, Class C construction, \$10,000.

San Francisco. Architect, J. C. Hladik, Monadnock Bldg., S. F. Owner's name not given. Location, south Bush east of Hyde. Will contain a number of two and three rooms suites with private baths and wall beds. Interior finish pine, gum and white enamel. Some hardwood floors. Steam heat, automatic elevator and hot water supply. Bath rooms will have composition floors and tile wainscot. Marble and tile wainscot in lobby. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and figures being taken.

CHURCH—1 story and base, frame and concrete, \$15,000. San Francisco. Architect, Leo J. Devlin, Pacific Bldg., S. F. Owners, St. Charles Church. Location, 15th and Shotwell streets. Designed in the Mission style. Will contain main auditorium and Sunday school rooms. Interior finished in pine and ornamental plaster. Art glass windows. Exterior covered with cement plaster. Plans being prepared.

CHURCH ADDITION—1 story, frame, \$4,000. San Francisco. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owners, Betheny Church. Location, Mission and Itiehland avenue. Addition will contain Sunday school rooms and social room. Interior finish pine. Exterior covered with cement plaster. Plans complete and figures being taken.

FLATS—2 story and base, frame, \$6,000. San Francisco. Architect, none. Owner, W. W. Rednall, 2500 Filbert street, S. F. Location, west Baker south of Filbert. Will contain two flats of five and six rooms. Interiors finished in pine, gum and hardwood. Hardwood floors and open fire places. Mantels tile and brick. Bath rooms finished in tile. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FLATS—3 story and base, frame, \$8,000. San Francisco. Architect, Edward E. Young, 251 Kearny street, S. F. Owner, Edward E. Young. Location, south Clay west of Leavenworth, covering an area of 25 by 52 feet. Will contain six flats of four and five rooms. Interiors finished in pine, gum and hardwood. Hardwood floors and open places. Wall beds. Mantels tile or brick. Special kitchen equipment. Exterior covered with brick veneer and shiplap. Plans complete and work to be done by Day Labor.

RADIO TOWERS—Steel. Cost not stated. Island of Guam. Engineers, Bureau of Yards and Docks, Washington, D. C. Owners, United States Government. Bids will be received until December 21st for the construction of a 100-foot steel radio tower at the Island of Guam.

WOMAN'S GYMNASIUM AND CLUB—1 story and base, Class A construction, \$100,000. San Francisco. Archi-

interiors finished in pine, gum and white enamel. Hardwood floors and open fire places. Mantels tile and brick. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,600. Oakland, Cal. Architect, none. Owner, Edward Larner, 470 Boulevard Way, Oakland. Location, north Alcatraz west of Hillegass. Will contain six rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, William E. Roth, 2820 Summit street, Oakland. Location, north Brookdale west of Lilac. Will contain six rooms, bath and sleeping porch. Interior finish pine, gum and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, F. R. Jordan, 1497 Oak street, Oakland. Location, south Harvard avenue east of College. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1½ story and base, frame, \$3,000. Oakland, Cal. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, Walter H. Packard. Location west Thomas south of Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine, gum and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, Charles W. McCall, Central Bank Bldg., Oakland. Owner, Robert Farmer. Location, northeast corner 11th avenue and East 24th street. Will contain a store on the first floor and five living rooms above. Interior finish pine. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 2 story and base, frame. Cost not stated. Oakland, Cal. Architect, Charles F. Mau, Macdonough Bldg., Oakland. Owners, Charles F. Mau and F. W. Dengwell. Location, Grand avenue near Sunnyslope. Will contain six rooms, bath and sleeping porches. Interiors finished in pine, gum and white enamel. Hardwood floors, open fire places and tile or brick mantels. Imitation tile in bath rooms. Automatic water heaters. Exterior

covered with cement plaster. Plans complete and architect taking sub-fractions.

RESIDENCE—1 story and base, frame, \$1,500. Oakland, Cal. Architect, none. Owner, F. A. Dodge, 1011 69th avenue, Oakland. Location, south Noble west of 61st street. Will contain five rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile mantel. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

HOSPITAL DAY HALL AND PORT-MITORIES—2, 2 story and base, brick and steel. Cost not stated. Oakland, Cal. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, Alameda County. Under the new proposal issued last Friday for the construction of these buildings bids will be opened on December 20th at 10 a. m. Plans and specifications can be secured from the offices of the County Clerk.

SCHOOL ADDITION—2 story and base, frame. Cost not stated. Oakland, Cal. Architect, John J. Donovan, Dalziel Bldg., Oakland. Owners, City of Oakland. Bids will be received until December 6th for the construction of a two-story addition to the Fremont School. Plans can be secured from the Secretary of the Board of Education.

Contracts Awarded

RESIDENCE—2 story and base, frame, \$25,000. Piedmont, Alameda Co., Cal. Architect, Julia Morgan, Merchants' Exchange Bldg., S. F. Owner, J. L. Lombard, Contractor, Bruce B. Burnett, 316 Oak avenue, Oakland. Contract price, \$25,000.

GRANITE FACING—\$225,000. Berkeley, Alameda Co., Cal. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. Contractors, Raymond Granite Co., S. F., exterior facing for Benj. Ide Wheeler Hall. Contract price, \$225,000.

THEATRE ALTERATION—Class C construction, \$66,000. Oakland, Cal. Architect, Carl Werner, Phelan Bldg., S. F. Owner, C. J. Heesman. Contractors, Van Sant-Houghton Co., 503 Market street, S. F. Contract price, \$66,000.

SAN JOSE AND THE SANTA CLARA VALLEY

SEWER CONSTRUCTION—Cost not stated. Daly City, San Mateo Co., Cal. Engineer, Town Engineer, Daly City. Owners, Town of Daly City. Bids will be received until December 12th for constructing an 8-inch salt glazed vitrified sewer pipe along Bellevue avenue, 2,662 feet; 12 feet of 12-inch diameter salt glazed vitrified sewer pipe at the intersection of Bellevue avenue with Henrietta street; 12 feet of 15-inch diameter salt glazed vitrified sewer pipe at intersection of Bellevue avenue with Oliver street; the construction of 1 manholes; 4 lampholes; 29 8x4 inch V branches; 8, 15x4 inch Y branches, 91 6-foot riser pipes of salt glazed vitrified sewer pipe.

STREET IMPROVEMENT—Cost not stated. San Mateo, San Mateo Co., Cal. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. At the last meeting of the City Trustees, new

specifications and a new resolution for the improvement of Barrohet and Peninsula avenues were adopted after the former had been rescinded and the clerk was directed to call for bids for the work. Further information may be had from the City Engineer at San Mateo.

SEWER CONSTRUCTION—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. At the last meeting of the City Trustees, H. F. Sharp petitioned the Board to construct a sewer on Pine avenue from olive to Linden avenue. The City Engineer was instructed to have the work done.

SCHOOL—1 story and base, reinforced concrete, \$25,000. Santa Cruz, Santa Cruz Co., Ca. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Santa Cruz Mission School. Will be designed along similar lines to the famous old Mission School at Santa Cruz. There will be six class rooms, special room for typewriting and an assembly hall. Interior finish pine. Central heating system, probably warm air. Exterior cement plaster, clay tile roof. Plans being prepared.

Contracts Awarded

STREET PAVING—\$4,432. San Mateo, San Mateo Co., Cal. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Contractors, Federal Construction Co., Sharon Bldg., S. F. Contract price, \$4,432.

FURNISHING PIPE—Cost as follows. Santa Cruz, Santa Cruz Co., Cal. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. Contractors, United State Pipe Co., 681 Market street, S. F., \$36.60 per ton; specials, \$60 per ton.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

HIGHWAY CONSTRUCTION—Cost not stated. Santa Rosa, Sonoma Co., Cal. Engineer, County Surveyor, associated with State Highway Commission. Owners, Sonoma-Marin Counties and the State of California. The construction of the Black Point cut-off is now assured. At a special meeting held by the Sonoma County Supervisors the matter of Sonoma County's share of payment was satisfactorily arranged. Sonoma County has agreed to pay into the State Treasury \$180,000 and Marin County \$35,000. Bids will be called for shortly.

STREET IMPROVEMENTS AND SEWERS—Cost as follows. Napa, Napa Co., Cal. Engineer, Town Engineer, Napa. Owners, Town of Napa. At a recent meeting of the City Council the following contracts were awarded: Geo. Brington, Improvements of Ash street, \$91,437; F. A. Burge, Improvement of Jackson street, \$1,863.11; F. A. Burge, sewer on Nursery street, \$357.97.

CHURCH—1 story and base, frame, \$7,500. Fairfield, Solano Co., Cal. Architect, W. J. Wythe, Central Bank Bldg., Oakland. Owners, Fairfield Methodist Church. Will contain main auditorium, Sunday school rooms, social parlors and pastor's study. Interior finish pine and ornamental plaster. Some art glass windows. Exte-

rior covered with cement plaster. Plans being prepared.

SCHOOL—1 story and base, brick. Cost as follows. Richmond, Contra Costa Co., Cal. Architect's name not given. Owners, City of Richmond. The following contractors submitted the low bids for the first unit of the new Pullman School and will probably be awarded the contracts: General construction, Robert Glaze, Humboldt Bank Bldg., S. F., \$9,282; J. E. O'Mara, S. F., heating \$635, and J. I. Collins, plumbing, \$1,011.

WINERY—2 story, brick and frame. Cost not stated. Martinez, Contra Costa Co., Cal. Architect, none. Owner, J. E. Colton, Martinez. J. E. Colton has purchased a site 50 by 100 feet on Howard street and will erect an addition to his present winery building. A two-story frame and part brick addition will be erected on the additional ground. Work will be started shortly.

STORE—1 story and base, reinforced concrete. Cost not stated. Napa, Napa Co., Cal. Architect, L. M. Turton, Napa. Owner, J. G. Platt, Napa. Location, Combs street between 4th and 5th streets. Arranged for a number of modern stores. Patent store fronts and marble bases. Interior finish pine. Exterior faced with cement plaster. Plans complete.

Contracts Awarded.

SEWERS AND PUMP — \$5,843.58. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Contractors Richmond Dredging Co., Monadnock Bldg., S. F., sublet to Chambers & Heafey, Bacon Bldg., Oakland.

RESIDENCE — 2 story and base, frame, \$4,000. Cotati, Sonoma Co., Cal. Architect, John J. Foley, 46 Kearny street, S. F. Owner, Roman Catholic Church. Contractor, A. Herrmann, Pengrove. Contract price, \$4,000.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

STREET PAVEMENT — Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, City Engineer, Modesto. Owners, City of Modesto. At a special meeting of the City Council the matter of paving McHenry avenue was taken up and a survey ordered. This will cover the portion of the street from the corner of Needham avenue and Annie street north to Stoddard avenue. The portion of the street from Stoddard avenue to the bridge over the canal will not be paved until some agreement with the county can be made. The east side of this portion of McHenry avenue is in the city and the west side in the county. It is probable that the same kind of construction as on the state highway, concrete base with oil surface will be tried out on this street. Further mention will be made of this work.

RESIDENCE — 1 story and base, frame, \$2,000. Fresno, Fresno Co., Cal. Architect, none. Owners, Reese & Atkins, 743 Weldon street, Fresno. Location, Alta Vista Tract. Will contain six rooms and bath. Interior finish pine throughout. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior cement plaster. Plans complete and work to be done by Day Labor.

LIBRARY—1 story and base, brick and concrete, \$10,000. Turlock, Stanislaus Co., Cal. Architects, Bowen & Davis, McKenzie Bldg., Fresno. Owners, Town of Turlock. Will be designed in the classic style and will contain two main reading rooms, children's room and offices of the librarian. Interior finish pine with hardwood floors. Metal book stacks. Central heating system. Exterior faced with cement plaster. Plans being prepared.

POST OFFICE—2 story and base. Class A construction. Cost not stated. Bakersfield, Kern Co., Cal. Architect, Supervising Architect, Washington, D. C. Owners, United States Government. Location, 18th and G streets, covering an area of 100 by 132 feet. Steel frame. Interior finish pine and hardwood with tile, hardwood and cement floors. Steam heat, oil burning equipment and vacuum cleaning. Exterior faced with stone and pressed brick. Plans complete and figures to be called for shortly.

Contracts Awarded.

BRIDGES AND CULVERTS—Cost as follows. Hanford, Kings Co., Cal. Engineer, County Surveyor, Hanford. Owners, Kings County. Contractor, S. G. Smart, Bakersfield. Contract price, No. 1A, laying concrete, \$7.19 per cubic yard; No. 1B, laying concrete, \$7.19 per cubic yard; No. 2, laying steel, half cent per pound.

ROAD IMPROVEMENT — Cost not stated. Oroville, Butte Co., Cal. Engineer, County Surveyor, Oroville. Owners, Butte County. All bids received by the Butte County Supervisors for the repair of the River road were rejected at the last meeting of the Board, as all were above the estimate. The work will now be done by the county. The following bids were received: J. L. Mery Co., \$5,825; Chico Construction Co., \$5,440; George Taber, \$5,537.

CHURCH COMPLETION — Frame, \$5,000. Brijach, Merced Co., Cal. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Roman Catholic Church. Contractor, A. Wayne, Atwater. Contract price, \$5,000.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

HIGHWAY CONSTRUCTION — Cost not stated. San Andreas, Calaveras Co., Cal. Engineer, County Surveyor, San Andreas. Owners, Calaveras County. The survey of the state highway lateral from San Andreas to the San Joaquin County line, has been started. Included in the highway work in the construction of a bridge across the Calaveras River between San Andreas and North Branch, which has been declared unsafe, and for which plans have already been prepared. Further mention will be made of this work.

BRIDGE—Steel and reinforced concrete. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. The County Surveyor was instructed at the last meeting of the County Supervisors to prepare plans and specifications for a steel and concrete bridge across Brickyard Creek on the Red Bluff and Corning road, in Road District No. 2. Bids will be called

for on the completion and acceptance of the plans by the County Board.

BRIDGES, ETC.—Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. At the last meeting of the County Supervisors the County Surveyor was instructed to prepare plans for the following work: That the County Surveyor be ordered to prepare specifications for trenching a portion of the Paynes Creek road, beginning at Seven Mile Creek and continuing on to Hog Lake. The county to furnish the rock crusher and the bidders to state the amount charged per cubic yard for crushed rock and placing same on the road. The County Surveyor was also ordered to prepare plans and specifications for repairing the Minger Creek bridge and for the construction of jetties near the lower Deer Creek bridge in Road District No. 5. It was moved by Supervisor Samson that Supervisor Kauffman be authorized to have the east approach to the bridge across the Sacramento River at Tehama repaired.

BRIDGE REMOVAL—Cost not stated. Marysville, Yuba Co., Cal. Engineer, County Surveyor, Marysville. Owners, Yuba County. The bid of A. C. Knox and K. W. Gordon for the removal of the old Yuba River bridge was rejected by the Supervisors at their last meeting. It is the intention of the Board to have the bridge removed to make way for a new structure to be erected there. The work of removing will now be done under the direction of the County Surveyor.

BRIDGE—Reinforced concrete. Cost not stated. Grass Valley, Nevada Co., Cal. Engineer, County Surveyor, Grass Valley. Owners, Nevada County. The old bridge over Little Wolf Creek on the Colfax road is being razed to make way for the new concrete bridge to be constructed. The work is under the supervision of C. J. Miller, chairman of the Board of Supervisors. Bids for the new structure will be called for shortly.

STREET LIGHTING SYSTEM—\$3,500. Eureka, Humboldt Co., Cal. Engineer, City Engineer, Eureka. Owners, City of Eureka. The proposition of maintaining and installing an ornamental lighting system on Second street is being considered by the business men and property owners on that thoroughfare. It is thought that the system could be placed at an estimate of \$3,500, this being for six blocks from the corner of G street to the Occidental Pavilion. Action will be taken shortly.

LEVEE REPAIR—Cost not stated. Freepoint, Sacramento Co., Cal. Engineer, E. A. Bailey, Sacramento. Owners, State of California. Owing to the dangerous condition of the east side of the Sacramento River at Portuguese Bend at Freepoint, the Reclamation Board has instructed Flood Control Engineer E. A. Bailey to submit at the next meeting detailed estimates of the cost of permanent repair.

RESIDENCE — 1 story and base, frame, \$2,500. Sacramento, Cal. Architect, none. Owner, W. D. McKoy, 2623 E street, Sacramento. Location, 2317 27th street. Will contain six rooms, bath and sleeping porch. Interior finish pine, hardwood and white

enamel. Hardwood floors. Open fire places and tile on brick mantels. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Sacramento, Cal. Architect, none. Owner, Joseph Edenhofer, 3011 Cypress avenue, Sacramento. Location, 2208 15th street. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—2 story and base, frame, \$8,000. Sacramento, Cal. Architect, P. J. Herold, Forum Bldg., Sacramento. Owner, George B. Stack. Location, corner of 15th and M streets. Will contain 20 rooms arranged en suite besides private baths. Interior finish pine with some hardwood floors. Hot water supply. Wall beds. Exterior covered with cement plaster. Plans complete and a contract for the carpentry and mill work awarded to Chatterton Bros. Bids being taken for the balance of the work.

WATER SYSTEM—Cost not stated. Stirling City, Butte Co., Cal. Engineer, none. Owners, Diamond Match Co. The Diamond Match Company is putting in a complete system in its new lumber yard. A total of 2,500 feet of 8-inch and 1,500 feet of 4-inch water main will be used.

FURNISHING WATER PIPE—Cost not stated. Eureka, Humboldt Co., Cal. Engineer, City Engineer, Eureka. Owners, City of Eureka. Bids will be opened on December 7th for furnishing f. o. b. steamer at San Francisco on or before February 1st, 1916, 8,000 feet 2-inch back pipe and 1,500 feet of 1-inch galvanized pipe, standard weight, random lengths, for the Eureka Water Department.

CITY HALL AND JAIL—4 story and base, reinforced concrete, \$175,000. Sacramento, Cal. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, City of Sacramento. The closing date for figures on this work has been officially announced as December 9th between 10 and 11 a. m. Plans can only be secured from the City Clerk at Sacramento. An official proposal appears in another column of this issue.

HOSPITAL ADDITION—1 story, frame. Cost not stated. Eureka, Humboldt Co., Cal. Architect, E. J. Burke, Eureka. Owners, Humboldt County. Bids will be received until December 14th for the construction of an addition to the present county hospital. Plans can be secured from the architect.

SCHOOL—2 story and base, reinforced concrete or brick, \$10,000. Lodi, San Joaquin Co., Cal. Architects, Stone & Wright, 21 South California street, Stockton. Owners, City of Lodi. Location, East Pine street. Will contain six class rooms and an assembly hall. Interior finished in pine with maple floors. Steam heat, oil burning plant. Exterior faced with cement plaster or pressed brick. Plans approved and bids to be called for shortly.

Contracts Awarded.

LEVEE REPAIRS—\$11,250. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, A. Teichert & Son, Ochsner Bldg., Sacramento. Contract price, \$11,250.

RESIDENCE—2 story and base, brick and frame, \$15,000. Los Angeles, Cal. Architects, Milwaukee Building Co., Wright and Callender Bldg., L. A. Owner, Harry Chandler. Contractors, Milwaukee Building Co., Wright and Callender Bldg., L. A. Contract price, \$15,000.

BANK—2 story and base, brick and concrete, \$13,228. Walnut Grove, Sacramento, California. Architect, W. H. Weeks, 75 Post street, S. F. Owner, Bank of Alex Brown. Contractor, H. F. Smith, Walnut Grove. Contract price, \$13,228.

LOS ANGELES AND SOUTHERN CALIFORNIA

PAVED WALKS AND ROAD—Cost not stated. Los Angeles, Cal. Engineer, State Engineer McClure, Sacramento. Owners, State of California. Bids will be received until December 27th at 12 noon for paved walks, road and gutters on the ground of the State Normal School at Los Angeles. Plans can be secured from the State Department of Engineering. An official proposal appears in another column of this issue.

FACTORY GROUP—1 and 2 story and base, steel and reinforced concrete, \$500,000. Los Angeles, Cal. Engineer, Engineering Dept. American Can Co., New York City. Owners, American Can Co. The American Can Co., C. J. Gordon representative, Los Angeles Investment Bldg., has purchased a five-acre site on the west side of Santa Fe avenue between 48th and 49th streets and will establish a branch factory. Several large factory buildings and machine shops will be erected.

STORAGE BUILDING—1 story and base, reinforced concrete. Cost not stated. Camarillo, Ventura Co., Cal. Architect, Alfred F. Priest, Fay Bldg., L. A. Owners, J. F. Lewis & Son. Will cover and area of 100 by 125 feet. Designed for cold storage and refrigerating plant. Interior finish pine. Carrier system, metal window sash and frames and metal covered doors. Exterior faced with cement plaster. Plans complete and work to be done by Day Labor under direction of the architect.

FLATS—2 story and base, brick. Cost not stated. Los Angeles, Cal. Architects, Eisen & Sons, Wilcox Bldg., L. A. Owner, Milton Metzler. Location, corner of 8th and New Hampshire streets. Will contain six five-room flats in each building. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Open fire places and tile mantels. Wall beds. Bath rooms tile. Exteriors faced with pressed brick. Plans complete and work to be done by Day Labor.

LODGE HALL—3 story and base, brick, \$30,000. San Diego, Architects, W. S. Hebbard and C. M. Winslow, Grant Bldg. San Diego. Owners, University Club. Location, east 7th between A and Ash streets. Will contain offices, dormitories, club rooms, banquet hall and kitchen. Interior finish

pine and hardwood with hardwood floors. Central heating system and hot water supply. Exterior faced with cement plaster. Plans complete and figures being taken.

LIBRARY—1 story and base, brick or hollow tile, \$30,000. East Hollywood, Los Angeles Co., Cal. Architect, C. H. Russell, Story Bldg., L. A. Owners, City of East Hollywood. Will contain main reading room, children's room, offices and stack room on the main floor. Auditorium seating 300 people and work room will occupy the basement. Interior finish pine and hardwood. Hardwood floor. Steam heat, metal hook stacks. Exterior Exterior faced with pressed brick. Plans being prepared.

SCHOOL—1 story and base, hollow tile or concrete. Cost not stated. Coachella, Riverside Co., Cal. Architect, G. Stanley Wilson, Virginia Block, Riverside. Owners, Coachella School District. Will contain nine class rooms, assembly hall and office. Interior finish pine with maple floors. Central heating system, oil burning furnace. Exterior faced with cement plaster. Plans complete and ready for figures.

SCHOOL. One story and base, brick. Cost not stated. Oxnard, Ventura Co., Cal. Architects, Allison & Allison, Hibernian Bldg., L. A. Owners, Town of Oxnard. Will contain six class rooms and an auditorium. Interior finish pine with maple floors in the class rooms. Central heating system. Ex. Plans being prepared.

SCHOOL—1 story, frame, \$1,500. Santa Margarita, San Luis Obispo Co., Cal. Architect, J. J. Roth, Atascadero. Owners, Santa Margarita School District. The lowest bid received for this work was \$1,875 and all figures were rejected. New bids are being called for and will be opened on December 11th. Plans can be secured from the architect.

IRRIGATION WORK—Cost not stated. Los Angeles, Cal. Engineer, County Surveyor, L. A. Owners, Los Angeles County. Owing to alleged irregularities, the bids for the construction of an irrigation system in water works district No. 1 were rejected by the Supervisors, and the mechanical department of the county was instructed to prepare new plans and specifications. It was said the specifications were vague in a number of respects and the bidders felt compelled to go outside of them in figuring on the work to be done.

STREET PAVING—\$17,635. San Gabriel, Los Angeles Co., Cal. Engineer, City Engineer, San Gabriel Owners, City of San Gabriel. The M. K. Company, 826 San Fernando Bldg., L. A., was the lowest bidder at approximately \$17,635 for improving a portion of Las Tunas Drive. The work will include 240,000 square feet of macadam paving, and 11,000 lineal feet of curb. No action was taken on awarding the contract.

STREET PAVING AND CURBS—Cost not stated. Sawtelle, Los Angeles Co., Cal. Engineer, City Engineer, Sawtelle. Owners, City of Sawtelle. Bids will be received by the City Clerk up to 5 p. m. of December 20th, for grading, macadamizing and constructing concrete curbs in Wabash street

between Iowa avenue and Santa Monica Boulevard, in accordance with plans and specifications on file in the office of the City Engineer.

HIGHWAY CONSTRUCTION — \$68,362. Los Angeles, Cal. Engineer, County Surveyor Los Angeles. Owners, Los Angeles County. The Supervisors will soon issue a call for the construction of the first five miles of the Mint Canyon road. Plans for the work have been completed by Road Commissioner Joyner and will be adopted at the next meeting of the Board. Commissioner Joyner estimates the building of the first five miles of this road will cost \$68,962, or \$13,792 a mile. The road will be of concrete construction, 20 feet wide and 5 inches thick. Further mention will be made of this work when bids have been called.

FLOOD PROTECTION — Cost not stated. Los Angeles, Cal. Engineer, County Surveyor, Los Angeles. Owners, Los Angeles County. The Road Commissioner has been authorized by the Board of Supervisors to do the necessary flood protection work connected with the construction of the Saugus-Palmdale road by force account. The work consists of the building of a number of short dykes along the banks of Santa Clara River.

Contracts Awarded

BANK AND OFFICES—5 story and base. Class A construction. Cost not stated. Los Angeles, Cal. Architect, John Parkinson, Security Bldg., L. A. Owners, Security National Bank. Contractor, F. O. Engstrom, 5th and Seaton streets, L. A. Contract price not stated.

RESIDENCE — 2 story and base, frame, \$15,184. Los Angeles, Cal. Architect, A. D. Hill, 775 South El Molin avenue, L. A. Owner, Joseph Cant. Contractor, A. D. Hill, 775 South El Molin avenue, L. A. Contract price, \$15,184.

CHURCH—1 story and base, brick and hollow tile. Cost not stated. La Jolla, San Diego Co., Cal. Architects, Reginald Johnson and C. M. Winslow, Grant Bldg., San Diego. Owners, Union Congregational Church. Contractor, Ralph Tillinghast, La Jolla. Contract price not stated.

STREET IMPROVEMENT — \$25,988. Glendale, Los Angeles Co., Cal. Engineer, City Engineer, Glendale. Owners, City of Glendale. Contractor, George H. Oswald, O. T. Johnson Bldg., L. A. Contract price, \$25,988.

STREET IMPROVEMENTS—\$81,480. Huntington Beach, Orange Co., Cal. Engineer, City Engineer, Huntington Beach. Owners, City of Huntington Beach. Contractors, Oswald Bros., O. T. Johnson Bldg., L. A. Contract price, \$81,480.

SEWER SYSTEM COMPLETION—\$18,790. San Diego, Cal. Engineer, City Engineer, San Diego. Owners, City of San Diego. Contractors, Doran & Armstrong, San Diego. Contract price, \$48,790.

SEATTLE AND WASHINGTON

HIGHWAY CONSTRUCTION — Cost as follows. Olympia, Wash. Engineer, State Highway Commission, Olympia. Owners, State of Washington. Bids will be received by the State High-

way Commission until December 20th for the construction of 35 miles of the Inland Empire Highway as follows: Rosalia south, 7 miles, \$27,000; Pullman south, 9 miles, \$30,000; Touchet-Wallula, 7 miles, \$34,000, and Kennewick west, 13 miles, \$34,000.

ORGANIZING BUSINESS NATIONALITY.

By John H. Fahey

President of the Chamber of Commerce of the United States.

Three years ago the Chamber of Commerce of the United States was organized. It had no membership and it hadn't a dollar.

Today it stands as the spokesman of 680 commercial organizations representing nearly 300,000 business men, firms and corporations throughout the United States.

In three years it has become a great constructive force in the business life of this Nation. It has helped vital commercial legislation at Washington. It suggested important amendments to the Federal Reserve Act, assisted in the readjustment of the Department of Commerce and influenced important modifications that appear in the final form of the Trust Bills.

As the time of the Fourth Annual Meeting approaches, the great business convention to be held in Washington, February 8, 9, and 10, the National Chamber stands committed, through referendum, to the proposition to the upbuilding of a Merchant Marine, a National Budget, and a permanent non-partisan Tariff Commission.

Agriculture and Labor have long been organized. Now the Chamber of Commerce of the United States is organizing business nationally. It has nothing to conceal. It is the mouthpiece of no clique or group. The New York banker and the San Francisco merchant may be found in its membership. Its voice is the voice of American Business. It speaks for all.

Let me say to business men everywhere the National Chamber is your Organization. It is fighting your battles. It is doing what you could never hope to do single-handed or through local organization. It is contending for just what you want to see in this whole country—business stability, integrity, sanity, understanding. And it wants, and needs, and indeed must have the encouragement and support of every live, patriotic business man in the United States.

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Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

SAN FRANCISCO COUNTY.

No.	Owner	Contractor	Amt.
3335	Rednall	Rednall	3355
3336	Rednall	Rednall	3355
3337	Nelson	Nelson	1900
3338	Nelson	Nelson	2500
3339	Knight	Knight	5500
3340	Heymann	Heyman	2505
3341	Williams	McIntosh	1000
3342	Rainey	Bowers	400
3343	Symon	Symon	1000
3344	Carlson	Carlson	100
3345	Ryan	Ryan	1000
3346	McInery	McInery	100
3347	Rice Leaders	Owner	1200
3348	Bothin	Bothin	400
3349	Sullivan	Sullivan	600
3350	Watson	Watson	400
3351	Wohl	Perry	1000
3352	Pick	Pick	800
3353	Skaller	Bligh	400
3354	Gerard	Gerard	85000
3355	Mart Dayst	Owner	1200
3356	Tillman	Carson	2000
3357	Brookie	Matthies	12700
3358	Knight	Knight	5500
3359	Alhonzee	Bowers	500
3360	Brown	Brown	1850
3361	Michilli	Bailey	400
3362	Thunberg	Thunberg	450
3363	Reed	Reed	500
3364	Bothin	Bothin	1000
3365	Blinn	MacDonald	600
3366	Roddy	Roddy	150
3367	Danna	No. Beh S M	400
3368	Nelson	Nelson	1900
3369	Nelson	Nelson	1900
3370	Wm Pac	Fay	1000
3371	Moran	Turner	3955
3372	Same	Carriek	1400
3373	Same	Carriek	2874
3374	Same	La Torres	2095
3375	Donnelly	Schwarz	5746
3376	It Am Bank	Biller	1500
3377	Ede	Ede	8000
3378	Bludworth	Sharman	650
3379	Bludworth	Sharman	1750
3380	City Rough Dry	Steur	1250
3381	Barton	Barton	1000
3382	Wolf	Atlas	450
3383	Levinson	Atlas	750
3384	Linderman	Gottwald	750
3385	Trolock	Trolock	1500
3386	Curry	Higginson	1600
3387	O'Connell	Petersen	19500
3388	Kenny	Kenny	3000
3389	Same	Same	3000
3390	Nelson	Nelson	1900
3391	Buckher	Stevenson	1000
3392	Cath Archb	Owner	600
3393	Scooble	Scooble	9000
3394	Angellus	Hantsche	300
3395	Schulz	Schulz	2000
3396	Williams	McIntosh	955
3397	Moran	Seibert	2841

FLATS

(3335) W BAKER, 37-6 S Filbert.
Two-story and base frame flats.
Owner.....W. W. Rednall, 2500 Filbert, S. F.
Architect.....None.
Day's work. COST, \$5,935

FLATS

(3336) W BAKER, 37-6 S Filbert.
Two-story and basement frame flats.
Owner.....W. W. Rednall, 2500 Filbert, S. F.
Architect.....None.
Day's work. COST, \$5,935

DWELLING

(3337) W TWENTY-SEVENTH AVE, 35 N Irving. Two-story and basement frame dwelling

Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.
Day's work. COST, \$1,900

DWELLING

(3338) W HILWAY, 155 S Carl. Two-story and basement frame dwelling.
Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.
Architect.....None.
Day's work. COST, \$2,500

FLATS

(3339) N NINETEENTH, 195 E Dolores. Two-story and basement frame (1) flats.
Owner.....Otis Knight, 163 Moscow, San Francisco.
Architect.....None.
Contractor.....L. Knight, 1216 Valencia, San Francisco.
COST, \$5,500

DWELLING

(3340) E FORTY-FIFTH AVE, 150 N Balboa. Two-story and basement frame dwelling.
Owner.....Oscar Heyman & Bro., 742 Market, San Francisco.
Architect.....None.
Day's work. COST, \$2,500

ADDITION

(3341) NO. 121 ELEVENTH AVE. Add rooms and new roof.
Owner.....E. Williams and wife, 124 11th Ave., San Francisco.
Architect.....None.
Contractor.....Wm. McIntosh, 289 Cumberland, San Francisco.
COST, \$1000

ALTERATIONS

(3342) E BAKER 112-6 S Union. Alter and add to dwelling.
Owner.....Adeline Rainey, 316 New Call Bldg., S. F.
Architect.....Frederick Boese, 316 New Call Bldg., San Francisco.
Contractor.....J. A. Bowers, 2440 Anza, San Francisco.
COST, \$100

ALTERATIONS

(3343) E BARTLETT 200 S 22nd. Alter and add to flats.
Owner.....Symon Bros.
Architect.....None.
Day's work. COST, \$1000

REPAIRS

(3344) NOS. 568-70-72 FREDERICK. Repair fire damages.
Owner.....O. W. Carlson, Premises.
Architect.....None.
Day's work. COST, \$400

FRAME DWELLING

(3345) N THOMAS 200 W Irving. One and one-half-story and basement frame dwelling.
Owner.....Geo. Ryan, 2811 Army, San Francisco.
Architect.....None.
Day's work. COST, \$1000

FRAME BARN

(3346) NO. 308 CAPITOL AVE. One-story frame barn.
Owner.....McInerny & Son, 156 Broad, San Francisco.
Architect.....None.
Day's work. COST, \$100

ERECT PLATFORM

(3347) NO. 660 MARKET. Erect platform.
Owner.....Rice Leaders of the World Ass'n., 300 Claus Spreckels Bldg., San Francisco.
Architect.....None.
Day's work. COST, \$1200

ALTERATIONS

(3348) NO. 521 MISSION. Alter store.
Owner.....Bothin Real Estate Co., 601 Mission, San Francisco.
Architect.....John A. Ettler, 604 Mission, San Francisco.
Day's work. COST, \$100

ALTERATIONS

(3349) NW LONDON 375 SW Russia. Raise and alter dwelling.
Owner.....P. J. and Margaret Sullivan, Premises.
Architect.....O. E. Evans & Co., 2861 Mission, San Francisco.
Contractor.....O. E. Evans & Co., 2861 Mission, San Francisco.
COST \$600

ALTERATIONS

(3350) W FRONT 20 N Market. Cut opening in wall and install doors.
Owner.....Moore-Watson, Premises.
Architect.....G. A. Applegarth, Claus Spreckels Bldg., S. F.
Day's work. COST, \$100

REBUILD SMOKEHOUSE

(3351) NO. 819 SANSOME. Rebuild smokehouse.
Owner.....A. E. Wohl.
Architect.....None.
Contractor.....Chas. Perry, NE Sutter & Buchanan, S. F.
COST, \$1000

REPAIRS

(3352) NO. 639 PUCHANAN. Repair fire damage.
Owner.....A. P. Pick, 231 Scott, San Francisco.
Architect.....None.
Day's work. COST, \$800

ALTERATIONS

(3353) W STOCKTON 50 S Jackson. Alter school.
Owner.....Skaller Levy Co., Philan Bldg., San Francisco.
Architect.....None.
Contractor.....V. S. Edgh, 470 Octavia, San Francisco.
COST, \$100

APARTMENTS

(3354) SE GEARY AND LEAVEN. With six story and basement brick

and steel frame (40) apartments and stores.

Owner.....Gerard Investment Co., 110 Sutter, San Francisco.

Architect...Rousseau & Rousseau, 110 San Francisco.

Day's work. COST, \$85,000

FRAME DWELLING

(3355) DETROIT NEAR STAPLES, Sunnyside. Two-story and basement frame dwelling.

Owner.....Mutual Bond & Investment Company.

Architect...W. J. Cuthbertson, 328 Montgomery, S. F.

Contractor...Mutual Bond & Invest. Co. COST, \$1900

FRAME APARTMENTS

(3358) E EIGHTH AVE 200 S Cabrillo (C) S 25XE 120. Excavating, work and labor for two-story and basement frame (4) apartments.

Owner.....Henry and Hattie M. Tillman, 452 Noe, S. F.

Architect...None.

Contractor...Otto Carson, 1919 Hayes, San Francisco.

Filed Nov. 22, '15. Dated Nov. 19, '15.

Rough frame up \$2150 in lieu of the payment; contractor to receive deed to lot.....

Brown coated\$1025

Standard finish on..... 1025

Usual 35 days..... 1750

TOTAL COST, \$7000

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(3357) SW JACKSON AND JONES S 37-6xW 82-6. Alterations and additions to make a one-story building into apartments.

Owner.....Wm. S. and Annie Brockie

Architect...Alexander A. Cantin, 68 Post, San Francisco.

Contractor...H. C. Matthies, 180 Jessie, San Francisco.

Filed Nov. 22, '15. Dated Oct. 3, '15.

Frame up and sheathed and roof on\$2381.25

Inside brown coated..... 2381.25

Standing wood trim on..... 2381.25

Completed and accepted..... 2381.25

Usual 35 days..... 3175.00

TOTAL COST, \$12,700.00

Bond, \$6250. Sureties, D. O. Druffel and Jas. S. Pennell. Limit, 100 days after Nov. 20. Forfeit, \$5. Plans and specifications filed.

FRAME FLATS

(3358) N NINETEENTH 195 E Dolores All work for two-story and basement frame flats.

Owner.....Otis Knight, 463 Moscow, San Francisco.

Architect...None.

Contractor...C. L. Knight, 1316 Valencia San Francisco.

Filed Nov. 22, '15. Dated Nov. 18, '15.

Rough frame up.....\$1375

Brown mortar on..... 1375

Completed and accepted..... 1375

Usual 35 days..... 1375

TOTAL COST, \$5400

Bond, none; Limit, 100 days. Forfeit, none. Plans and specifications filed.

REPAIRS

(3359) NO. 51 RONDEL PLACE. Repair dwelling.

Owner.....G. A. Albonze, 3143 16th, San Francisco.

Architect...None.

Contractor...J. A. Bowers, 4400 Anza, San Francisco.

COST, \$500

FRAME DWELLING

(3360) E LISBON 225 N Excelsior.

One-story and basement frame dwlg.

Owner.....Ward C. Brown, 2945 Harrison, San Francisco.

Architect...None.

Day's work. COST, \$1850

ALTERATIONS

(3361) NO. 3275 MISSION. Alter front.

Owner....."Michilli," 3230 Mission, San Francisco.

Architect...None.

Contractor...M. E. Bailey, 2248 Mission San Francisco.

COST, \$400

ALTERATIONS

(3362) W TWENTIETH AVE 300 S

Clement. Alter Bats.

Owner.....Thunberg & Johnson, 640 9th Ave., San Francisco.

Architect...None.

Contractor...Gus Thunberg, 640 9th Ave., San Francisco.

COST, \$450

ALTERATIONS

(3363) NO. 736 LISBON. Alter and

add to dwelling.

Owner.....Mrs. H. M. Reed, Premises.

Architect...None.

Day's work. COST, \$500

ALTERATIONS

(3364) SE LEIDESDORFF & SACRAMENTO. Remove front and change stairs, etc.

Owner.....Bothin Real Estate Co., 604 Mission, San Francisco.

Architect...John A. Ettler, 604 Mission San Francisco.

Day's work. COST, \$1000

ADDITION

(3365) NO. 384 SECOND. Add to factory building.

Owner.....John Finn Metal Works, Premises.

Architect...None.

Contractor...A. Macdonald, 1036 C St., San Rafael.

COST, \$600

ALTERATIONS

(3366) NO. 61 THIRD. Alter front and new toilet.

Owner.....P. F. Roddy, Premises.

Architect...None.

Day's work. COST, \$450

ERECT MARQUESE

(3367) NO. 132 EMBARCADERO. Erect marquee.

Owner.....Harvey H. Dana, San Jose.

Architect...None.

Contractor...North Beach Sheet Metal Works, 1018 Columbus Ave., San Francisco.

COST, \$400

(3368) E TWENTY-EIGHTH AVE 127 N Irving. One-story and basement frame dwelling.

Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.

Architect...None.

Day's work. COST, \$1900

FRAME DWELLING

(3369) E TWENTY-EIGHTH AVE 156 N Irving. One-story and basement frame dwelling.

Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.

Architect...None.

Day's work. COST, \$1900

SIDEWALKS, ETC.

(3370) EAST AND WEST LINES OF Third (Kentucky) from S 25th to N

Tulare. All work for laying sidewalks along property of Western

Pacific Railway Co.

Owner.....Frank G. Drum and Warren Olney, Jr., Receivers of Western Pacific Railway Co., Mills Bldg., S. F.

Architect...None.

Contractor...The Pay Improvement Co., Phelan Bldg., S. F.

Filed Nov. 23, '15. Dated Nov. 17, '15.

On completion 75%

36 days after 25%

TOTAL COST, All filling 37½c per cubic yard; sidewalk, \$.07½ per sq. ft.

Bond, \$1100. Sureties, R. W. Costello

and Daniel A. Ryan. Limit, to commence within 15 days and complete 90

days thereafter. Forfeit, none. Plans only filed.

FRAME STORES AND APARTMENTS

(3371) SE HAYES AND OCTAVIA E 62-6xS 120. Plumbing, gas fitting,

drainage and domestic hot water

piping system for three-story and basement frame stores and apart-

ments.

Owner.....Daniel M. Moran, 154 6th, San Francisco.

Architect...Chas. J. I. Devlin, Pacific Bldg., San Francisco.

Contractor...The Turner Co., 278 Natoma, San Francisco.

Filed Nov. 23, '15. Dated Nov. 16, '15.

On 1st and 15th of each month 75%

Usual 35 days..... 25%

TOTAL COST, \$3695

Bond, \$1850. Surety, Massachusetts Bonding & Insurance Co. Limit, 15

days after plastering done. Forfeit, \$25. Plans and specifications filed.

(3372) PATCHING AND POINTING

on above.

Contractor...Martin H. Carrick, 1358 Fell, San Francisco.

Filed Nov. 23, '15. Dated Nov. 16, '15.

Completed and accepted.....\$100

TOTAL COST, \$100

Bond, none. Limit, 10 days after carpenter work done. Forfeit, \$25. Plans and specifications filed.

(3373) LATH AND PLASTERING AND

cementing on above.

Contractor...Martin H. Carrick, 1358 Fell, San Francisco.

Filed Nov. 23, '15. Dated Nov. 16, '15.

On 1st and 15th of each month 75%

Usual 35 days..... 25%

TOTAL COST, \$2874

Bond, \$1500. Sureties, J. W. Smith and Thos. Butler. Limit, 60 days after ready for lathing. Forfeit, \$25. Plans and specifications filed.

(3371) PAINTING, VARNISHING, tinting, etc., on above.
Contractor, Frank L. Torres, 3257 Mission, San Francisco.
Filed Nov. 23, '15. Dated Nov. 17, '15.
Payments same as above.
TOTAL COST, \$2096
Bond, \$1100. Surety, Hartford Accident & Indemnity Co. Limit, 20 days after carpentry done. Forfeit, \$25. Plans and specifications filed.

FRAME FLATS
(3375) E TWELFTH AVE 250 N Fulton N 25x E 120. All work for two-story frame (2) flats.
Owner.....Audley F. and Florence Donnelly 75 Arguello Blvd San Francisco.
Architect...None.
Contractor...Chas. Schwarz, 353 Maple, San Francisco.
Filed Nov. 23, '15. Dated Nov. 20, '15.
Frame up, deed to W Arguello Blvd (1st Ave) 75 S Balboa S 25x W 95 Subj to Mtg of \$2500.
Enclosed and brown coated. 1373.00
Completed 1436.50
Usual 35 days. 1436.50
TOTAL COST, \$3716.00
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS
(3376) SE SACRAMENTO AND MONTGOMERY. Remove wall and vault.
Owner.....Italian-American Bank, SE Sacramento and Montgomery, San Francisco.
Architect...None.
Contractor...John Biller, 460 Montgomery, San Francisco.
COST, \$1500

BRICK STORES
(3377) S MARKET 75 E Ninth. One-story brick stores.
Owner.....William Ede Co., 333 Kearny, San Francisco.
Architect...Wm. Knowles, 1301 Hearst Bldg., San Francisco.
Day's work. COST, \$8600

ADDITION
(3378) N OAKDALE 220 E Mendell. Add one-room and make alterations.
Owner.....M. Bludworth, 1653 Palou, San Francisco.
Architect...None.
Contractor...T. L. Sharman, 1440 Shafter San Francisco.
COST, \$650

FRAME DWELLING
(3379) N OAKDALE 225 E Mendell. One-story and basement frame dwlg.
Owner.....M. Bludworth, 1653 Palou, San Francisco.
Architect...None.
Contractor...T. L. Sharman, 1440 Shafter San Francisco.
COST, \$1750

ADDITION
(3380) NO. 1672 FIFTEENTH. Add to laundry.
Owner.....City Rough Dry Laundry, 1671 15th, San Francisco.
Architect...None.
Contractor.....Steur & Bury, 1165 O'Farrell, San Francisco.
COST, \$1250

FRAME DWELLING
(3381) W SCHRADER 486-6 S 17th. One-story frame dwelling.

Owner.....J. W. Barton.
Architect...None.
Day's work. COST, \$1000

HEATING SYSTEM
(3382) NO. 1250 O'FARRELL. Install steam heating system.
Owner.....Wolf Bros., 1647 Fillmore, San Francisco.
Architect...None.
Contractor...Atlas Heating & Ventilating Co., 4th and Freelon, San Francisco.
COST, \$450

STEAM HEATING
(3383) NO. 1542 CALIFORNIA. Install steam heating plant.
Owner.....Levison-Zellerbach Co., Premises.
Architect...None.
Contractor...Atlas Heating & Ventilating Co., 4th and Freelon, S. F.
COST, \$750

REPAIRS
(3384) NO. 517 SHOTWELL. Repair dwelling.
Owner.....Ida Lindeman.
Architect...None.
Contractor...Louis Gottwald, 2359 Howard, San Francisco.
COST, \$750

FRAME DWELLING
(3385) E NINTH AVE 75 S Noriega. Two-story and basement frame dwlg.
Owner.....Sylvester Trobeck, 230 Judah, San Francisco.
Architect...None.
Day's work. COST, \$1500

FRAME APARTMENTS
(3386) N WASHINGTON 201 W Polk W 35x N 127-8 1/4 W A 51. All work except beds, steam heat, fixtures and shades for three-story and basement frame apartments.
Owner.....Floyd C. Curry.
Architect...Rousseau & Rousseau, 110 Sptter, San Francisco.
Contractor...Higginson Co., Humboldt Bank Bldg., S. F.
Filed Nov. 24, '15. Dated Nov. 17, '15.
Frame up and ready for roof. \$3511
Brown coated 3511
Completed and accepted. 3512
Usual 35 days. 3511
TOTAL COST, \$14,045
Bond, \$7022.50. Surety, United States Fidelity & Guaranty Co. Limit, 90 days. Forfeit, \$10. Plans and specifications filed.

FRAME APARTMENTS
(3387) NO. 1350 DOLORES AND NW Dolores and Army 51x114. All work for three-story frame (6) apartments and alterations and additions to building (except wall beds, light fixtures, window shades and finish hardware.)
Owner.....Wilhelmina Brougham O'Connell, Premises.
Architect...Ernest C. Essmann, 3805 24th, San Francisco.
Contractor...Einar Petersen, 3530 23rd, San Francisco.
Filed Nov. 24, '15. Dated Nov. 15, '15.
Frame up \$2625
Brown coated 2625
Completed 2625
Usual 35 days. 2625
TOTAL COST, \$10,500

Bond, \$4250. Sureties, Herman J. Axt and B. Martin. Limit, 100 days from recording. Forfeit, none. Plans and specifications filed.

FRAME DWELLING
(3388) E NINETEENTH AVE 75 S Balboa. Two-story and basement frame dwelling.
Owner.....W. B. Kenny, 450 Arguello Blvd., San Francisco.
Architect...None.
Day's work. \$3000

FRAME DWELLING
(3389) E NINETEENTH AVE 50 S Balboa. Two-story and basement frame dwelling.
Owner.....W. B. Kenny, 450 Arguello Blvd., San Francisco.
Architect...None.
Day's work. \$3000

FRAME DWELLING
(3390) W TWENTY-SEVENTH AVE 100 N Irving. One-story and basement frame dwelling.
Owner.....F. Nelson, 30 Presidio Terrace, San Francisco.
Architect...None.
Day's work. COST, \$1900

ALTERATIONS
(3391) NO. 985 MARKET. Alter and repair lofts.
Owner.....Buckbee Thorne & Co., 27 Montgomery, S. F.
Architect...None.
Contractor...Swenson & Franzen, 145 Natoma, San Francisco.
COST, \$1000

TILE ROOF
(3392) NO. 2320 GREEN. Tile roof.
Owner.....Roman Catholic Archbishop of San Francisco, 1100 Franklin, S. F.
Architect...None.
Day's work. COST, \$600

FRAME APARTMENTS, ETC.
(3393) NE GEARY & NINETEENTH Ave. Two-story and basement frame (4) apartments and market.
Owner.....Thos. Schole, 363 14th Ave., San Francisco.
Architect...E. E. Young, 251 Kearny, San Francisco.
Day's work. COST, \$9000

ADDITION
(3394) S CLEMENT 48 E 33rd Ave. Add to building for locker room.
Owner.....F. Angelus, Premises.
Architect...Sylvian Schnalttacher, 233 Post, San Francisco.
Contractor...Hantsche & McKay, 528 31st Ave., San Francisco.
COST, \$900

FRAME DWELLING
(3395) E EIGHTEENTH AVE 250 S Anza. Two-story and basement frame dwelling.
Owner.....Chas. J. H. Schultz, 5709 Geary, San Francisco.
Architect...None.
Day's work. COST, \$2000

ALTERATIONS AND ADDITIONS
(3396) E ELEVENTH AVE 275 S Point Lobos Ave S 25x E 100. Alterations and additions to one-story and basement frame building.
Owner.....Ecklin and Della Williams, 424 11th Ave., S. F.

Architect, Hugh C. White.
Contractor, Wm. McIntosh, 289 Cum-
berland, San Francisco.
Filed Nov. 26, '15. Dated Nov. 23, '15.
Not later than 5th of each month 75%
36 days after..... 25%
TOTAL COST, \$955
Bond, \$477.50. Sureties, Wm. Smith and
F. Wagner. Limit, 45 days. Forfeited.
\$3. Plans and specifications filed.

FRAME BUILDING

(2397) SE HAYES AND OCTAVIA E
62 6x8 120. Hot water house, heat-
ing system, fuel oil plant and do-
mestic water storage tank for three-
story and basement frame building.
Owner, Daniel M. Moran, 154 6th,
San Francisco.

Architect, Chas. J. J. Devlin, Pacific
Bldg., San Francisco.
Contractor, Seibert Co., 1423 Divisa-
dero, San Francisco.

Filed Nov. 26, '15. Dated Nov. 16, '15.
On 1st and 15th of each month 75%
Usual 35 days, 25%..... \$702.75
TOTAL COST, \$2811.00
Bond, \$1110. Surety, New England
Equitable Insurance Co. Limit, 30 days
Forfeited, \$25. Plans and specifications
filed.

LEASE.

Nov. 22, 1915 NE EDDY AND JONES
N 137-6xE 137-6. W E Dean to M
A Fisher. 10 years. \$180,000. As-
signed July 8, 1914 to Arcadia
Amusement Co.

Nov. 26, 1915-S TWENTIETH 155 W
Dolores W 25xS 114. Mary A Burke
to Rolt and Katherine Abel. 5 years
\$45 per month.

Nov. 22, 1915-SE LOMBARD AND
Octavia 29x31-2. Charles A Mohaupt
to Ramiert Ltd. 5 years. \$10 per
month with option to renew.

NOTICE OF NON-RESPONSIBILITY.

Nov. 22, 1915-NE EIGHTH AVE &
Fulton N 123-7½ E 68 S 115-11 W
45-2. The Hoteling Estate Co as to
improvements on leased property
Nov. 24, 1915-S SIXTEENTH 100 W
Mission W 100xS 96-8½. Solomon
Hyman and Ruth V Wolf as to im-
provements on leased property....
Nov. 24, 1915-SE MARKET 91-8 SW
Stewart SW 1xSE 20. Union Securi-
ties Cpn as to improvements on
leased property.....

COMPLETION NOTICES

San Francisco

RECORDED	ACCEPTED
Nov. 19, 1915-NOS. 1960-62-64-66	
Vallio, Chas E Lipp and Clara	
O'Connor to Stear & Barry.....	
Nov. 15, 1915.....	
Nov. 19, 1915 N GEARY 90 W 3rd	
Ave. Bertha M Orth to R De Luca	
.....Nov. 11, 1915	
Nov. 20, 1915-N ELLIS, 55 W Jones,	
N 120xW 52-6. The Peter Winde-	
ler Co. to Peterson-James Co.....	
.....Nov. 10, 1915	
Nov. 20, 1915-E THIRD AVE, 217-4	
13-16 S Cabrillo, S 31xNE 120. Tre-	
vor & Co. to Moore & Watson.....	
.....Nov. 16, 1915	
Nov. 20, 1915 E SCOTT between	
Green and Union, 50x125. Maude J.	

or Maude James Graves to Rud-	
gear-Merie Co. ....Nov. 13, 1915	
Nov. 22, 1915-N FELTON & HAR-	
vard NE 85xNW 50; ptn Lot 5 BLK	
101 University Hd Ass's. A J O	
and Lena Martinet to whom it may	
concern.....Nov. 15, 1915	
Nov. 22, 1915-S SUTTER 115-9 E	
Powell S 137-6xE 45-6. Pacific Gas	
& Elec Co to J R Cahill. Nov. 16, 1915	
Nov. 22, 1915-W BURNETT 50 m or	
1 S Clarendon Ave; No. 114 Burnett.	
Roy E Dickerson to Chas Schwarz	
.....Nov. 18, 1915	
Nov. 22, 1915-NO. 36 EDDY; NE	
Eddy and Anna Lane E 25xN 75.	
Bessie H Pyne, lessee to T D Gil-	
more .....Nov. 20, 1915	
Nov. 22, 1915-E TWENTY-FIFTH	
Ave 100 N Clement N 25xE 120.	
Mary A Green to whom it may con-	
cern.....Nov. 22, 1915	
Nov. 22, 1915-E TWENTY-SECOND	
Ave 125 S "A." Emil B Johnson	
to whom it may concern. Nov. 6, 1915	
Nov. 23, 1915-LOT 15 BLK 29 Map	
Bilks 27 to 34, Forest Hill Ext. Otto	
A Brown to whom it may concern	
.....Nov. 19, 1915	
Nov. 23, 1915-LOT 16 BLK 29 Map	
Bilks 27 to 34, Forest Hill Ext. Otto	
A Brown to whom it may concern	
.....Nov. 19, 1915	
Nov. 23, 1915-LOT 18 BLK 2 De	
Boon. Tract. Mary V Lafferty and	
Grace A Cuneo to Michael McDon-	
ough.....Nov. 22, 1915	
Nov. 23, 1915-E BANKS 25 S	
Eugenia Ave S 25xE 70. Vincenzo	
and Jos Rubino to whom it may	
concern.....Nov. 17, 1915	
Nov. 23, 1915-S CALIFORNIA 47-6 E	
Pierce S 87-6xE 22-6. Wilhelmine	
Foerst to whom it may concern..	
.....Nov. 13, 1915	
Nov. 23, 1915-SW FLORIDA AND	
Mariposa; No. 2801 and 2803 Mari-	
posa and Nos. 506 and 508 Florida.	
Elizabeth A Horn to whom it may	
concern.....Nov. 15, 1915	
Nov. 23, 1915-E LANGTON 125 S	
Howard S 25xE 80. Belle S Mac-	
donald to Jas Booker.....Nov. 13, 1915	
Nov. 23, 1915-SW CALIFORNIA &	
Mason W 77-6xS 60. S W Morshead	
to Bri H Richardson.....Nov. 16, 1915	
Nov. 23, 1915-NW WALLER AND	
Webster W 100 N 137-6 W 50 S	
137-6 E 50. Wilhelmine Eichler to	
Emil Nelson.....Nov. 19, 1915	
Nov. 23, 1915-W TWENTY-FIRST	
Ave 100 N Ulloa N 33-4xW 120. Geo	
W and Mahel L Pracy to Edward	
Zinkand.....Nov. 22, 1915	
Nov. 24, 1915-W HOMESTEAD 135	
N 25th N 25xW 150. F Monson to	
whom it may concern.....Nov. 24, 1915	
Nov. 24, 1915-E WEBSTER, bet.	
Sacramento and Clay. The Board	
of Trustees of The Leland Stan-	
ford, Jr. University to Scott Co.....	
.....Nov. 18, 1915	
Nov. 24, 1915-N ELLIS 55 W Jones N	
120xW 52-6. The Peter Windeler Co	
to Fred Miller, Gust Johnson and	
R Zelinsky.....Nov. 20, 1915	
Nov. 21, 1915-N MANGELS AVE -	
E Hamburg. John W Totten to	
G L Hughson.....Nov. 22, 1915	
Nov. 24, 115-E TWENTY-SECOND	
Ave 200 N Balboa 25x120. Mahel	
Green.....Nov. 24, 1915	
Nov. 26, 1915-S TWENTY-SIXTH	
246 E Church E 50xS 114. Hugh	
and Nellie Quinn to Einar Peter-	

sen .....Nov. 26, 1915
Nov. 26, 1915-LOT 57 BLK 25 Crock-
er Amazon Tract. Gussie A Meyer
to whom it may concern.....Nov. 26, 1915
Nov. 26, 1915-W WHITNEY 100-2½
N Randall N 24-9½ W 74-4 m or 1
S 29 m or 1 E 60 ptn Lot 3 Blk 26
Plint Tct. Eugene and Elizabeth
McSweeney to whom it may concern
.....Nov. 26, 1915
Nov. 26, 1915-SE BUSH AND HYDE
S 87-6xE 87½. Dr Florence
Ward to E T Leiter & Sons, Inc....
.....Nov. 16, 1915

LIENS FILED

San Francisco

Nov. 18, 1915-N BALBOA 82-6 N 20th
Ave W 25xN 100. John Ryan vs
Emil Dahl and H S Mathews.....\$19.50
Nov. 18, 1915-S CHESTNUT AND NE
Columbus Ave E 162-11 S 137-6 W
49-5½ NW 178-11½. Giuseppe
Capacili vs Lewis Packing Co and
Iouda & Spivock.....\$174.45
Nov. 19, 1915-NO. 1837 ALABAMA E
line 155 S Ripley. The Greater City
Lumber Co vs Stefan Specjalski
.....\$8.75
Nov. 22, 1915-N OAK 157-6 W Van
Ness Ave W 89-9 N 120 E 68-9 S
10 E 21 S 80. Martin Carriack vs
The Young Men's Institute Hall
Association .....\$7649.81

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

Nov. 18, 1915-EXPOSITION SITE.
Eureka Sash, Door & Moulding
Mills to Panama-Pacific Interna-
tional Exposition, V Cardashian, F
A Salih, M A Naify and Northwest
Constr Company
Nov. 22, 1915-E VERMONT 150 S
Mariposa S 25xN 100. Macdonald
Lumber Co, George Spencer, Rein-
hart Lumber & Planing Mill Co to
Frank Kamback and Robert Selman

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Amt.
2501	Broadhead	Broadhead	1550
2502	Jordan	Jordan	2500
2503	Roth	Roth	2000
2504	Miller	Cords	4000
2505	Sugg	Sugg	4700
2506	Carl Paint	Davis	400
2507	Leamon	Scott	400
2508	Taronasso	Hambleton	1818
2511	Handyside	Thursby	2500
2512	McCarthy	Lundby	2500
2513	Shredded Wheat	Detroit	6000
2514	Migazec	Caritto	1325
2515	Carron	Haskell	2265
2516	Berovich	Jones	400
2517	Oakland	Paulkes	350
2518	Gwaragna	Menden	500
2519	Kirkland	Schubely	1000
2521	Larmer	Larmer	2500
2522	O'Connor	O'Connor	3500
2524	Same	Same	3500
2525	Same	Same	3500
2526	Same	Same	3200
2527	Beckett	Beckett	2500
2528	Wiser	Wiser	2000
2527	Howley	Muller	400
2528	Reese	Van Sant	6000
2540	Dodge	Dodge	1500
2542	Jackman	Central Iron	6000
2543	Lombard	Burnett	25000

DWELLING

(2501) E ADELIN, 90 N 56th street,
Oakland. One-story four-room
dwelling.

Owner.....Bessie B. Broadhead, 864
57th street, Oakland.
Architect...None.
Contractor..Broadhead & Wishart, 860
57th street, Oakland.
COST, \$1550

DWELLING
(2502) S HAIRWOOD AVE, 350 E Col-
lege avenue, Oakland. One-story
five-room dwelling.
Owner.....F. R. Jordan, 1497 Oak,
Oakland.
Architect...None.
Day's work.....COST, \$2500

DWELLING
(2503) N BROOKDALE, 320 W Lilac,
Oakland. One-story six-room dwlg.
Owner.....Wm. E. Roth, 2820 Summit,
Oakland.
Architect...None.
Day's work.....COST, \$2500

DWELLING AND GARAGE
(2504) N JEROME AVE, Lot 15 Nova
Piedmont. One-story 8-room dwell-
ing and garage.
Owner.....Chas. A. Miller, 725 15th,
Oakland.
Architect...None.
Contractor..Alfred Cords, 318 1st Svgs
Bank Bldg., Oakland.
COST, \$4000

FRAME RESIDENCE
(2505) PARK WAY 50 S Rail Road
right of way, Piedmont. Two-story
frame residence.
Owner.....Sugg Bros. Realty Co., 408
12th, Oakland.
Architect...Walter C. Clifford, 1230
Jackson, San Francisco.
Contractor..Sugg Bros., 408 12th, Okd.
COST, \$4700

ALTERATIONS
(2506) NO. 1797 TWELFTH, Oakland
Alterations.
Owner.....California Paint Co., Prem
Architect...None.
Contractor..A. L. Davis, 2626 Union,
Oakland. COST, \$400

ALTERATIONS
(2507) NO. 5979 TELEGRAPH AVE.,
Oakland. Alterations.
Owner.....Mrs. J. G. Lemmon, Prem.
Architect...None.
Contractor..Jas. Scott, Premises.
COST, \$400

DWELLING
(2508) N FOURTEENTH 130 W Per-
alta, Oakland. One-story 5-room
dwelling.
Owner.....Francisco Taramassco, 1519
Peralta, Oakland.
Architect...None.
Contractor..Fred Hambleton, 575 43rd,
Oakland. COST, \$1818

DWELLING
(2511) W DOLORES AVE 80 S Dolores
(street curves), Oakland. One and
one-half-story 8-room dwelling.
Owner.....Miss Handyside, 1819 West
Oakland.
Architect...None.
Contractor..H. G. Thursby, 926 Broad-
way, Oakland. COST, \$2500

DWELLING
(2512) E BROADWAY 216 S 38th,
Oakland. One-story 7-room dwlg.
Owner.....Mrs. Mary McCarthy, 1730
Washington, S. F.
Architect...None.
Contractor..A. L. and J. E. Lundy, 5
Franklin, San Francisco. COST, \$2500

STEEL SASH
(2513) LOTS 8 TO 21 incl and ptn Lots
4, 5, 6, 7 and 25 to 32, incl., Map R J
McMullens Shdvn of Blk 576, Oak-
land. All work for steel sash for
factory building.
Owner.....Pacific Coast Shredded
Wheat Co.
Architect...Hobart & Cheney, Crock-
er Bldg., San Francisco.
Contractor..Detroit Steel Products Co.,
Detroit, Michigan.
Filed Nov. 22, '15. Dated Sept. 8, '15.
Monthly payments of..... 75%
Usual 35 days..... 25%
TOTAL COST, \$6060
Bond, \$3030. Surety, Royal Indemnity
Co. Limit, 120 days from Oct. 1. For-
feit, \$10. Specifications only filed.

DWELLING
(2514) W 100 LOT 35 BLK 727-A Map
resbdrv ptn Blks 726-A, 727-A and
728-B, Oakland. All work for one-
story four-room dwelling.
Owner.....Luigi Mignacco, 1704 14th,
Oakland.
Architect...None.
Contractor..Carlo Caretto, 933 Addi-
son, Berkeley.
Filed Nov. 22, '15. Dated Nov. 18, '15.
Brown coated.....\$500
Completed and accepted..... 500
Usual 35 days..... 525
TOTAL COST, \$1525
Bond, none. Limit, 60 days after Nov.
20. Forfeit, none. Plans and speci-
fications filed.

DWELLING
(2514) W 100 LOT 35 BLK 727-A Map
resbdrv ptn Blks 726-A, 727-A and
728-B, Oakland. All work for one-
story four-room dwelling.
Owner.....Luigi Mignacco, 1704 14th,
Oakland.
Architect...None.
Contractor..Carlo Caretto, 933 Addi-
son, Berkeley.
Filed Nov. 22, '15. Dated Nov. 18, '15.
Brown coated.....\$500
Completed and accepted..... 500
Usual 35 days..... 525
TOTAL COST, \$1525
Bond, none. Limit, 60 days after Nov.
20. Forfeit, none. Plans and speci-
fications filed.

STORES
(2515) SW THIRTY-FOURTH AND
Chestnut, Oakland. Two-story three
room stores.
Owner.....C. McCarron, 5816 Chabot
Road, Oakland.
Architect...None.
Contractor..Albert A. Haskell, 3122
Magnolia, Oakland. COST, \$2266

ALTERATIONS
(2516) NO. 1128 BROADWAY, Oakland
Alterations.
Owner.....B. Bercovich.
Architect...None.
Contractor..A. E. Jones, 1119 Union,
Oakland. COST, \$400

SCHOOL
(2517) SW EDES AVE & COUNTY
Road, Oakland. One-story 1-room
school.
Owner.....City of Oakland.
Architect...None.
Contractor..John R. Faulkes, 9828 E-
14th, Oakland. COST, \$550

ALTERATIONS
(2518) NO. 545 MYRTLE, Oakland.
Alterations.
Owner.....Louis G. Gwaragna, 709
Castro, Oakland.
Architect...None.

Contractor..Geo. Marden, 4101-A 20th,
S. F. COST, \$500

ALTERATIONS
(2519) NO. 3829 BROADWAY, Oak-
land. Alterations.
Owner.....A. W. Klrkland, Care Sun-
set Grocery, Oakland.
Architect...None.
Contractor..Schnebly, Hostawser &
Pedgrift, 6th and Jackson,
Oakland. COST, \$1000

DWELLING
(2521) N ALCATRAZ AVE 50 W Hille-
gass, Oakland. Two-story six-room
dwelling.
Owner.....Edw. Larmer, 470 Boule-
vard Way, Oakland.
Architect...None.
Day's work.....COST, \$2500

DWELLING
(2523) W BROADWAY 510 N College
Ave., Oakland. One-story six-room
dwelling.
Owner.....J. C. O'Connor, 5314 Bry-
ant Ave., Oakland.
Architect...M. I. Diggs, 2444 Bow-
ditch, Berkeley.
Day's work.....COST, \$3500

DWELLING
(2524) W BROADWAY 623 N College
Ave., Oakland. One-story six-room
dwelling.
Owner.....J. C. O'Connor, 5314 Bry-
ant Ave., Oakland.
Architect...M. I. Diggs, 2444 Bow-
ditch, Berkeley.
Day's work.....COST, \$3500

DWELLING
(2525) W BROADWAY 585 N College
Ave., Oakland. One-story six-room
dwelling.
Owner.....J. C. O'Connor, 5314 Bry-
ant Ave., Oakland.
Architect...M. I. Diggs, 2444 Bow-
ditch, Berkeley.
Day's work.....COST, \$3500

DWELLING
(2526) W BROADWAY 547-6 N College
Ave., Oakland. One-story six-room
dwelling.
Owner.....J. C. O'Connor, 5314 Bry-
ant Ave., Oakland.
Architect...M. I. Diggs, 2444 Bow-
ditch, Berkeley.
Day's work.....COST, \$3500

DWELLING
(2527) N OAKLAND AVE 250 E Grand
Ave, Piedmont. Two-story 8-room
frame dwelling.
Owner.....J. P. Beckett, 2035 Chan-
ning Way, Berkeley.
Architect...None.
Day's work.....COST, \$2500

(2528) S SEQUOIA AVE 200 E Arro-
yelle Ave., Oakland. One-story five-
room dwelling.
Owner.....Eunice C. Wiser, 1468 55th
Ave., Oakland.
Architect...None.
Day's work.....COST, \$2000

ALTERATIONS
(2536) SE HOBART & TELEGRAPH
Ave., Oakland. Alterations.
Owner.....Hawley Constr. Co., Syndi-
cate Bldg., Oakland.
Architect...None.

Contractor...F. A. Muller, Syndicate Bldg., Oakland.
COST, \$400

ALTERATIONS

(2577) NW SEVENTEENTH & CLAY, Oakland. Alterations for four-story brick store and loft building into a Class "A" theatre, store and loft bldg. Owner.....Chas. J. Heeseman, Plaza Bldg., Oakland.

Architect...Carl Werner, Phelan Bldg San Francisco.
Contractor...Van Sant-Houghton Co., 503 Market, San Francisco.
COST, \$80,000

DWELLING

(2540) E NOBLE 116 W 61st Ave., Oakland. One-story 5-room dwelling. Owner.....F. A. Dodge, 1911 69th Ave. Oakland.

Architect...None.
Day's work.....COST, \$1500

ALTERATION

(2542) W CLAY 70 N 13th Ave., Oakland. Alter. Put in mezzanine floor. Owner.....Jackson Furniture Co.
Architect...Carl Werner, Phelan Bldg., San Francisco.
Contractor...Central Iron Works, Inc., 621 Florida, S. F.
COST, \$6000

FRAME DWELLING

(2543) S FARRAGUT AVE., bet Sea View and King Aves., Piedmont. Two story frame dwelling.
Owner.....J. L. Lombard, 525 Underwood Bldg., S. F.
Architect...Julia Morgan, Merchants' Exchange Bldg., S. F.
Contractor...Bruce B. Burnett, 316 Oak Ave., Oakland.
COST, \$25,000

Building Contracts Awarded

Berkeley.

No.	Owner	Contractor	Amt.
2509	Williamson	Owner	1000
2510	Williamson	Owner	1000
2520	Harris	Harris	500
2522	Eggleston	Anderson	1000
2539	Gibbs	Anderson	3073
2541	Dahl	Dahl	1000

DWELLING

(2509) S HEARST 50 W California, Berkeley. One-story 5-room dwlg. Owner.....L. M. Williamson, 1621 Seenic Ave., Berkeley.
Architect...None.
Day's work.....COST, \$1000

DWELLING

(2510) S HEARST AVE 20 W California, Berkeley. One-story five-room dwelling.
Owner.....L. M. Williamson, 1621 Seenic Ave., Berkeley.
Architect...None.
Day's work.....COST, \$1000

ADDITION

(2520) NO. 1794 WALNUT, Berkeley. Addition.
Owner.....L. A. Harris, Premises.
Architect...None.
Day's work.....COST, \$500

STORE AND DWELLING

(2522) NE PRINCE AND COLBY, Berkeley. One-story 3-room store and dwelling.

Owner.....A. T. Eggleston, 2929 Telegraph Ave., Berkeley.

Architect...None.
Contractor...L. W. Andersen, 821 16th. Oakland.
COST, \$1000

ALTERATIONS AND ADDITIONS

(2539) NW ASHBY AVE AND ASHBY Ave where said thoroughfare turns N 1 block E College Ave (as filed) being Lot 3 Blk "A" Elmwood Park, Berkeley. Alterations, addition and repairs to three-story frame dwelling (into 6 apartments).
Owner.....John D. Gibbs, 419 North. Berkeley.

Architect...Clara W. Burnett, 2011 Shattuck Ave., Berkeley.

Contractor...N. A. Anderson, 1927 Napa, Berkeley.

Filed Nov. 24, '15. Dated Nov. 22, '15.
As work progresses.....75%
Usual 35 days.....25%

TOTAL COST, \$3073

Bond, none. Limit, 60 days. Forfeit, \$1. Plans and specifications filed.

DWELLING

(2541) W NINTH 220 S Grayson, Berkeley. One-story 4-room dwelling.
Owner.....M. Dahl, 2812 9th, Berkeley
Architect...None.
Day's work.....COST, \$1000

Building Contracts Awarded

Alameda

No.	Owner	Contractor	Amt.
2528	Noble	Noble	1800
2529	Noble	Noble	1600
2530	Noble	Noble	1800
2531	Noble	Noble	1800
2532	Patto	Torre	400
2532	Kehres	Kehres	1000
2534	Anderson	Rockingham	1900
2535	Lena	Lena	2473

DWELLING

(2528) NO. 2512 BUENA VISTA AVE., Alameda. One-story 5-room dwlg.
Owner.....G. H. Noble, 2220 Central Ave., Alameda.
Architect...None.
Day's work.....COST, \$1300

DWELLING

(2529) NO. 2516 BUENA VISTA AVE., Alameda. One-story 4-room dwlg.
Owner.....G. H. Noble, 2220 Central Ave., Alameda.
Architect...None.
Day's work.....COST, \$1600

DWELLING

(2530) NO. 2521 NOBLE AVE., Alameda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central Ave., Alameda.
Architect...None.
Day's work.....COST, \$1800

DWELLING

(2531) NO. 1428 COTTAGE, Alameda. One-story 5-room dwelling.
Owner.....G. H. Noble, 2220 Central Ave., Alameda.
Architect...None.
Day's work.....COST, \$1800

DWELLING

(2532) BAY FARM ISLAND, Alameda. One-story 4-room dwelling.
Owner.....B. Patto, Premises.
Architect...None.

Contractor...E. Torre, 3213 Lloyd Ave., Oakland.

COST, \$400

DWELLING

(2533) NO. 1551 ST. CHARLES, Alameda. One-story 3-room dwelling.
Owner.....W. H. Kehres, Premises.
Architect...None.
Day's work.....COST, \$1000

DWELLING

(2534) NO. — VERSAILLES AVE., Alameda. One-story 5-room dwlg.
Owner.....A. Anderson, 2109 Pacific Ave., Alameda.
Architect...None.
Contractor...William H. Rockingham, 2306 San Jose Ave., Ala.
COST, \$1900

DWELLING

(2535) NO. — ENCINAL AVE., Alameda. One-story 5-room dwelling.
Owner.....M. Lena.
Architect...None.
Day's work.....COST, \$2473

COMPLETION AND CANCELLATION OF CONTRACT.

ALAMEDA COUNTY.

Nov. 23, 1915—NW TENTH AVE AND NE E-20th NW 150xNE 100, Okd. E G Campbell to Charles D Haines

COMPLETION NOTICES

ALAMEDA COUNTY.

RECORDED AMOUNT

Nov. 19, 1915—SE 20 LOT 13 AND NW 16 Lot 14 Map Holway & Lanes Subdivision Lots 31, 32 and 33 Kingsland Tract, Okd. S A Potter E R Williams.....Nov. 16, 1915
Nov. 19, 1915—LOT 27 Map Holway & Lanes Subdivision Lots 31, 32 and 33, Kingsland Tract, Okd. S A Potter to Charles F Wilford (Milford).....Nov. 18, 1915
Nov. 19, 1915—LOT 10 Blk 3, Fruitvale Orchard Terrace Tract, Okd. I A Kellogg to O L Bergen.....Nov. 19, 1915
Nov. 20, 1915—LOT 165 NOVA PIEDMONT, Piedmont. J. E. Van Horn to M C Vaughn.....Nov. 17, 1915
Nov. 22, 1915—E THORNE ROAD ½ mile N Moraga Road, Okd. Geo C Mullen to O G Smith.....Nov. 20, 1915
Nov. 22, 1915—W 33½ LOT 17 BLK 3 Butler Tract, Okd. R B Cuthbert to L W Cox.....Nov. 17, 1915
Nov. 23, 1915—LOT 38 BLK 2 North Cragmont, Oakland Tp. M F Furman to John Sullivan.....Nov. 16, 1915
Nov. 22, 1915—PTN LOTS 11, 12, 13 Blk "G" Northbrae Terrace, Bkly. H F Hiller to whom it may concern.....Nov. 19, 1915
Nov. 24, 1915—LOT 75 and N ½ Lot 74 Blk 9 Map No. 4, Regents Park, Albany. Otto Klube to W J Chedd.....Nov. 11, 1915
Nov. 24, 1915—PTN LOT 16 BLK 12, Northbrae Sbdvn, Oakland Tp. J S Killam to M P Brashch.....Nov. 22, '15
Nov. 24, 1915—NW 15 LOT 38; All Lot 39 and SW 10 Lot 40 Blk 9, Key Route Heights, Okd. Jose J Corvello to Jos Flittner.....Nov. 24, '15
Nov. 24, 1915—LOT 80 and ½ Lot 81

Stone Orchard Ext being No. 915
146th Ave, Okd. R E Stubbe to
whom it may concern. Nov. 24, 1915

LIENS FILED

ALAMEDA COUNTY.

Nov. 19, 1915—LOTS 64 AND 65 BLK
11 Map Regents Park No. 4, Al-
bany. Emil Anderson vs John
Larson\$12
Nov. 22, 1915—E FORTY-EIGHTH
Ave 274 N E-14th th along E-14th
25 E 146.62, Okd. Tom Brown vs
Lena Bender\$265.50
Nov. 19, 1915—LOT 27 Map Mesa Alta
Tract No. 2, Okd. Redwood Manu-
facturers Co vs Ralph Noble, L and
Jane Doe Sodergen\$305.56
Nov. 19, 1915—SW ALEXANDER
Court and 35th Ave, Lot 14, Red-
wood Glen Tract, Okd. F M Dreis-
bach vs Nannie A and W C Brown
.....\$600.02

RELEASE OF LIENS

ALAMEDA COUNTY.

Nov. 18, 1915—LOT 32 BLK "B" Map
Central Terrace, Okd. Inland Floor
Co to B C Swaggett and W A
White\$87
Nov. 27, 1915—NW TENTH AVE &
NE E-20th NW 150xNE 100, Okd.
Jas Cahill & Co, \$69.45; Downey
Glass & Paint Co, \$92.79; Chas D
Harris, \$323 to E G Campbell and
Charles D Haines.....

BUILDING CONTRACTS.

SANTA CLARA COUNTY.

COTTAGE
LOT 10 BLK 66 Naglee Park Tract, San
Jose. All work for one-story cottage.
Owner.....Mrs. M. E. Jones.
Architect.....O. M. Vrooman, 53 S-First
St., San Jose.
Contractor.....Al. Compton, 547 N-17th
St., San Jose.
Filed Nov. 19, '15. Dated Nov. 18, '15.
Frame up\$510.75
1st plaster on 510.75
When completed 510.75
Usual 35 days 510.75
TOTAL COST, \$2043.00
Bond, \$1025. Sureties, S. Williams and
W. M. Stocker. Limit, 90 days. For-
feit, \$1. Plans and specifications filed.

FRAME DWELLING
ON FRANKLIN, bet. Jefferson and
Lincoln Sts., Santa Clara. All work
for one-story frame dwelling.
Owner.....H. R. and Mary Roth, 1525
Franklin, Santa Clara.
Architect.....W. E. Higgins, 1210 Jeffers-
on, Santa Clara.
Contractor.....R. B. Snapp, 876 Lincoln
St., Santa Clara.

Filed Nov. 18, '15. Dated Nov. 8, '15.
Frame up and sheathing on\$778.45
1st coat plaster on 778.50
Building completed 778.45
Usual 35 days 778.50
TOTAL COST, \$3113.00
Bond, \$1557. Sureties, A. L. Shaw and
E. McQuaid. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

FRAME BUILDING
NEAR AGNEWS, CAL. All work for

one-story frame building.
Owner.....Western Grain & Sugar
Products Co., San Jose.

Architect.....None.
Contractor.....P. L. Hoyt, 58 W-Santa
Clara St., San Jose.
Filed Nov. 12, '15. Dated Nov. 12, '15.
Exterior completed\$891.50
Building completed 819.50
TOTAL COST, \$1783.00
Bond, none. Limit, 10 days. Forfeit,
none. Plans and specifications filed.

FRAME DWELLING
PTN OF QUITO RANCHO, Saratoga.
All work for two-story frame dwlg.
Owner.....R. Webster, Oakland.
Architect.....C. Werner, 952 Phelan
Bldg., San Francisco.
Contractor.....J. Rodoni, Saratoga.
Filed Nov. 16, '15. Dated Nov. 15, '15.
Frame up and roof on\$2400
Interior and exterior finished..... 2400
When completed 2400
Usual 35 days..... 3400
TOTAL COST, \$9600
Bond, \$4800. Sureties, J. A. Kerr and
Wm. Seagraves. Limit, 120 days. For-
feit, \$5. Plans and specifications filed.

COMPLETION NOTICES.

SANTA CLARA COUNTY.

RECORDED ACCEPTED
Nov. 15, 1915—LOT 120x150 end of
street known as Alvarado Row,
Stanford University, Palo Alto. C
G Allen to Geo Mosher. Nov. 6, 1915
Nov. 15, 1915—PTN LOTS 7 AND 8
Blk 3, Chapman and Davis Tract,
San Jose, Clyde Alexander to whom
it may concern.....Nov. 12, 1915

BUILDING CONTRACTS.

SAN MATEO COUNTY.

BUNGALOWS
LOT 26 BLK 4, 120x50, Capuchino Ave.
near Buir Buir Ave., Easton. All work
for three-room bungalow in rear and
a four-room buigalow in front.
Owner.....Elfrida and Ray Pladwell,
525 Market, San Francisco.
Architect.....None.
Contractor.....Wm. Pearce, Burlingame.
Filed Nov. 13, '15. Dated Sept. 29, '15.
TOTAL COST, \$—
Bond, limit, forfeit, none. Plans and
specifications, none.

LIENS FILED

SANTA CLARA COUNTY.

RECORDED AMOUNT
Nov. 15, 1915—LOT 2 Barrett & Mack
Sub. San Jose. San Jose Lumber Co
vs F Greco\$69.86

COMPLETION NOTICES.

CONTRA COSTA COUNTY.

RECORDED ACCEPTED
Nov. 1, 1915—NE KEARNY AND
Eureka St. Tract, being School
Site, Fairmont School, Richmond.
Richmond School District to J C
Hurley CoOct. 23, 1915
Nov. 1, 1915—LOTS 11 To 22 Incl of
Blk 1, Fifth Addn to Richmond
and Lots 20 to 30 Blk 36, Nicholl

McDonald Central Trct Richmond.
Richmond School District to J C
Hurley CoOct. 23, 1915
Nov. 8, 1915—REAR LOTS OF LOTS
22, 23 Blk 26, City of Richmond
Tract. Martin J and Ida D Gor-
don to Norman E Anderson.....
.....Nov. 2, 1915
Nov. 11, 1916—IN OR NEAR TOWN
of Martinez, known as Cutler or
Frazier Tract. Shell Company of
California to Petroleum Iron Wks.
.....Nov. 9, 1915
Nov. 12, 1915—IN OR NEAR TOWN
of Martinez known as Frazier or
Cutler Tract. Shell Company of
California Inc to Petroleum Iron
Works.....Nov. 9, 1915
Nov. 17, 1915—LOT NOS. 7 AND 8
Blk 323 of Welch survey, Town of
Martinez. Bank of Martinez to
Harvey A Klyce.....Nov. 13, 1915

COMPLETION NOTICES.

MARIN COUNTY.

RECORDED ACCEPTED
Nov. 24, 1915—SAN RAFAEL. Mrs
M Eastman to whom it may con-
cernNov. 16, 1915

BUILDING CONTRACTS.

FRESNO COUNTY.

GARAGE
E N ST., bet Fresno and Mariposa Sts.,
Fresno. Garage.
Owner.....Sperry Flour Co., N Cor.
Fresno St., Fresno.
Architect.....Coates & Traver, Rowell
Bldg., Fresno.
Contractor.....Jas. L. Daly.
Filed Nov. 22, '15. Dated ———
Frame up 1/4
Enclosed 1/4
Completed 1/4
Usual 35 days..... 1/4
TOTAL COST, \$2850
Bond, \$1125. Sureties, G. A. Howells
and J. C. Smith. Limit, 30 working
days. Forfeit, \$10. Plans and speci-
fications filed.

DWELLING
LOT 11 BLK 18, Hazelwood Addition,
Fresno. Dwelling.
Owner.....J. K. Douglas.
Architect.....None.
Contractor.....Reese & Atkins, 743 Wel-
don St., Fresno.

COST, \$2000
DWELLING AND GARAGE
LOT 11 BLK 21, Alta Vista Trct, Fresno
Dwelling and garage.
Owner.....Reese & Atkins, 743 Wel-
don St., Fresno.
Architect.....None.
Day's work.....COST, \$1800

REPAIRS
LOTS 36 AND 37 North Park Extension
Frame Repairs
Owner.....C H Rowell.
Architect.....None.
Contractor.....G J Farr, 245 Fortheamp
St Fresno
COST, \$5000

DWELLING
NO. 1, F ST Fresno. Dwelling.
Owner.....John O'Keefe, Premises
Architect.....None

Contractor...E. A. Turner, 1359 K St.,
Fresno.

COST, \$1000

BUILDING CONTRACTS

SACRAMENTO COUNTY.

STATION

FRANKLIN AVE in Lots 6, 7, 8 Bath
Tract, Sacramento. Reinforced con-
crete transformer station.

Owner.....City of Sacramento, City
Hall.

Architect...None.

Contractor...J. W. Terrill, 1111 29th
St., Sacramento.

COST, \$3325

FRAME RESIDENCE

NO. 2317 TWENTY-SEVENTH ST., on
N ½ Lot 8 Blk W, X, 27th and 28th
Sts., Sacramento. One-story 6-room
frame residence.

Owner.....W. D. McKoy, 3029 E St.,
Sacramento.

Architect...None.

Day's work.

COST, \$3500

FRAME RESIDENCE

NO. 2208 EIGHTEENTH, on N ½ of S
½ Lot 4 Blk V, W, 17th and 15th Sts.,
Sacramento. One-story six-room
frame residence.

Owner.....Joseph Edenhofer, 3011
Cypress Ave., Sacramento.

Architect...None.

Day's work.

COST, \$2000

GARAGE, ETC.

NO. 2316 THIRTIETH ST., on ¼ Lot 5,
29th, 30th, W, X Sts., Sacramento. All
work for public garage and repair
shop.

Owner.....L. W. Mathias, 2924 X St.,
Sacramento.

Architect...None.

Contractor...W. W. Kennedy, 3030
Orange Ave., Sacramento.

COST, \$1330

REPAIRS

NO. 1016 N ST., on W ½ Lot 3 Blk N, O,
10th and 11th Sts., Sacramento. Re-
pair foundation of residence.

Owner.....Mrs. A. E. Knauer.

Architect...None.

Day's work.

COST, \$650

BANK BUILDING

WALNUT GROVE, Sacramento. All
work except roofing, etc., for two-
story and basement brick and con-
crete bank building.

Owner.....Bank of Alexander Brown.

Architect...None.

Contractor...H. F. Smith.

Filed Nov. 19, '15. Dated Nov. 16, '15.

COST, \$13,228

BUILDING CONTRACTS

SAN JOAQUIN COUNTY.

BRICK BUILDING

NE CHURCH AND EL DORADO STS.,
Stockton. All work for three-story
brick building (no finish up stairs).

Owner.....P. L. Belgiano and A.
Lalola, 1295 Union, S. E.

Architect...Franklyn E. Warner, Rm.
37 San Joaquin Bldg.,
Stockton.

Contractor...McPhee & Totten.

Filed Nov. 18, '15. Dated Nov. 17, '15.

1st floors joists in place.....\$1000

Ceiling joists in place.....2000

Roof on	1000
Plastering completed	500
Ready for paint	500
Building completed	1700
TOTAL COST, \$6700	

Bond, \$6350. Sureties, P. Pezzi and J.
H. Winde. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

FRAME DWELLING

NO. 1130 N-EDISON ST., Stockton. All
work for two-story frame dwelling
and garage building.

Owner.....Mrs. Marie Arbios, Prem.
Architect...Franklyn E. Warner, Rm.
37 San Joaquin Bldg.,
Stockton.

Contractor...D. M. Sennett, 830 N-Van
Buren St., Stockton.

Filed Nov. 18, '15. Dated Nov. 18, '15.

Plastering completed
 \$700 00 |

Building completed
 415 25 |

Usual 35 days.....
 371 75 |

TOTAL COST, \$1487 00

Bond, \$743. Sureties, T. B. Littleton
and H. R. Youngblood. Limit, 25 days.

Forfeit, \$10 a day. Plans and spec-
ifications filed.

BUILDING CONTRACTS.

SONOMA COUNTY.

FRAME RESIDENCE

SANTA ROSA. All work for one-story
frame residence.

Owner.....F. S. Boedfeld.

Architect...Tuston & Herbert, Bank
of Santa Rosa Bldg., Santa
Rosa.

Contractor...A. F. Baker.

Filed Nov. 22, '15. Dated Nov. 22, '15.

Bond, \$1898. Surety, Eugene Gannon.
Limit, 56 working days. Forfeit, \$5.

Plans and specifications filed.

LIENS FILED.

SACRAMENTO COUNTY.

RECORDED

Nov. 22, 1915—W 20 FT. LOT 5 and E

¼ Lot 6, G, H, 13th and 14th Sts.,
Sacramento. Emerick & Duncan

Co vs C W Johnson, J Johnson, J M
E Morrill and C O McFarland..\$25.24

Nov. 22, 1915—NOS. 1323 AND 1325 H
St., bet 13th and 14th, Sacramento.

W P Hyatt vs John M E Morrill, C
W and H C Johnson (Johnson
Bros)
 \$253 |

TEAK IN SIAM AND INDO-CHINA.

The Bureau of Foreign and Domestic
Commerce has just published, in
pamphlet form, an account of the teak-
market situation in two of the coun-
tries of southeastern Asia. The detail-
ed information contained in it was
gathered by Commercial Agent Frank-
lin H. Smith during the course of his
investigations into the lumber markets
of the Far East and Australasia.

Teak is one of the most valuable and
interesting of woods. Teak logs when
first cut will not float. It is strongly
and characteristically scented, of oily
texture, and the surface feels greasy
to the touch. The oil is considered to
resist the entrance of water into the
wood and to prevent the wood becom-
ing water-soaked after it has once
been thoroughly seasoned. Teak
darkens with age, and finally after a

number of years becomes almost black.

The principal use of teak is in ship-
building, especially for decking and as
backing for armor plate. Its durability
and lack of corrosive effect on steel
make it particularly suitable for the
latter purpose. Teak has been used to
some extent for gun carriages, but is
not now considered well adapted for
that purpose, on account of its splitting
too readily. In India it is used for all
purposes in house and ship building,
for bridges, railway sleepers, furniture,
shingles, etc. It is also used for carv-
ing, the Burmese carved teak wood
being especially noted.

Mr. Smith's booklet, entitled "Teak
in Siam and Indo-China," is No. 103 in
the Special Agents Series. It discusses
the various grades and prices of the
wood and the methods obtaining in the
industry, and presents statistics of ex-
ports from both the countries visited.
Five cents is the price of this publica-
tion, obtainable from the Superintend-
ent of Documents, Washington, D. C.—
Commerce Reports.

AUSTRALIAN TENDENCY TO DOLLAR EXCHANGE.

[Report of Canadian Government Trade
Commissioner, Melbourne, Sept. 29.]

The most disturbing factor in Aus-
tralia trade with Canada and the United
States in recent months has been the
marked variation in the rate of con-
version from dollars into sterling. The
lowest rate advised was \$4.48 to the
pound, which represented a loss of
about 10 per cent to the purchasers of
goods invoiced in dollar currency. This
variation has completely upset the even
tenor of trade between the North
American Continent and Australia.
Sellers of staple lines of Canadian and
American goods have been obliged to
quote dollar prices, thus throwing the
loss, by conversion into sterling, on to
the purchaser, or, if quoting sterling
prices based on a named fixed rate of
exchange, having the fluctuations ad-
justed by the Australian buyers of the
goods. This naturally has made busi-
ness difficult and buyers have been op-
erating on a "hand-to-mouth" policy.
The visit of the British Finance Com-
mission to the United States has al-
ready had a steadying effect upon ex-
change, which today is reported at,
nominally, \$4.75, and consequently
there is a tendency for Australian buy-
ers to operate on quotations submitted
in dollars.—Commerce Reports.

MEXICAN BORDER CONDITIONS IM- PROVED.

[Vice Consul William P. Blocker,
Piedras Negras, State of Coahuila,
November 6.]

The situation in the Piedras Negras
consular district is much improved; in
fact, fighting has become a thing of
the past. The passenger, freight, and
other trains of the Mexican National
Railroad are operating daily to and
from southern points without molesta-
tion.

Many Americans and other foreigners
are crossing the International Bridge
daily en route to their homes in the
interior, with a view to again settling
down to work and rebuilding their
business. Those coming out say condi-
tions are becoming better each day.—
Commerce Reports.

Catarrh Can Be Relieved

THERE IS NO NEED for you to continually suffer from Catarrh and Cold in the Head. It makes you miserable, doesn't it? You really don't care whether things go right or not and you wonder when you'll ever get over it. And you will not get over it until you get the Clover Leaf Catarrh Remedy, and use it. It will relieve you, and you'll wonder why you had not used it sooner. We are so positive that this will relieve you of your Catarrh or Cold in the Head, that we guarantee you satisfaction or we will refund your money.

Price 50 Cents

For Sale By All Druggists, or will be sent by mail postpaid by the manufacturers,
CLOVER-LEAF PHARMACY, Inc.

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Clover Leaf Toilet Cream

A Delight of the Toilet

The one Perfect Preparation for Bringing that Delicate Beauty to the Skin so desired by the Ladies and admired by the Gentlemen. Fine for the face after shaving. At all Druggists 25c.

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Right or Left Hand, without change

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over door, when Bracket will be sent to fit.

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13th and Clay Sts.
Oakland

237 Powell St.
San Francisco

UNIVERSAL BED

Latest and Best in Wall Beds.

This bed is not fastened to any door or door jamb. It is portable--movable--you can move it to any part of the room or building. Goes through any stock door 6 ft. 8 in. high and 18 in. or more wide.

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George Nelson, C. E., Editor.

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Publisher and Proprietor.
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560 Mission Street.
Telephone—Douglas 2372.

W. D. Manville, News Editor.

December 8, 1915

Leading Articles in this Issue:

Electric Motive Power in the Operation of Railroads.

By William Hood, Member Am. Soc. C. E., Chief Engineer
Southern Pacific Company, San Francisco, California.

The Electrification of the Puget Sound Lines of the Chicago, Milwaukee & St. Paul Railway.

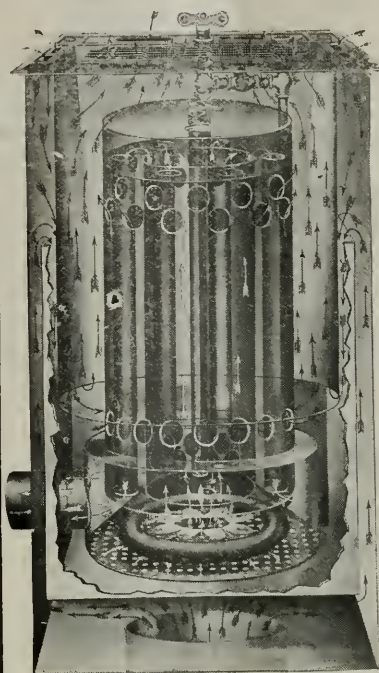
By A. H. Armstrong, Assistant Engineer, Railway and Traction
Department General Electric Company.

Railroad Commission News.

Water Commission News.

Our "STREET WORK and PAVING ISSUE" will appear on December 29th. It will be of "Special Interest" to you and will contain many important items on Street Work and Paving.

"Watch For It."



FLOOR FURNACE STYLE B
Size 14½ in. square by 2 ft. high
Has 8-in. Fresh Air Intake with Damper.
Has 3-in. Outlet Vent
Fits in space between floor joists
Hangs from Register which lays flush with floor.

Style

A. Floor Furnace with fresh air intake on side. For use in buildings having sufficient fresh air circulation under same. For artificial gas only.

B. Floor Furnace with fresh air intake at bottom. For use in buildings where it is desirable to obtain air directly from outside of cellar or basement. For artificial gas only.

NOTE—Style A and B are built alike except for position of fresh air intake.

C. Wall Furnace with fresh air intake at back. For artificial gas only.

D. Wall Furnace with fresh air intake at bottom. For artificial gas only.

NOTE—Style C and D are built alike except for position of fresh air intake.

Prices and Information on Natural Gas Furnaces Furnished on Application.

Unit Plant Hot Blast Furnaces

On Display, Booth 33

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Panama-Pacific International Exposition
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Manufactured under Patents, and Patents pending, by

UNIT GAS HEATING CO., Successors to
Central Hardware Co., Inc.
Los Angeles, Cal.

ARCHIE L. BLOCK, 647 Mission St., S. F.
Sales Agent for Northern Cal

Unit Plant Hot Blast Furnace

Delivers the Heat

A Complete Answer to the Heating Question.

Instantaneous—Furnishes an instantaneous and continuous supply of **Sanitary**—fresh warm air free from gas fumes, odors, smoke or dust.

Hygienic—Maintains an even temperature necessary to health and comfort.

Scientific—Built like a real hot air furnace reduced in size.

Convenient—Operated from inside of room, saving many steps to cellar.

Simple—Any child 10 years of age can operate, turn the key and apply match.

Economical—Wall furnace burns 10 cubic feet and floor furnace 20 cubic feet of gas per hour.

Efficient—Each furnace will heat from 2 to 5 rooms or from 3,000 to 9,000 cubic feet of space.

Fireproof—Has four thicknesses of metal and three air spaces of one inch each between fire and wood; fire is 20 inches from floor.

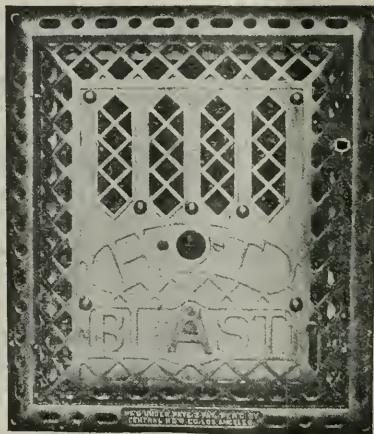
Up to Date—Uses exclusively the Johnson Hot Blast Burner, recognized as the most efficient ever constructed.

Durable—Is made from best grade of metal to be obtained.

Finish—Register electro plated Flemish Brass. The finish that lasts.

Installation—Can be installed by any gas appliance dealer, plumber, tinsmith or hardware merchant at nominal cost.

Retail Prices—Wall Furnace, any style \$22.50
Floor Furnace, any style 30.00
Installations and fittings extra.



WALL FURNACE STYLE C

Size of Wall Furnace front is 17x19 inches, with a recessed portion of 14x17x4 inches between studding. Recessed portion has a 2-inch vent opening at top and a fresh air intake 3x12 inches at bottom operated with damper in front. Both vent and fresh air intake pipes go between studding.

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Coming in,
All Bad Air
Goes Out
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Refund
Money Paid
For
Any of Our
Unit Plant
Furnaces
Which Does
Not Prove
Efficient

According to

Our
Statements



Benj. G. McDougall, Architect.
ST. LUKE'S CHURCH, S. F.

South and east cement walls waterproofed with Imperial Water Proofing.
Color effect produced with Imperial Concrete Finish to match stone work of street fronts



METCALF HOTEL, Geary nr Taylor.
Righetti & Headman, Architects.

Interior walls dampproofed with Imperial Damp Proofing. Exterior walls waterproofed with Imperial Water Proofing. Color effects with Imperial Pigments.



TEMPORARY CITY HALL, San Francisco
Wright, Rushford & Cahill, Architects

Exterior waterproofed with Imperial and color effects with Imperial pigments.



KAHN BROS. DEPARTMENT STORE, OAKLAND
C. W. Dickey, Architect

Seventy-five thousand sq. ft. basement floor and walls waterproofed with Imperial



GERMAN HOUSE, San Francisco
Frederick H. Meyer, Architect

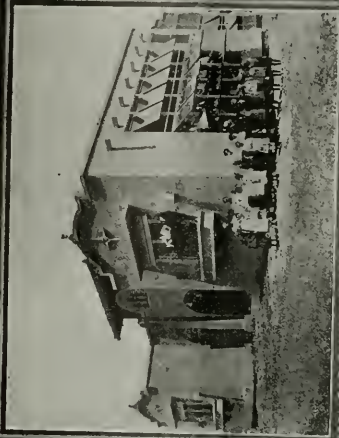
Stone and terra cotta work treated with Imperial Water Proofing preserving and to prevent discoloration

A Few of the Buildings on which IMPERIAL WATER PROOFING and IMPERIAL WALL FINISHING Products are used

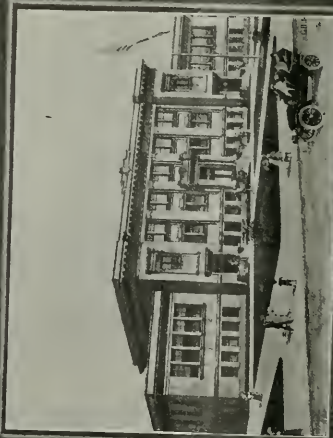
IMPERIAL COMPANY 183 STEVENSON STREET
San Francisco



ROCK RIDGE SCHOOL, OAKLAND - J.J. Donovan Supervising Archt.



COLLEGE PARK SCHOOL - SAN JOSE - Frank D. Wolfe Architect



WOODLAND SCHOOL - W.H. Woods Architect.



INTERIOR VIEW - MICHESNEY SCHOOL - J.J. Donovan Supervising Archt.

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Electric Motive Power in the Operation of Railroads.

By William Hood, Mem. Am. Soc. C. E.,
Chief Engineer, Southern Pacific
Co., San Francisco, Cal.

In considering the question of electric motive power versus the use of steam locomotives, the probability of the electric motive power being proper for adoption is evidently greater when a new railroad is to be equipped than if the question pertains to an existing railroad, and lies between retaining the steam locomotives or purchasing new electric locomotives in addition to the other expenses of equipping the road for electrical operation.

This question is especially important when the existing railroad is an extensive suburban system, with steam locomotives and cars of special adaptation to the service and not suitable for general use on a steam-operated main line, and which suburban system is giving satisfactory returns on the investment.

In such a case the change to electrical operation, with the probability of cost being much in excess of the estimates and the possibility of increase of traffic being much less than predicted, together with the practical loss of the original rolling stock may transform a satisfactory remunerative property into a heavily losing investment for a disastrously long period.

That is, the probabilities of the propriety of electrical operation are:

(1) Greatest on a new main line railroad;

(2) Next greatest on an existing main line railroad when the equipment, other than motive power equipment, will not be changed;

(3) And next greatest on a portion, that is on one or more operating divisions of an existing main line railroad, when the equipment, other than motive power equipment, will not be changed;

(4) And least on a railroad when electrification involves scrapping or nearly corresponding salvage value of existing equipment.

When these matters are under consideration, the amount of risk to investors depends on whether the one making the decision is in charge of matters that he does understand and also of matters that he does not understand, the decision being either a matter of fiat or otherwise, as the case may be.

The inconveniences of electrical operation of part of a main line, a di-

vision or more, have been so fully discussed as to require no more than mention, as for instance, the certainty of increased investment for motive power of both classes over that required for operation of the entire road either by steam or by electric locomotives.

When this partial method is correctly adopted, the evident disadvantages of the two kinds of motive power must have been more than balanced by the saving due to the electrical operation of the parts of the road so operated.

The question of whether or not to adopt electric motive power on a portion, for instance on an operating division, of a main line elsewhere operated by steam locomotives is especially likely to be taken under advisement in reference to a mountain operating division having a steep grade system of considerable length, the electric operation at first glance appearing particularly attractive on such a piece of railroad.

Evidently such a railroad if already built with a double track is more conveniently operated either with electric locomotives or with steam locomotives, than if built with only a single main line track.

The opinion that is sometimes entertained, however, that in cases where a single-track road overburdened with traffic as handled by steam locomotives, the substitution of electric locomotives will materially postpone the expenditure necessary for double tracking the road is not always correct, excepting with the condition that an unusual and perhaps properly termed, unreasonable and impracticable amount of electric power is available at a cost that can be properly contemplated.

The reason for this condition is that on a single-track mountain railroad operating division with a steep grade system and having a considerable number of daily passenger trains throughout the year, the time of passage of these trains over the mountain division cannot be materially modified, owing to necessary business adjustment of times of departure from and arrival at important terminals. And with a considerable freight traffic at all times, and perhaps several times the average freight traffic at certain seasons of the year, it is necessary to move a number of freight trains of maximum practicable size one after the other, and as

near as practicable to each other, up the steep grade, at such periods of the twenty-four-hour day as will least interfere with the passenger train movements.

This is accomplished without difficulty with the use of steam locomotives, which, per varying necessities of traffic volume, can be used on any operating division.

When such mountain operating division is operated electrically, however, not only must the adequate number of electric locomotives be on hand for meeting these traffic conditions, but the amount of electric power available must correspond to the special traffic requirements.

By the necessary method of operation of a single-track road heretofore outlined, the maximum power-house output for freight trains only, at certain seasons of the year, might reach about 40,000 kilowatts, with perhaps 8,000 kilowatts for passenger trains, being about 48,000 kilowatts in all, and possibly more; while for much of the year the requirements would be very considerably less, making an undesirable method of power production as to cost of operation and of installation.

In general, a transportation company will find it impolitic to attempt to equalize power production and fluctuating consumption on so large a scale by entering the market and selling power to suitable consumers in competition with power producing companies regularly in the business of supplying the market.

This results in the cost of power to a railroad company for operating a mountain division being, in general, equal to the entire cost of operating the power house or houses and their related plants plus the entire fixed charges, without very material variation in this cost on account of variation in amount of traffic as between seasons of the year or as between the several years.

That is, the cost of power under to the actual power expenditure for these conditions has no direct relation conducting transportation, and in a way is analogous to the fixed charges pertaining to power-plant installation, as well as to the fixed charges pertaining to the cost of the railroad itself, which fixed charges are constant, regardless of traffic fluctuations.

On a similar mountain division having 2.2% grade and with a double track, the conditions would evidently be much

*A paper presented at the International Engineering Congress, San Francisco, September, 1915.

The Electrification of the Puget Sound Lines of the Chicago, Milwaukee & St. Paul Railway.

By A. H. Armstrong, Assistant Engineer, Railway and Traction Department General Electric Co.

more favorable, and the maximum power-house output for freight trains only at the heaviest traffic period might be no more than 10,000 kilowatts, with perhaps 8,000 kilowatts for passenger trains, being 18,000 kilowatts in all; while for much of the year the requirements would be considerably less.

In general, the cost of double tracking a mountain division will be so great that it should not be done until absolutely necessary, especially in view of possible failure of traffic to increase or even remain constant, on account, for instance, of the construction of competitive lines, entered into judiciously or otherwise.

Evidently on light grade railroads the question of amount of installation of power plant versus fluctuations of traffic is less serious.

The reduction in the necessary production of electric energy by the returning to the line of energy produced by the control of descending trains on a mountain division, electrically operated, might be worth the expense of installation of the necessary appliances as effecting some fuel saving in a steam-power electric-generating station; but when the electric energy is developed in a water-power station, the power saving would be of doubtful value, and in particular because, as heretofore outlined, the cost of power so produced is not per kilowatt hour or any usual function, but is essentially so much per year, regardless of any ordinary fluctuations of power requirements.

The increasing cost of fuel for steam locomotives or for steam electric-generating plants tends to hasten the time when railroads will be operated by electric power, generated by hydraulic plans, particularly on mountain grades.

Presumably much more would have been accomplished in this direction if the National laws and regulations had been so modified as to give to railroad companies the necessary confidence to enable them to make the very large investment required.

Some large water-power locations made by railroad corporations with a view to their development and utilization for mountain railroad operation have, after considerable preliminary expenditure, been abandoned when it was found that after the installation expenditure, the right to continue the operation would depend entirely on the several successive Secretaries of the Interior.

This condition is well understood and preliminary steps have been taken at times to correct it, but without satisfactory results in the way of legislation.

The author gives a brief account of the scope of the work undertaken on this most important of steam road electrifications. He gives a description of the power supply available, the cost of power to the railway company, the type of substation and rolling stock equipment, and the overhead construction adopted. It is of special interest to note that the trolley potential is to be 3,000 volts, which is the highest direct-current potential yet adopted in this country for railway work.—Editor.

Plans for the electrification of the first engine division of the Chicago, Milwaukee & St. Paul Railway have been completed and contracts let with the General Electric Company for electric locomotives, substation apparatus and line material, and with the Montana Power Company for the construction of transmission and trolley lines. The initial electrification of 112 miles of main line between Three Forks and Deer Lodge is the first step toward the electrification of four engine divisions extending from Harlowton, Montana, to Avery, Idaho, a total distance of approximately 440 miles with approximately 650 miles of track, including yards and sidings. The construction of this section is now well under way. While this comprises the extent of track to be equipped in the near future, it is understood that plans are being made to extend the electrification from Harlowton to the Coast, a distance of 550 miles, should the operating results of the initial installation prove as satisfactory as anticipated.

The plans of the Chicago, Milwaukee & St. Paul Railway are of special interest, as this is the first attempt to install and operate electric locomotives on tracks extending over several engine divisions, under which conditions it is claimed the full advantage of electrification can be secured. The various terminal and tunnel installations made in the past have been more or less necessary by reason of local conditions, but the electrification of the Chicago, Milwaukee & St. Paul is undertaken purely on economic grounds with the expectation that superior operating results with electric locomotives will effect a sufficient reduction in the present cost of steam operation to return an attractive percentage on the large investment required. If the savings anticipated are realized in the electric operation of the Chicago, Milwaukee & St. Paul, this initial installation will constitute one of the most important milestones in electric railway progress, and it should foreshadow large future developments in heavy steam road electrification. The success of electric operation on such a large scale will at least settle the engineering and economic questions involved in making such installation, and will limit the future problems of electrification to the ways and means of raising the required capital to effect the change in motive power.

The first step taken towards electrification by the Chicago, Milwaukee & St. Paul Railway was to enter into a contract with the Montana Power Company for an adequate supply of power over the 440 miles of main line considered for immediate electrification. The precautions taken both by the Railway Company and Power Company to safeguard the continuity of power supply should guarantee a reliable source of power, subject to few interruptions of a momentary nature only.

The Montana Power Company covers a great part of Montana and part of Idaho with its network of transmission lines which are fed from a number of sources of which the principal are tabulated below:

	kW.
Madison River	11,000
Canyon Ferry	7,500
Hauser Lake	14,000
Biz Hole	3,000
Butte, steam turbine	5,000
Rainbow Falls	21,000
Small powers aggregating.....	7,320

Total power developed 68,890

Further developments part of which are under construction are as follows:

	kW.
Great Falls	85,000
Holter	30,000
Thompson Falls	30,000
Snake River	20,000
Missoula River	10,000

Total power developed 175,000

Total power capacity developed and undeveloped, 244,000 kW.

The several power sites are interconnected by transmission lines; the earlier ones are supported on wooden poles and operate at 50,000 volts and the later installations are supported on steel towers and operate at 100,000 volts. Ample water storage capacity (300,000 acre-feet), is provided in the Hebgen Reservoir and this is supplemented by auxiliary reservoir capacity at the several power sites which brings the total up to 418,000 acre-feet. The Hebgen Reservoir is so located at the head waters of the Madison River that water drawn from it can supply in turn the several installations on the Madison and Missouri Rivers, so that the same storage water is used a number of times, giving an available storage capacity considerably greater than is indicated by the figures given. It would seem, therefore, in changing from coal to electricity as a source of motive power, that the railroad is amply protected as regards reliability and continuity of power supply.

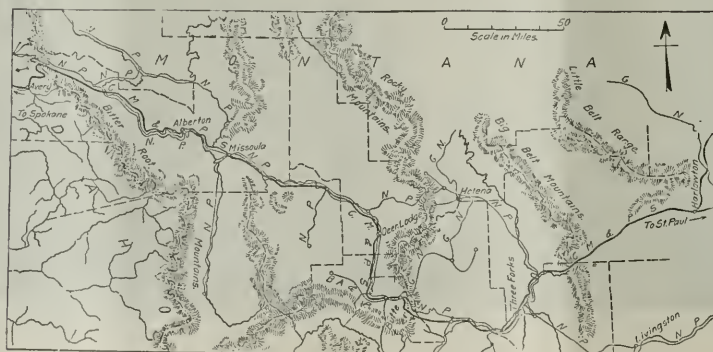
Due to the great facilities available and the low cost of construction under the favorable conditions existing, the Railway Company will purchase power at a contract rate of 0.536 cents per kilowatt-hour, based upon 60 per cent load factor. It is expected under these conditions that the cost of power for locomotives will be considerably less than is now expended for coal. The contract between the Railway and Power Companies provides that the



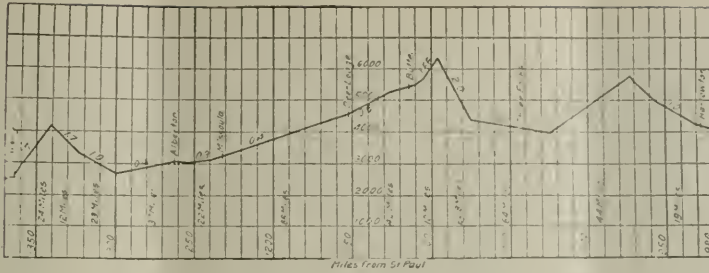
Freight train on the two per cent grade between Piedmont and Donald on the Chicago, Milwaukee & St. Paul Railway



Eagle's Nest on the Chicago, Milwaukee & St. Paul Railway



Map showing Section of the Chicago, Milwaukee & St. Paul to be Electrified



Profile of Section of the Chicago, Milwaukee & St. Paul Undergoing Electrifications

total electrification between Harlowton and Avery, comprising four engine divisions will be in operation by January 1, 1918.

In order to connect the substations with the several feeding-in points of the Montana Power transmission lines, a tie-in transmission line is being built by the Railway Company which will permit feeding each substation from two directions and from two or more sources of power. This transmission line will be constructed with wooden poles and suspension type insulators, and will operate at 100,000 volts. It will follow in general the right of way of the Railway Company, except where advantage can be taken of a shorter route over public domain to avoid the necessarily circuitous line of the railway in the mountain districts.

The immediate electrification of 113 miles will include four substations

others after a careful investigation extending over two years. The 2,400-volt direct-current installation of the Butte, Anaconda & Pacific Railway in the immediate territory of the proposed Chicago, Milwaukee & St. Paul electrification has furnished an excellent demonstration of high-voltage direct-current-locomotive operation during the past year and a half, and the selection of 3,000 volts direct current for the Chicago, Milwaukee & St. Paul Railway was due in a large measure to the entirely satisfactory performance of the Butte, Anaconda & Pacific installation.

The equipment for this road was also furnished by the General Electric Company, and a comparison based on six months steam and electric operation shows a total net saving of more than 26 per cent on the investment or total cost of electrification. These figures do not take into account the increased

Substations.

The substation sites of the Chicago, Milwaukee & St. Paul Railway electrified zone provide for an average intervening distance of approximately 35 miles, notwithstanding that the first installation embraces 20.8 miles of two per cent grade westbound and 10.4 miles of 1.66 per cent grade eastbound over the main range of the Rocky Mountains. With this extreme distance between substations and considering the heavy traffic and small amount of feeder copper to be installed, it becomes apparent that such a high potential as 3,000 volts direct current permits a minimum investment in substation apparatus and considerable latitude as to location of sites.

The substations will be of the indoor type, the transformers being three-phase, oil-cooled, with 100,000 volts primary and 2,500 volts secondary windings. The synchronous motors will



260-ton Locomotive for the Chicago, Milwaukee & St. Paul Railway

containing step-down transformers and motor-generator sets with the necessary controlling switchboard apparatus to convert 100,000 volts, 60 cycles, three-phase power to 3,000 volts direct current. This is the first direct-current installation using such a high potential as 3,000 volts, and this system was adopted in preference to all

capacity of the lines, improvement to the service, and the more regular working hours for the crews. The comparison also shows that the tonnage per train has been increased by 35 per cent, while the number of trains has been decreased by 25 per cent, with a saving of 27 per cent in the time required per trip.

operate at the latter potential. The transformers will be rated 1,900 and 2,500 kva and will be provided with 7 1/2 per cent taps in the primary, and 50 per cent starting taps in the secondary.

The motor-generator sets will comprise a 60 cycle synchronous motor and direct-current generators will be sep-

arately excited by small generators direct-connected to each end of the motor generator shaft. The direct-current generators will be compound wound and will maintain constant potential up to 150 per cent load and will have a capacity for momentary overloads up to three times their normal rating. To insure good commutation on these overloads the generators are equipped with commutating poles and compensating pole face windings. The synchronous motors will also be utilized as synchronous condensers and it is expected that the transmission line voltage can be so regulated thereby as to eliminate any effect of the fluctuating railway load.

wire. This form of construction permits the collection of very heavy currents by reason of the twin contact of the pantograph with the two trolley wires and also insures sparkless collection under the extremes of either heavy current at low speed or more moderate current at very high speeds. It seems that the twin conductor type of construction is equally adapted to the heavy grades, calling for the collection of very heavy currents, and on the more level portions of the profile where maximum speeds of 60 m. p. h. will be reached with the passenger trains having a total weight of over 1,000 tons. The advantage of this type of construction is due partly to the

fact, the Rocky Mountains at an elevation of 6350, the Bitter Root Mountains at an elevation of 4200 feet and the Cascade Mountains at an elevation of 3010 feet. The first electrification between Three Forks and Deer Lodge calls for locomotive operation over 20.8 miles of 2 per cent grade between Piedmont and Donald at the crest of the main Rocky Mountain Divide, so that the locomotives will be fully tested out as to their capacity and general service performance in overcoming the natural obstacles of the first engine division. The initial contract calls for nine freight and three passenger locomotives having the above character-



Electric Ore Train of the Butte, Anaconda & Pacific Railway, Crossing the Tracks of the Chicago, Milwaukee & St. Paul Railway.

The location and equipment of the several substations is as follows:

Station.....	Miles from Deer Lodge.....	No. of Units.....	Kw. per Unit.....	Total.....
Morel	17.1	2	2000	4000
Janney	50.5	3	1500	4500
Piedmont	77.9	3	1500	4500
Eustice	120.6	2	2000	4000

Overhead Construction.

Trolley construction will be of the catenary type in which a 4-0 trolley wire is flexibly suspended from a steel catenary supported on wooden poles, the construction being "bracket" wherever track alignment will permit and "cross span" on the sharper curves and in the yards. Steel supports instead of wooden poles will be used in yards where the number of tracks to be spanned exceeds the possibilities of wooden pole construction. Poles for the first installation are already on the ground and 30 miles of poles are set.

As the result of careful investigation and experiments a novel construction of trolley will be installed composed of the so-called twin-conductor trolley. This comprises two 4-0 wires suspended side by side from the same catenary by independent hangers alternately connected to each trolley

greater surface for the collection of current, and partly to the very great flexibility of the alternately suspended trolley wires, a form of construction which eliminates any tendency to flash at the hangers either at low or high speed. Including sidings, passing and yard tracks, the 113 miles of route mileage is increased to approximately 168 miles of single track to be equipped between Deer Lodge and Three Forks in the initial installation.

The locomotives to be manufactured by the General Electric Company are of special interest for many reasons. They are the first locomotives to be constructed for railroad service with direct-current motors designed for so high a potential as 3,000 volts. They will weigh approximately 260 tons and will have a continuous capacity greater than any steam or electric locomotive yet constructed. Perhaps the most interesting part of the equipment is the control, which is arranged to effect regenerative electric braking on down grades. This feature as yet has never been accomplished with direct-current motors on so large a scale. The general characteristics are tabulated below.

The Chicago, Milwaukee & St. Paul Railway from Harlowton to the Coast crosses four mountain ranges. The Belt Mountains at an elevation of 5768

istics. The freight and passenger locomotives are similar in all respects except that the passenger locomotives will be provided with a gear ratio permitting the operation of 800 tons trailing passenger trains at approximately 60 m. p. h., and will further be equipped with an oil-fired steam-heating outfit for the trailing cars. The interchangeability of all electrical and mechanical parts of the freight and passenger electric locomotives is considered to be of very great importance from the standpoint of operation and maintenance.

Total weight	260 tons
Weight on drivers	200 tons
Weight on each guiding truck	30 tons
Number of driving axles	8
Number of motors	8
Number of guiding trucks	2
Number of axles per guiding truck	2
Total length of locomotive	112 feet
Rigid wheel base	10 feet
Voltage of locomotive	3000
Voltage per motor	1500
H.P. rating one hour—each motor	430
H.P. rating continuous—each motor	375
H.P. rating one hour—complete locomotive	3440
H.P. rating continuous—complete locomotive	3000
Trailing load capacity, two per cent	1250 tons
Trailing load capacity, one per cent	2500 tons
Approximate speed at these loads and grades	16 m.p.h.

The cab consists of two similar sections extending practically the full length of the locomotive. Each section is approximately 52 feet long and the cab roof is about 14 feet above the rail exclusive of housings for the ventilation. The trolley bases are about five feet above the roof owing to the unusual height of the trolley wire which will be located at a maximum elevation of 25 feet above the rail. The outer end of each cab will contain a compartment for the engineer while the remainder is occupied by the electric control equipment, train heater, air brake apparatus, etc.

Motors.

The eight motors for the complete locomotive will be Type GE-253-A. This motor has a normal one-hour rating of 130 h. p. with a continuous rating of 75 h. p. The eight motors will thus give the locomotive a one-hour rating of 3440 h. p. and a continuous rating of 3000 h. p. which makes it more powerful than any steam locomotive ever built. The tractive effort available for starting trains will approximate 120,000 pounds at 20 per cent coefficient of adhesion.

Each motor will be twin geared to its driving axle in the same manner as on the Butte, Anaconda & Pacific, the Detroit River Tunnel and the Baltimore and Ohio locomotives, a pinion being mounted on each end of the armature shaft. The motor is of the commutating-pole type and has openings for forced ventilation from a motor-driven blower located in the cab.

The freight locomotives are designed to haul a 2500-ton trailing load on all gradients up to 1 per cent at a speed of approximately 16 m. p. h., and this same train load, unbroken, will be carried over the 1.66 and 2 per cent ruling grades on the west and east slope of the Rocky Mountain Divide with the help of a second similar freight locomotive acting as a pusher. Track provision is being made at Donald, the summit of the grade, to enable the pusher locomotive to run around the train and be coupled to the head end to permit electric braking on down grade. In this case the entire train will be under compression and held back by the two locomotives at this head end, the entire electric braking of the two locomotives being under the control of the motorman in the operating cab of the leading locomotive. It is considered that electric braking will prove very valuable in this mountain railroading, as in addition to providing the greatest safety in operation, it also returns a considerable amount of energy to the substations and transmission system which can be utilized by other trains demanding power. In this connection, the electric locomotives will have electric braking capacity to hold back the entire train on down grades, leaving the air-brake equipment with which they are also equipped, to be used only in emergency and when stopping the train. There is therefore provided a duplicate braking system on down grades which should result in safety of operation and should eliminate breakdowns, wheel and track wear and overheating, as well as leading to a reduction in maintenance and an improvement in track conditions.

With the completion of the remaining engine divisions it is proposed to take advantage of the possibilities afforded by the introduction of the electric locomotive by combining the present four steam-engine divisions into two locomotive divisions of approximately 220 miles length, changing crews, however, at the present division points. As the electric locomotive needs inspection only after a run of approximately 2,000 miles, requires no stops for taking on coal or water, or layover due to dumping ashes, cleaning boilers or petty roundhouse repairs, it is expected that the greater flexibility of the locomotive so provided will result in considerable change in the method of handling trains now limited by the restrictions of the steam engine.

The electrification of the Chicago, Milwaukee & St. Paul Railway is under the direction of Mr. A. C. Goodnow, Assistant to the President in charge of construction, and the field work is under the charge of Mr. R. Beunckes, Electrical Engineer of the railway.

*From article in General Electric Review.

Water Commission News.

HIGH PIPE LINE.

The State Water Commission has just granted to L. J. Stone of Waddington, Humboldt County, a permit to use three minor inches, or three-fourths of a cubic foot of water, from Soldiers' Grove Spring, in the Van Duzen watershed in that county, for gold mining purposes. The water is diverted at a point in the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Sec. 14, T. 2 N., R. 4 E., Humboldt meridian. A three-inch pipe line is to be run a distance of 3,500 feet to carry the water to the quartz mill and camp.

Railroad Commission News.

An interesting report of certain features of the operations of the urban railways of San Francisco and Los Angeles has been prepared by the California Railroad Commission, affording comparisons between the street car traffic of the two cities.

The report includes the United Railroads of San Francisco, the Municipal Railway and the California Street Cable Railway, which are all the lines in San Francisco, but in Los Angeles it does not include the local traffic of the Pacific Electric Railway, which is inconsiderable, as the line is chiefly an interurban one. The statement is based on data submitted for the year ending June 30, 1915, and the figures are as follows:

	San Francisco	Los Angeles
Passenger car miles	36,587,629	29,261,200
Passenger car hours	3,591,611	3,128,042
Regular fare passengers	201,574,155	125,939,865
Revenue transfer passengers	1,517,360	
Total passengers—Revenue	203,091,515	125,939,865
Free Transfer Passengers	79,234,452	42,965,583
Total All Passengers	282,325,967	168,905,448
Passenger Revenue	\$10,044,930.49	\$6,203,161.35
Average Fare Revenue Passengers	.0496	.0495
Average Fare All Passengers	.0355	.0367
Revenue from Transportation per Car mile	.2239	.2119
Revenue from Transportation per Car hour	2,7967	1.95305

The Railroad Commission has issued an order authorizing the Consolidated Water Company of Pomona, Los Angeles County to issue \$225,000 face value, 6 per cent 20 year bonds at par, less a 5 per cent commission also to execute a deed of trust to secure the bonds. The money obtained by the sale of the securities is to refund present indebtedness, bonds and promissory notes. The bonded indebtedness is \$175,000 and the notes \$50,000.

Imperial County has filed with the Railroad Commission and application for authority to build highways across the tracks of the Southern Pacific Company at five points.

SANTA FE MUST BUILD TEMECULA-OCEANSIDE.

Protest of the Atchison, Topeka and Santa Fe Railway Company against the order of the State Railroad Commission that they construct a standard gauge connection between Temecula and Oceanside, has been overruled by that body, which Saturday denied the petition of the railroad company for a rehearing of the case. The construction of the line, which the company will now be compelled to build, will afford direct connection between San Bernardino, Riverside and the port of San Diego.

The original order of the Railroad Commission was issued September 20, 1915. The railroad filed a petition for a rehearing of the case. This has been met with refusal, leaving the original order in force.

CITY CAN COMPEL RAILROAD TO ACT.

That a city or municipality can compel a street railway company to sprinkle its own right of way within the city, is the effect of a decision by the Supreme Court of California in refusing to grant the petition of the Pacific Gas and Electric Railway Company for a hearing in the Supreme Court of its action against the city of Sacramento. This means the Supreme Court fully agrees with the Appellate Court, which held the city could compel the company to sprinkle.

It is the first time the point has been ruled upon by a California Supreme Court.

COUNTY TO SPEND \$500,000.

TACOMA, WASH.—County Engineer White reports about \$500,000 will be expended next year by Pierce County in the construction of new highways. Practically all of this will be paying work probably, \$50,000 being spent in grading.

Technical Societies.

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Weekly luncheons in College Room, Hoffbrau Cafe, Wednesdays at 12:30. Engineers welcome; informal; no program.

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Address all communications to Frank C. Ayars, Secretary, 505-6 Douglas Bldg., Los Angeles.

PERSONAL.

Harry A. Kelsey, superintendent of streets of Berkeley, will January 1 be succeeded by Thomas Bither, a young engineer now employed as a street inspector. This has been announced by Fred T. Robson, commissioner of public works.

Fred C. Roberts, former city engineer of Daly City and constructor of the municipal water system, has been appointed general inspector in the State architectural department. Roberts was named to succeed W. J. Young, who was dismissed on the grounds of inefficiency by State Architect McDougal.

County Engineer E. H. Annear of Stanislaus County has returned from a trip to San Mateo and Contra Costa counties for the purpose of investigating what these counties are doing in the matter of building permanent roads. San Mateo County has voted a bond issue of \$1,200,000 for permanent road building while Contra Costa County is following the plan of building 12 miles of permanent roads a year by direct taxes. Engineer Annear studied both the financial situation of the two counties and the type of road building now in progress, for the purpose of securing information that may be of use in case Stanislaus should proceed with permanent road building in the near future.

HIGHWAY SURVEY CAMP TRANSFERRED.

C. A. Utley, who is in charge of the survey of the lateral from Auburn to Grass Valley for the State Highway Commission, has transferred his headquarters from Auburn to Grass Valley. Utley's crew of surveyors is working five miles this side of Bear River. Three months more will be required to complete the survey. Other engineers in the party are Howard Briley, Wendell Woodworth, Jr., Seth W. Sampson and H. S. Kirk.

CHINESE ENGINEER TO BUY MATERIAL FOR RAILROAD.

H. T. Hsia, an engineer of the Chinese ministry of communications, is in consultation with manufacturers of steel rails and other railroad supplies and equipment in Pittsburgh. He explained that the Chinese Government contemplates the construction of 4,000 miles of railroad and he has been commissioned to investigate American standards with a view to placing orders in this country.

Heretofore railroad construction in China has been under the direction of European engineers who have inaugurated European methods.

ADVANCE CONSTRUCTION NEWS.

Classified According to Character of Work.

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Pebble manufacture is a new industry in Nevada. Foreign pebbles for grinding cement, etc., imported into the United States in 1914 had a value of \$478,146.

APARTMENT HOUSES

SAN FRANCISCO—Apartment house and stores, 4 story and base, brick and steel, \$10,000. Architect, Joseph Cahen, 45 Kearny street, S. F. Owner, E. J. Greenwood. Location, northwest Bush and Powell streets, covering an area of 57½ by 70 feet. Will contain several stores on the first floor beside the lobby and entrance. Upper floors arranged for 31 suites of two and three rooms. Wall beds and private baths. Interior finish pine and hardwood with some hardwood floors. Steam heat, automatic elevator and hot water supply. Patent store fronts. Exterior faced with pressed brick and cement plaster. Plans complete and ready for figures.

SAN FRANCISCO—Apartment house, 2 story and base, frame, \$15,000. Architect, Benj. G. McDougall, Sheldon Bldg., S. F. Owner, Arthur Arlett, Call Bldg. Location, east Powell north of Washington, covering an area of 19½ feet by 48. Will contain six apartments of three rooms each with wall beds and private baths. Interior finished in pine and elm panels with some hardwood floors. Central heating system and hot water supply. Bath rooms finished in tile. Exterior faced with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Apartment house, 4 story and base. Class C construction, \$21,000. Architect, J. F. Dunn, Monadnock Bldg., S. F. Owner, W. F. Humphrey Investment Co. Location, north Pine west of Leavenworth. Will contain a total of 12 suites of three and four rooms. Interior finish pine and hardwood with some hardwood floors. All apartments will have wall beds and private baths. Plans provide for steam heat, automatic elevator and hot water supply. Bath rooms tile. Exterior faced with cement plaster and pressed brick. Plans being prepared.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$17,000. Architect, Joseph M. Geary, 2581 Post street, S. F. Owner, J. H. Kruse, 23rd and Polson streets. Location, southwest corner of 23rd and Howard streets covering an area of 43 feet 10 inches by 75 feet. Will contain twelve suites of three and four rooms. Interior finish pine and elm panels. Some hardwood floors. Wall beds and private baths. Steam heat and a hot water system. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Apartment house, 3 story and base, frame, \$20,000. Architect, none. Owner, John Conant, 542 25th street, Oakland. Location, north 25th street west of Telegraph. Will contain a number of large apartments which will be finished in pine, hardwoods and white enamel. Hardwood floors. Steam heat and a hot water supply. Open fire places and tile or brick mantels. Bath rooms tile. Wall beds. Exterior covered with cement

Bids now being taken for garden furniture, marble, interior decoration, vac-plaster on metal lath. Plans complete and owner taking subfigures.

SEATTLE, WASH.—Apartment house, 5 story and base, mll construction, \$75,000. Architects, Martin & Pagan, Northern Bank Bldg., Seattle. Owners, Gardner and Lessey, 2021 4th avenue. Location, 4th avenue, covering an area of 60 by 105 feet. Will contain a large number of two, three and four room apartments with wall beds and private baths. Interior finished in pine and hardwood with some hardwood floors. Steam heat, automatic elevators and a hot water supply. Bath rooms tile. Exterior faced with pressed brick trimmed with terra cotta. Plans complete and segregated figures being taken.

SEATTLE, WASH.—Apartment house, 3 story and base, brick, \$40,000. Architect, J. I. Ripley, 2447 4th avenue, Seattle. Owner, F. H. Webber. Location, corner of 24th avenue and Spruce streets, covering an area of 53 by 65 feet. Will contain two and three room apartments with wall beds and private baths. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat, oil burning plant and hot water supply. Bath rooms tile. Marble and tile wainscot. Exterior faced with pressed brick. Plans complete and segregated figures to be taken.

SEATTLE, WASH.—Apartment house, 3 story and base, brick, \$45,000. Architect, H. Ryan, Northern Bank Bldg., Seattle. Owner's name not given. Location, Capitol Hill, covering an area of 80 by 120 feet. Will contain 43 suites of two and three rooms with wall beds and private baths. Interior finish pine and hardwood with some hardwood floors and white enamel. Steam heat, automatic elevator and hot water supply. Bath rooms finished in tile. Marble and tile wainscot. Exterior faced with pressed brick. Plans complete and figures being taken.

SAN FRANCISCO—Apartment house, 7 story and base, steel and brick. Cost not stated. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name not given. Location, northwest Pine and Stockton, covering an area of 50 by 67½ feet. Will contain a large number of two and three room apartments with all modern conveniences. Complete steel frame. Interior finish pine and hardwood with hardwood floors. Steam heat, oil burning furnace, automatic elevator and hot ater system. Bath rooms tile. Vacuum cleaning. Wall beds. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared and contracts to be let by January 1st.

OAKLAND, CAL.—Apartment house completion, 4 story and base, brick. Cost not stated. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners, Hinkel and Sommerstrom Bros. Location 14th and Allica streets,

uum cleaning system and household furnishings.

OAKLAND, CAL.—Apartment house, 3 story and base, frame, \$90,000. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner's name withheld. Location, Lake District. Will contain a total of 140 rooms which will be arranged in suites of two, three, four and five rooms. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat, oil burning furnace, hot water supply and vacuum cleaning. Bath rooms tile. Wall beds. Exterior covered with pressed brick and cement plaster. Working drawings being completed.

OAKLAND, CAL.—Apartment house and stores, 4 story and base, brick, \$70,000. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners, Sommerstrom Bros. Location, Telegraph avenue and 24th street, covering an area of 100 by 100 feet. Ground floor arranged for stores and main office and lobby. Upper floors will contain two, three and four room suites. Interior finish pine, hardwood and white enamel. Hardwood floors. Steam heat, vacuum cleaning, hot water system and automatic elevator. Oil burning plant. Bath rooms tile. Wall beds. Patent store fronts. Exterior faced with pressed brick. Plans being prepared.

OAKLAND, CAL.—Apartment house completion, 4 story and base, brick. Cost not stated. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners, Sommerstrom Bros. Location, southwest 11th and Oak streets. Bids are now being taken for marble and tile work, ornamental iron and interior decorations.

Contracts Awarded

SEATTLE, WASH.—Apartment house, 3 story and base, mill construction, \$75,000. Architect, David Dow, 21st and Spruce streets, Seattle. Owner's name not given. Contractor, David Dow, 21st and Spruce. Contract price, \$75,000.

SAN FRANCISCO.—Apartment house, 3 story and base. Class C construction, \$30,000. Architect, W. G. Hind, 46 Kearny street, S. F. Owner, Clyde S. Payne. The following contracts in addition to those previously mentioned have been awarded: Iron work, C. J. Hillard Co., 19th and Minnesota; plumbing, Jas. H. Pinkerton, 2266 Fulton; heating, Atlas Heating and Ventilating Co., 4th and Freelon; metal work and flues, Bartholme & Hartmannshenn; electric work, Brouillet Electric Co., 492 Castro; painting, J. Marconi, 737 Greenwich; plastering, A. Huck, 59 Capp street; hardware, Bennett Bros., 314 Market street; roofing, Thomas H. Price Co., Monadnock Bldg.; lumber, S. F. Lumber Co., foot of Mason street; millwork, Builders Supply Depot, 42 8th street. Bids are still being taken for the marble and tile work, glass, lighting fixtures and shades.

BANKS

Contracts Awarded.

STOCKTON, SAN JOAQUIN CO., CAL.—Bank and offices, 4 story and base, Class A construction. Cost not stated. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owners, Stockton Savings Bank. Contractors,

P. J. Walker Co., Monadnock Bldg., S. F. Contract price not stated. Note: The contractors are now taking subfigures on the work, and have awarded the structural steel work to the Builders' Iron Works of Stockton.

BATH HOUSES.

ALAMEDA, ALAMEDA CO., CAL.—Bathing resort, frame and concrete. Cost not stated. Architect, Edwin J. Symmes, Pacific Bldg., S. F. Owners, Surf Beach Amusement Co. Architect Edward J. Symmes states that he has plans complete and will take figures within a week or ten days for the largest reinforced concrete swimming tank in the United States. The tank will be 75x300 feet and will be lined on the bottom and sides with tile. A large reinforced concrete bulkhead and a pier will also be constructed. Strehlow, Freese & Peterson already have the contract for fencing and for the construction of the passenger station. A large pavilion with maple floor will also be erected and a number of frame and plaster concession booths. H. S. Thompson will construct the largest roller coaster in the country on property at this resort.

BONDS.

LODI, SAN JOAQUIN CO., CAL.—December 17th is the date set for voting on the question on issuing bonds of \$10,000 with which to erect a new grammar school building. A new building is necessary owing to the crowded conditions of the present ones.

WALNUT CREEK, CONTRA COSTA CO., CAL.—Jos. L. Silveira, banker of Walnut Creek, has purchased a site in this town on which he will make improvements costing \$10,000. At present there is a factory building on the site.

LOS ANGELES, CAL.—Members of the Board of Library Commission have unfolded plans for a campaign for a central library building to Mayor Sebastian. Sketches of the proposed structure have been prepared by Los Angeles architects. The proposed building will cost about \$1,000,000.

OAKDALE, STANISLAUS CO., CAL.—E. J. Knight & Co., have purchased \$11,500 of the \$10,000 bond issue of the Oakdale Irrigation District. The proceeds of the sale of these bonds will be used in irrigation improvements.

LOYALTON, SIERRA CO., CAL.—The Trustees have passed an ordinance calling an election to vote bonds of \$5,000 for the construction of an electric lighting power plant.

ASTORIA, ORE.—The election held to vote bonds of \$100,000 carried. It is proposed to erect a building containing 30 class rooms. Plans will be ordered immediately.

ANDERSON, SHASTA CO., CAL.—P. Eels, San Francisco attorney, has sent word that the bonds voted by the Anderson-Cottonwood Irrigation are valid and preparations are now being made to place them on the market. The bonds voted amounted to \$400,000, which will be used in irrigation improvements.

BLYTHE, RIVERSIDE CO., CAL.—Authority to issue \$350,000 first mortgage bonds, \$400,000 second mortgage

and \$250,000 of capital stock has been given the California Southern Railroad Company by the State Railroad Commission. Of the entire amount \$253,000 will be used in building up of the road. Extensions and repairs to the present system will be made.

CALEXICO, IMPERIAL CO., CAL.—For the establishment of a public park, so called civic center, the election held here last week carried by a large vote.

PARADISE, BUTTE CO., CAL.—The petitions for the organization of Paradise Irrigation District are complete and will be presented to the Supervisors at their next meeting. The proposed district will take in about ten thousand acres and water will be taken from Little Butte Creek or from Little West Branch, or both.

MARTINEZ, CONTRA COSTA CO., CAL.—Considerable opposition has developed here against the proposed bond issue to build an oil and macadam road to Mount Diablo. The proposition has been approved by the County Supervisors, who intended to pay \$30,000 from county funds. The total cost of the road is placed at \$125,000.

AUBURN, PLACER CO., CAL.—An ordinance providing for the issue of \$22,000 worth of bonds for municipal improvements has been given its first reading by the Trustees. The bonds were voted last month.

GLOBE, ARIZ.—Bonds of \$350,000 have been voted for county highway improvements by Gila County at a recent election.

ONNAUD, LOS ANGELES CO., CAL.—A bond election will be called shortly to provide funds for the erection of a school building. Plans for the proposed structure are now being prepared by Los Angeles architects.

EAGLE ROCK, CAL.—The proposition to vote bonds of \$65,000 for the erection of new schools failed to carry. It is thought another election will be called.

WOLTERS, FRESNO CO., CAL.—An election will be held December 17th to decide the question of issuing and selling bonds of \$12,000 for school improvements.

BRIDGES, DAMS AND HARBOR WORK

SACRAMENTO, CAL.—Bridge, steel and concrete, \$28,061.13. Engineer, State Highway Commission, Sacramento. Owners, State of California. Bids opened at the last meeting of the State Highway Commission for the construction of a bridge over the Yolo By-Pass show the Security Construction Co., Los Angeles, low at \$24,671. Bids have been taken under advertisement. The engineer's estimate was \$28,061.13. A complete list of the bids received will be found under the heading of Sacramento in this issue.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridge, steel and reinforced concrete, \$100,000 to \$125,000. Engineer, A. V. Saph, Rialto Bldg., S. F. Owners, Santa Barbara County. A. V. Saph has been appointed consulting engineer for the state highway bridge across the Santa Ynez River at Cuesta and Zaca Canyons, and will start on plans for the work immediately. The Cuesta-Zaca bridge is the largest and most expensive structure to be built

on the state highway out of the county bridge fund. From this fund \$50,000 will be taken as the county's contribution toward the cost of the bridge, while the state will contribute between \$50,000 and \$75,000.

PASCO, WASH.—Bridge, steel and reinforced concrete. Cost not stated. Engineer, C. E. Fowler, Central Bldg., Seattle. Owners, Walla Walla and Franklin Counties. C. E. Fowler, consulting engineer, is preparing plans for the construction of a steel bridge over the Snake River between Pasco and Ilwaco for Franklin and Walla Walla Counties, and will have them ready for contractors the latter part of December. The bridge will rest on concrete piers, will be about 800 feet long with about 2,000 feet of approaches.

SALEM, ORE.—Bridge, steel or reinforced concrete, \$125,000 or more. Engineer's name not given. Owners, Marion and Polk Counties. Competitive plans will be submitted with proposals for the construction of the proposed bridge to be built jointly by Marion and Polk Counties. The selection of plans will probably be made by the State Highway Department. Plans will include a draw span, and will be either a steel or concrete structure.

Contracts Awarded

MEYERS CREEK, IMPERIAL CO., CAL.—Bridge, reinforced concrete. Cost, \$15,000. Engineer, State Highway Commission, Sacramento. Owners, State of California. Contractors, Holland Construction Co., Granger Bldg., San Diego. Contract price, \$15,000. Engineer's estimate, \$25,320.53.

CHURCHES

YUBA CITY, YUBA CO., CAL.—Mausoleum, 1 story and base, reinforced concrete, \$60,000. Architect, Consolidated Mausoleum Co., Flatiron Bldg., S. F. Owners, Sutter-Yuba Cemetery Association. Will contain a number of crypts, chapel and office. Interior finished in stone and marble. Exterior faced with cement plaster and granite. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL.—Church, 2 story and base, brick, \$50,000. Architect, Frank L. Meline, 6772 Hollywood Boulevard, L. A. Owners, Fifth Church of Christ, Scientist. Location, Hollywood and La Brea. Will contain large main auditorium, reading rooms and Sunday school rooms. Interior finish hardwood and ornamental plaster. Art glass windows. Central heating system. Exterior faced with pressed brick. Revised plans complete and figures being taken.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—Church, 1 story and base, reinforced concrete or hollow tile, \$35,000. Architects, Joffrey & Schaefer, Wesley Roberts Bldg., L. A. Owners, First Congregational Church. Will cover an area of 95 by 150 feet. Interior arranged for main auditorium, seating 250 people, fifteen class rooms, social parlors and pastor's study. Interior finish pine and ornamental plaster. Art glass windows. Exterior faced with cement plaster. Plans complete and figures being taken.

COURT HOUSES.

SAN FRANCISCO—City hall draperies. Cost not stated. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owners, City and County of San Francisco. Bids will be opened on December 15th by the Board of Public Works for furnishing the draperies for the mayor's office and council chambers.

FACTORIES AND WAREHOUSES

SAN FRANCISCO—Factory alterations, \$3,500. Architect, none. Owners, Rosenbergs Bros., 269 Brannan street. Work will consist of cutting a number of openings in the present brick walls and installing fire escapes. Plans are complete and work will be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Factory group, 3, 4 story and base, mill construction, \$200,000. Architect's name not given. Owners, Peet Bros. Mfg. Co. Superintendents of construction, P. J. Walker Co., Monadnock Bldg., S. F. Location, Pardee and Third streets. Main building will cover an area of 165 by 245 feet, while the other two structures will be but a little smaller. Heavy mill type of construction with brick exterior walls. Modern plumbing and electric work, elevators, steam heat and electric work. Separate power plant. Work is the first unit of a large soap factory which, when complete, will represent an expenditure in construction of over \$1,000,000.

SEATTLE, WASH.—Warehouse, 4 story and base, reinforced concrete, \$50,000. Architects, Engineering Dept. American Paper Co., 85 Atlantic street, Seattle. Owners, American Paper Co. Location, southwest Junco and Atlantic streets, covering an area of 120 by 180 feet. Construction fireproof with reinforced concrete floors and walls. No interior finish. Elevator service, metal window sash and frames and fireproof doors. Exterior faced with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO—Warehouse, 2 story and base, reinforced concrete. Cost not stated. Architect, Charles Paff, Merchants Exchange Bldg., S. F. Owners, American Marine Paint Co. Location, Brannan and Ellery streets. This project, which was temporarily abandoned, has been revived and working drawings are now being prepared. Exterior will be faced with cement plaster. Construction will be fireproof.

TORRENCE, IMPERIAL CO., CAL.—Glass factory, 5, 1 and 2 story frame and corrugated iron, \$10,000. Architect's name not given. Owners, The Hurlie Window Glass Co. Work is now under way by Day Labor on this group of buildings. Concrete floors will be used. Exteriors will be covered with corrugated iron. Adolph Sieroty, Eastern Outfitting Co., L. A., is the secretary of the company.

Contracts Awarded.

SAN FRANCISCO—Factory, 2 story and base, reinforced concrete, \$175,000. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, John Hollman Co. Contractors, Lange & Bergstrom, Sharon Bldg. S. F. Contract price, \$175,000.

OAKLAND, CAL.—Warehouse, 2 story. Class C construction, \$14,000. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owners, Luckenbach Steamship Co. Contractor, C. Armstrong, 1629 Alcatraz avenue, Berkeley. Contract price, \$14,000.

FLATS

SAN FRANCISCO—Flats, 3 story and base, frame, \$5,000. Architect, none. Owner, Mrs. Lillie Cook, 635 Minna street, S. F. Location, south Minna west of 9th street. Will contain three flats of four and five rooms. Interior finish pine. Open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic and shiplap.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,000. Architect, none. Owner, John V. Stiefel, 181 23rd avenue, S. F. Location, south Lake west of 19th avenue, covering an area of 25 by 65 feet. Will contain two flats of five and six rooms. Interior finish pine and elm panels. Hardwood floors. Open fire places and tile mantels. Bath rooms tile. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$2,000. Architect, none. Owner, A. M. Sylvia, 371 30th avenue, S. F. Location, west 19th avenue south of California, covering an area of 25 by 40 feet. Will contain two flats of five and six rooms. Interior finish pine and elm panels. Hardwood floors, open fire places and tile mantels. Bath rooms tile wainscot. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2, 2 story and base, frame, \$5,000 each. Architect, none. Owner, L. B. Ham, 1643 Lake street, S. F. Location, east 10th avenue north of California. Each building will contain two modern flats of five and six rooms. Interior finish will be of pine, elm and white enamel. Hardwood floors will be used. Open fire places and tile or brick mantels. Bath rooms tile wainscot. Automatic water heaters. Marble and tile entrance. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FIRE REPORT

LOS ANGELES, CAL.—More than half of the town of Avalon, on Santa Catalina Island, was destroyed by fire last week. Two large hotels, bath houses, club, business and a number of freight warehouse buildings were destroyed. It is estimated that the loss is \$1,000,000.

FRESNO, FRESNO CO., CAL.—Hickman's Clothing store, Mariposa street, was destroyed by fire last week. The loss is estimated at \$15,000.

SANTA ROSA, SONOMA CO., CAL.—The town of Graton was partially destroyed by fire last week. Fire also destroyed the largest hotel building in Bolleene, another small town near Graton.

ELREKA, HUMBOLDT CO., CAL.—A lamp explosion in the Garberville Exchange hotel caused a fire which did damage estimated at \$20,000.

SAN FRANCISCO—The fire in the Twin Peak tunnel last week caused little damage and will have no effect on the progress of the work, according to City Engineer O'Shaughnessy.

ISLETON, SACRAMENTO CO., CAL.
—The Oriental quarter of this city has been destroyed at a loss of \$80,000. There was but little insurance carried on any of the structures destroyed.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—Fire last week destroyed the store building of the Home Furniture Company in San Bernardino. It is thought the loss will reach \$60,000, partly covered by insurance.

GARAGES

OAKLAND, CAL.—Garage, 1 story and base, brick, \$5,500. Architect, William Wilde, 1725 Broadway, Oakland. Owner, O. J. Mead. Location, Broadway between 29th and Orchid streets. Will be arranged for storage space only. Cement floor. Metal window sash and frames. Exterior faced with pressed brick. Plans complete and figures being taken.

HALLS AND SOCIETY BUILDINGS

SAN FRANCISCO—Athletic Club, 4 story and base, brick and steel. Cost not stated. Architects, Bliss & Paville, Balboa Bldg., S. P. Owners, Women's Athletic Association. Location, north Sutter between Mason and Taylor. Revised plans are now out for figures for the structural steel work for this building. About 250 tons of steel is required.

GOVERNMENT WORK & SUPPLIES

San Francisco Circular No. 68.

The following awards have been made by the depot quartermaster, San Francisco, Cal., under office circular No. 68, opened November 1:

1. Bid 1. Weeks-Howe-Emerson Co., 51 Market street, San Francisco, Cal.
2. Bowers Rubber Works, 68 Sacramento street, San Francisco, Cal.
3. Zellerbach Paper Co., Battery and Jackson streets, San Francisco, Cal.

4. West Coast Wire & Iron Works, 748 Folsom street, San Francisco, Cal.
5. Judson Mfg. Co., 819 Folsom street, San Francisco, Cal.

6. Whittier-Coburn Co., 301 Howard street, San Francisco, Cal.
7. G. M. Josselyn & Co., 58 Sacramento street, San Francisco, Cal.

8. Dunham, Carrigan & Hayden Co., 140 Kansas street, San Francisco, Cal.
9. Western Electric Co., 680 Folsom street, San Francisco, Cal.

10. Crane Co., 2nd and Brannan streets, San Francisco, Cal.
11. National Brass & Copper Tube Co., 639 Mission street, San Francisco, Cal.

12. California Steam & Plumbing Supply Co., 671 5th street, New York City.
13. International Harvester Co., Menadnock Building, San Francisco, Cal.

14. York-California Construction Co., 832 Folsom street, San Francisco, Cal.
15. Keystone Bros., 120 2nd street, San Francisco, Cal.

16. Morgan & Allen Co., 150 Post street, San Francisco, Cal.
17. Henry Disston & Sons Co., 158 1st street, San Francisco, Cal.

18. Coffin-Redding Co., 301 Mission street, San Francisco, Cal.
19. W. P. Fuller & Co., 201 Mission street, San Francisco, Cal.

20. Marshall-Newell Supply Co., 142 Stuart street, San Francisco, Cal.
21. W. E. Mueshet & Co., 410 Mission street, San Francisco, Cal.

22. The Heyman Weil Co., 720 Mission street, San Francisco, Cal.
23. Baker & Hamilton, 1th and Brannan streets, San Francisco, Cal.

24. Berger Mfg. Co., 1120 Mission street, San Francisco, Cal.
25. Selby Smelting & Lead Co., Merchants' Exchange Building, San Francisco, Cal.

26. Hohbrook, Merrill & Stetson, 6th and Bloxum streets, San Francisco, Cal.

27. Plant Rubber & Supply Co., 32 Beale street, San Francisco, Cal.
28. Pacific States Electric Co., 575 Mission street, San Francisco, Cal.

29. Wagner Bros., 419 Jackson street, San Francisco, Cal.
30. Sun Tent & Awning Co., 54 Washington street, San Francisco, Cal.

31. C. P. Weber & Co., 365 Market street, San Francisco, Cal.
32. John Clark Saddlery Co., Portland, Ore.

33. The Garlock Packing Co., 670 Howard street, San Francisco, Cal.
34. Yates & Co., 762 Folsom street, San Francisco, Cal.

35. U. S. Rubber Co., of California, 50 Fremont street, San Francisco, Cal.
36. The George Lawrence Co., Portland, Ore.

37. S. H. Frank & Co., 416 Battery street, San Francisco, Cal.
38. Koening & Zancati, 1270 7th avenue, San Francisco, Cal.

39. H. W. Johns-Manville Co., 2nd and Howard streets, San Francisco, Cal.
40. The Holland Mfg. Co., 685 Broadway, New York City.

41. Mangrum & Otter Co., 561 Mission street, San Francisco, Cal.
42. American Rubber Mfg. Co., 410 Mission street, San Francisco, Cal.

43. Johnson & Joseph Co., 34 Sacramento street, San Francisco, Cal.
44. C. A. Wood Preserving Co., Rialto Building, San Francisco, Cal.

45. The Sherwin-Williams Co., 454 2nd street, San Francisco, Cal.
46. The Howe Scale Co., 143 Main street, San Francisco, Cal.

47. M. Seller & Co., Seattle, Wash.
48. Universal Trading Co., 171 Broadway, New York City.

49. Item 2, 2 boilers, for 8-in standard drive pipe—\$21.97 ea, bid 82.
50. 3 do, for 10-in pipe, \$50.97 ea, do.

51. 2 do, for 8-in pipe, \$34.39 ea, do.
52. 5 288 balls, float, rubber, 12½ ea, bid 56.

53. 12 bends, return, ammonia, 1.54 ea, bid 14.
54. 7 24 bits, stock drill, 6c ea, bid 37.

55. 8 12 do, twist drill, 12c ea, bid 12.
56. 50 brackets, cross arm, \$1.52 per 100, bid 13.

57. 1 200 do, oak, \$1.60 per 100, do.
58. 11 50 lbs brass, sheet, 1-32 in, 29c lb, bid 16.

59. 15 lbs do, 1-16 in, 29c lb, do.
60. 12 bulbs, gasoline furnace, \$3 doz, bid 41.

61. 4 300 yds canvas, white, 36-in, 51-87c yd, bid 46.
62. 15, 1500 yds do, 22-in, 28.79c yd, bid 82.

63. 15, 500 yds do, 72-in, \$1.045 yd, bid 46.
64. 17 500 yds do, 24-in, \$29.48c yd, bid 82.

65. 18, 500 yds do, 26-in, 31.4c yd, bid 46.
66. 19 250 yds do, 36-in, 13c yd, do.

67. 20, 300 yds do, 60-in, 62.85c yd, do.
68. 21, 300 yds do, 36-in, 28c yd, do.

69. 22, 300 yds do, 44-in, 24½c yd, do.
70. 23 36 sets casters, furniture, round plate, 24c set, bid 12.

71. 24 36 sets do, oblong plate, 24c set, do.
72. 25 30 cans cement, Doh-Magic, 12c can, bid 37.

73. 26 50 tubes cement, rubber, 2c tube, do.
74. 27 2 irons, caulking, 35c ea, bid 41.

75. 28 2 clamps, wire, Havens, \$1.90 ea, bid 13.
76. 29 12 do, saw filing, 60c ea, bid 37.

77. 30 4 clocks, office, 6-in, \$1.80 ea, bid 37.
78. 31 4 do, 8-in, \$3.65 ea, bid 22.

79. 32 2 counters; thread, \$1.75 ea, bid 22.
80. 55 50 lbs cyanide of potash, 95c lb, bid 26.

81. 36 3 sets dies, pipe, for No. 1 stock, \$1.42 set, bid 12.
82. 37 3 do, for No. 2 stock, \$1.65 set, do.

83. 38 3 do, for No. 3½ stock, \$1.90 set, do.
84. 39 3 do, for No. 4 stock, \$2.30 set, do.

85. 40 30 dippers, enamel, 1-qt, 22c ea, bid 41.
86. 41 1½ do, 2-qt, 27c ea, do.

87. 42 100 gals dryer, turpentine, \$1.24 gal, bid 54.
88. 43 6 elbows, ammonia, 2-in, \$3.74 ea, bid 20.

89. 44 1rs gloves, rubber, size 9, \$1.75 pr, bid 56.

47. 2 hrs do, size 9½, \$1.75 pr, do.
48. 25 bs gum, splicing, 40c lb, bid 12.

49. 5,000 heads, nail, leather, 75c lot, bid 13.
50. 12 hooks, plate, galvanized, 25c ea, bid 1.

51. 1,000 ft hose, rubber, water, 19.9c ft, bid 1.
52. 204 ft do, suction, ¾-in, 97c ft, do.

53. 96 ft do, 4-in, \$1.05 ft, do.
54. 1 indicator, speed, 85c, bid 37.

55. 800 lbs iron, flat, ¾x1 in, \$6.60 cwt, bid 9.
56. 275 lbs do, ¾x1½ in, \$6.60 cwt, do.

57. 10,000 lbs do, sheet, \$4.09 cwt, bid 38.
58. 3,000 lbs lead, sheet, 7.1c lb, bid 39.

59. 5,000 lbs do, pig, 5.55c lb, bid 41.
60. 100 lbs leather, rigging, 60c lb, bid 61.

61. 3,000 links, repair, ¼x¾ in, 50c per 100, bid 12.
62. 1,000 lbs do, ¼x1¼ in, 50c per 100, do.

63. 1,000 do, 5-16x1½ in, 94c per 100, do.
64. 500 do, ¾x2 in, \$1.55 per 100, do.

65. 12 locks, drawer, 85c ea, bid 37.
66. 10 lbs nuts, finished, 60c lb, bid 72.

67. 7,000 lbs oakum, plumbers, 3.7c lb, bid 14.
68. 2 do, carlocks, brass, heavy, 37½c ea, bid 30.

69. 10 gals oil, banana, \$1.85 gal, bid 45.
70. 100 lbs packing, asbestos, 45c lb, bid 57.

71. 750 lbs do, rubber, 1-16 in, 60c lb, bid 51.
72. 150 lbs do, ¼-in, 60c lb, do.

73. 200 lbs do, sheet, wire insertion, 50c lb, do.
74. 300 lbs do, ¼-in, 50c lb, do.

75. 60 lbs paint, gold bronze, 68c lb, bid 29.
76. 15,000 lbs paint, white lead, in oil in 25-lb containers, 6.4c lb, bid 50.

77. 15,000 lbs do, in 50-lb containers, 6.4c lb, do.
78. 30,000 lbs do, in 100-lb containers, 6.15c lb, do.

79. 36 pans, stew, 5-qt, 40c ea, bid 41.
80. 60 do, 6-qt, 45c ea, do.

81. 2 sockets, Stillson wrench, 18-in, 12c ea, bid 14.
82. 2 do, 24-in, 18c ea, do.

83. 2 do, 36-in, 29c ea, do.
84. 144 picks, ice, 9-in, 7½c ea, bid 41.

85. 720 pipe, cotter, 1-16x1 in, 45c M, bid 37.
86. 720 do, 1-16x1½ in, 55c M, do.

87. 720 do, 1-16x2½ in, \$1.10 M, bid 12.
88. 720 do, 1-16x3 in, \$1.35 M, do.

89. 720 do, ¼x3 in, \$2 M, do.
90. 24 pots, coffee, enamel, 54c ea, bid 41.

91. 93, 200 preservers, life, belt, 84c ea, bid 11.
92. 3 pumps, sand, for 6-in pipe, \$21.90 ea, bid 82.

93. 100 3 do, for 8-in pipe, \$27.40, do.
94. 1,000 lbs resin, best quality, 3c lb, bid 10.

95. 123 rings, syphon, 45c doz, bid 41.
96. 2 scales, counter, with scoop, \$11.40 ea, bid 80.

97. 6 prs sights, wood level, 45c ea, bid 37.
98. 432 snaps, harness, \$9.50 gr, bid 49.

99. 6,000 lbs spikes, railroad, \$2.50 cwt, bid 12.
100. 250 stocks, whip, 4-line, 18½c ea, bid 2.

101. 2 lbs tape, asbestos, 60c lb, bid 31.
102. 520 gals tar, coal, 11¼c gal, bid 10.

103. 12 ester, thread, \$7.50, bid 63.
104. 12 thermometers, household, 40c ea, bid 37.

105. 114 spools thread, linen, back, 99c doz spools, bid 82.
106. 144 spools do, white, \$1.14 doz spools, do.

107. 24 tiles for fine boiler, style L, 63c ea, bid 31.
108. 198 do, style T, 47c ea, bid 31.

109. 198 do, style T, 47c ea, bid 31.
110. 24 do, style TX, 49c ea, do.

111. 48 traps, mouse, 1c ea, bid 81.
112. 168 do, rat, 5c ea, do.

113. 160 tubes, boiler, steel, 35.59c ft, bid 14.

Wednesday, Dec. 8, 1915.

128. 60 tubs, wash, heavy, 58c ea, bid 12.
 129. 15 valves, blow-off, 1-in., \$2.35 ea, bid 12.
 130. 6 do, gate, 6-in., \$8.23 ea, bid 17.
 132. to 137. 60 gr washerslock 14-in, 24c gr; 5-16 in, 20c; 3/4-in, 22c; 7-16 in, 36c; 1/2-in, 47c; 3/8-in, 75c, bid 37.
 141. 50 lbs waste, wool, 7 1/4 lb, do.
 112. 300 lbs wax, floor, 2 1/2 lb, bid 12.
 146 to 151. 6 wrenches, engineers, double end, 1/2-in, 15c ea; 3/4-in, 18c, 4c-in, 27c; 5/8-in, 4c; 3/4-in, 76c; 1-in, \$1, bid 12.
 152. 32 wrenches, engineers, single end, 1/2-in, 19 1/2c ea, bid 12.
 153. 24 do, 3/4-in, 29 1/2c ea, do.
 151. 21 do, 1/2-in, 55c ea, do.
 155. 6 do, 1-in, 75c ea, do.
 156. 16 machines, mowing, Deering, \$16.55 ea, bid 19.
 157. 50 mowers, lawn, hand, 18-in, \$7.50 ea, bid 12.
 158. 44 pawns, for lawn mower, 4c ea, do.
 159 to 184. 66 parts mowing machine, No. 1-674, \$1.87 ea; No. 1-818, \$1.13 ea; No. 1-826, 15c; No. 1-903, 57c; No. 1-981, 19c; No. 1-981, 23c, bid 19.
 185 and 186. 24 lbs rivets, mowing machine, 8c lb, bid 37.
 187. 72 bolts, door, foot, 90c ea, bid 12.
 188. 144 do, cast iron, 8c ea, bid 12.
 189. 2,000 galb wood preservative, 60c gal, bid 74.
 200. 400 lbs paint, carmine lake, 28c lb, bid 29.
 216. 6 planes, Stanley, No. 100, 78c ea, bid 12.
 217. 4 saws, hand, 24 ft, \$18 ea, bid 25.
 218. 2 do, circular, rip, \$3.15 ea, do.
 220. 10 coolers, water, metal, 3-gal, \$1.55 ea, bid 41.
 221. 12 do, 4 gal, \$1.62 ea, do.
 222. 5 do, 5-gal, \$1.98 ea, do.
 223. 5 do, 8-gal, \$2.60 ea, do.
 221. 5 do, 10-gal, \$3.17 ea, do.
 225. 50 ft hose, double jacketed, 4-in, 79c ea, bid 71.
 226. 24 ft do, suction, 6-in, \$1.89 ft, do.
 227. 21 washers, spark, 31x31x7 in \$2 ea, bid 41.
 229. 10 do, 40x36x7 in, \$2.90 ea, bid 8.
 230. 1 do, 36x30x7 in, \$2.75 ea, bid 41.
 231. 20 do, 31x30x7 in, \$2.75 ea, do.
 232. 14 do, 40x30x7 in, \$3.75 ea, bid 69.
 233. 21 do, 31x32x7 in, \$2.50 ea, bid 41.
 234. 12 lights, electric flash, \$1 ea, bid 44.
 235. 1 fd, hand, lignum vitae, \$2, bid 11.
 236. 1 stool, draftsman's, \$4.50 ea, bid 18.
 237. 4 prs blinds, truck, 80c pr, bid 58.
 238. 18 burners, lantern, 10c ea, bid 36.
 243. 200 sheets cardboard, white, \$1.70 per 100 sheets, bid 6.
 244. 24 centers, neckyoke, 50c ea, bid 58.
 245. 4 gr chains, rein, 18-in, \$18.70 gr, bid 58.
 246. 4 gr do, spreader, \$16.50 gr, bid 12.
 248. 4 clamps, door, 8-ft, \$3.60 ea, bid 12.
 249 to 253. 5 dies, adjustable, 5-16 in, 72c ea; 3/4 in, 90c; 7-16 in, 90c; 1/2 in, \$1.05; 3/8 in, \$1.25, bid 12.
 255. 12 sheets felt, orange, \$2.75 sheet, bid 58.
 256. 4 fronts, brass, hand, 25c ea, bid 21.
 257. 24 globes, lantern, red, 17 1/2c ea, bid 36.
 259. 4 prs hames, dandy, \$2.50 pr, bid 58.
 260. 1 holder, bit, extension, 75c ea, bid 12.
 261. 24 hooks, bolt, plain, 15c ea, bid 21.
 262. 1 iron, hoof branding, 65c ea, bid 61.
 263. 2 plates, horse clipper, \$1.15 ea, bid 58.
 264. 1 riveter, hand, \$2.90, bid 58.
 265. 2 bars steel, mild, 1-in, 2.2c lb, bid 12.
 266. 2 bars do, 1 1/2-in, 2.2c lb, do.
 269. 260 straps, bume, 20c ea, bid 58.
 270. 21 terrets, plain, \$2 doz, bid 21.
 271. 1 vise, combination, \$1.95, bid 12.
 273. 4 washers, circular, 3/8c ea, bid 11.
 274. 100 lbs twine, sacking, 1-ply, 28.17c lb, bid 82.
 275. 100 lbs twine, 3-ply, 28.47c lb, do.

Boise, Idaho, Post Office.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for the construction of an extension, etc., to the United States post office at Boise, Idaho:

- North Pacific Construction Co., Pocatello, Idaho, \$16,125.
 T. P. Murphy & Co., Boise City, Idaho, \$22,500.
 R. E. Campbell, Salt Lake City, Utah, \$11,687.
 Steinger Bros., Portland, Ore., \$59,100.
 George A. Whitmayer & Sons, Ogden, Utah, \$19,578.
 A. S. Whiteway, Boise, Idaho, \$19,276.
 E. A. Steininger Construction Co., Victoria Bldg., St. Louis, Mo., \$51,884.
 Frank M. Weakley, Portsmouth, Va., \$15,333.
 Welsh Bros. & Hannaman, Gridley, Calif., \$41,874.

Honolulu, H. T., Painting.

The contract for painting interior woodwork, etc., in the U. S. public building at Honolulu, H. T., has been awarded to N. Stecher at \$715.

Battleships.

Secretary Daniels on November 23 took the first steps with the view to building in navy yards battleships 43 and 44, by directing that formal bids be obtained from steel makers for furnishing the Navy Department some 62,000 lbs of the plates, shapes, rivets, and castings required for the structure of these two ships. It appears from the department's figures that the lowest bid, after adding certain omissions from the department's specifications would be approximately \$8,075,000, while the limit of cost fixed by Congress is \$7,800,000.

Navy Fuel Oil Plants.

All bids received at the bureau of yards and docks, Navy Department, for fuel oil storage plants at Bremerton, Wash.; Mare Island, Cal.; San Diego, Cal., and Norfolk, Va., have been rejected. Further action in connection with the plants has been temporarily suspended.

Salem, Ore., Indian School.

The contract for the construction of an addition to the brick assembly hall at the Salem Indian School, Ore., has been awarded to Stewart & Engstrom, Salem, Ore., at \$5,950.

Chain Shafts, Etc., Grand Valley, Irrigation Project.

Contract has been awarded by authority of the Secretary of the Interior to the Lakeside Bridge & Steel Co., of North Milwaukee, Wis., for furnishing chain shafts and operating chains for the rolling crest of the Grand River diversion dam, Grand Valley Irrigation project, Colo. The contract price is approximately \$5,117; delivery f. o. b. Milwaukee.

HOSPITALS

PRESIDENT OF SAN FRANCISCO Addition to nurses' dormitory, 2 story reinforced concrete. Cost as follows: Engineer, Constructing Quartermaster, Fort Mason, Owners, United States

Government. The following firms have been found low on this work. Contracts have not as yet been awarded. Frank M. Garden Co., general construction, \$12,793, extra grading, \$120. Furham Plumbing Co., plumbing work, \$2,000; extra plumbing, \$78. Colman & Colman, electric wiring, \$580. The Turner Co., fixtures, \$218. Colman & Colman, heating, \$900. Total cost, \$17,289.

SAN BERNARDINO CO., CAL.—Hospital group, 4 story with 2, 2 story wings, reinforced concrete, \$130,000. Architect, Lyman Farwell, Story Bldg., L. A. Owners, San Bernardino County. The building will be Spanish Renaissance in design and will have concrete foundation and basement, brick exterior walls, pressed brick facing, clay tile roofs, reinforced concrete interior columns and floors, tile and metal lath partitions, elevators, steam heat, hospital plumbing. Working drawings have been completed.

HOTELS

SAN FRANCISCO—Hotel and stores, 5 story and base, brick and reinforced concrete, \$125,000. Architects, Smith & Stewart, 24 Kearny street, S. F. Owner, J. B. Reite, 110 Jessie street, S. F. Location, south Mission west of Mary. Will contain a number of stores on the first floor besides the hotel entrance and lobby. Upper floors will contain in the neighborhood of 200 rooms. Interior finish pine with some hardwood and ornamental plaster in the lobby. Steam heat, oil burning equipment, elevator service, hot water system and vacuum cleaning. Patent store fronts. Marble and tile bases. Exterior faced with cement plaster. Plans complete and sub-contracts to be let.

STOCKTON, SAN JOAQUIN CO., CAL.—Hotel, 2 story and base, brick, \$15,000. Architect, Ralph P. Morrill, Odd Fellows Bldg., Stockton. Owner, G. Sanquett. Will cover an area of 62 by 100 feet. Interior finish pine. Hot water system. Exterior faced with pressed brick. Plans being prepared.

LAKE TAHOE, PLACER CO., CAL.—Resort hotel, 1, 2 and 3 story, reinforced concrete. Cost not stated. Architect, Walter Webber, Ferguson Bldg., L. A. Owner, Anita M. Baldwin. Will contain 112 rooms, large office and lobby, dining room and 98 baths. Interior finish pine and redwood. Hardwood floors. Power and heating plant in separate building. Vacuum cleaning and hot water system. Bath rooms tile. Exterior faced with natural stone. Plans being prepared.

IRRIGATION PROJECTS

CULUSA, CULUSA CO., CAL.—Irrigation work. Cost not stated. Engineer, Charles de St. Maurice, Culusa. Owners, Cheney Slough District. The land owners in the proposed Cheney Slough District have incorporated and have selected Engineer Charles de St. Maurice to deal with the engineering features of the district. Canals, ditches, pumping plant and concrete intake are the improvements to go under way immediately. The directors elected are H. H. Mitchell, B. H. Burton, P. R. Arnold, W. H. Ash and W. E. Klewe.

SAN FERNANDO, LOS ANGELES CO., CAL.—Irrigation distributing system. Cost not stated. Engineers, Los Angeles County Water Board, L. A. Owners, Los Angeles County. The Supervisors and members of the Water Board have reached an agreement as to the policy that shall govern the laying of the distributing system in the San Fernando Valley irrigating system, for which \$2,604,000 of bonds some time ago were voted under the Shenk Act. The Supervisors will follow the usual course of advertising for bids. In case these bids come within the limits of the fund provided by the bond issue, the work will be done by Private contract. In case it is found that the work cannot be done in this way within the limit, the county will do the work itself, purchasing the necessary materials and having the labor performed by force account under the supervision of Chief Engineer Mulholland of the water department. The system will involve the laying of 300 miles of pipe.

COLUSA, COLUSA CO., CAL.—Gates and weirs, reinforced concrete. Cost not stated. Engineer's name not given. Owners, Sutter-Butte Canal Co., Colusa. The Sutter-Butte Canal Co. is putting in concrete gates and weirs to replace wooden structures that were put in originally. The work is being done in pursuance of a settled policy of the company to make all its plant of permanent construction.

Contracts Awarded

BYRON, CONTRA COSTA CO., CAL.—Intake canal. Cost as follows. Engineer's name not given. Owners, Byron-Bethany project. Contractor, S. R. Fox, Oakland. Contract price, 13½¢ per cubic yard.

LIBRARIES

BERKELEY, ALAMEDA CO., CAL.—Library steel and steel erection, \$46,232. Architect, John Galen Howard, 604 Mission street, S. F. Owners, Regents of the University of California. The Pacific Rolling Mills submitted the low figure at \$46,232 for furnishing and erecting structural steel for the new addition to the Doe Library on the University Campus. An award has not been made. A complete list of the bids submitted will be found under the heading of Oakland and Alameda County in this issue.

RAILROAD CONSTRUCTION AND EQUIPMENT

MARTINEZ, CONTRA COSTA CO., CAL.—Railroad station. 1 story and base, frame and concrete, \$12,000. Architect, Engineering Dept. of Southern Pacific Co., Flood Bldg., S. F. Owners, Southern Pacific Co. Will be designed in the Mission style. Interior finish pine with concrete and tile floor. Exterior faced with cement plaster. Plans being prepared.

MILL VALLEY, MARIN CO., CAL.—Railroad extension. Cost not stated. Engineer's name not given. Owners, Mt. Tamalpais Scenic Railroad Co. The directors of the Mt. Tamalpais Scenic Railway Company are contemplating the extension of the present railroad to the southerly and highest peak of the mountain. This extension will carry

the road to an altitude of 2,640 feet, or several hundred feet higher than the Tavern building. The erection of a hotel building will be considered at a later date, according to manager of the road Buckingham.

TACOMA, WASH.—Street railway extension. Cost not stated. Engineer, Engineering Dept. of Pacific Traction Co., Tacoma. Owners, Pacific Traction Co. The Pacific Traction Co., Geo. W. Rounds, general superintendent, proposes the construction of an extension of two miles on the Steilacoom boulevard, Starling street and Steilacoom avenue to Union and La Fayette; involving 11,347 cubic yards of excavation and 12,850 cubic yards of embankment work.

Contracts Awarded.

SAN PEDRO, LOS ANGELES CO., CAL.—Power station, 1 story and base, reinforced concrete. Cost not stated. Architect, none. Owners, American Trona Co., Pacific Electric Bldg., L. A. Contractors, F. O. Engstrom Co., 5th and Santon streets, L. A. Contract price not stated.

RESIDENCES

SAN FRANCISCO — Residence, 2 story and base, frame, \$10,000. Architect, Alfred H. Jacobs, 110 Sutter street, S. F. Owner, Dr. Martin E. Hart. Location, 14th avenue north of Balboa. Will contain nine rooms, three baths and a basement garage. Interior will be finished in pine, hardwood and white enamel. Hardwood floors throughout except baths which will be finished in tile. Furnace heat, open fire places and brick mantels. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO — Residence, 2 story and base, frame, \$4,500. Architect, Clarkson Swain, Clunkin Bldg., S. F. Owner, William A. Larkins. Location, Forest Hill. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and tile or brick mantels. Automatic water heater. Bath room tile. Exterior covered with cement plaster. Plans being prepared.

SAN FRANCISCO — Residence, 2 story and base, frame, \$1,000. Architect, none. Owner, A. Harrington, 10 Judah street, S. F. Location, west 12th avenue south of Cabrillo. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and furnace heat. Automatic water heater. Bath rooms tile. Brick or tile mantels. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. — Residence, 1½ story and base, frame, \$3,000. Architect, none. Owner, William H. Sims, 126 6th avenue, Oakland. Location, east Fairfax avenue north of Ygnacio. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel with some elm panels. Hardwood floors, open fire places and tile or brick mantels. Automatic water heater. Some tile wainscot. Exterior covered with cement plaster.

Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residences, 2, 2 story and base, frame, \$2,500 each. Architects, Sidney B. and Noble Newsom, Nevada Bank Bldg., S. F. Owner, Frank Spring. Location, Thousand Oaks Tract. Each will contain seven rooms, bath and sleeping porch. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels tile or brick. Automatic water heaters. Tile wainscot in bath rooms. Exteriors covered with cement plaster on metal lath. Plans complete and figures being taken.

OAKLAND, CAL. — Residence, 1½ story and base, frame, \$2,500. Architect, none. Owner, John A. Bischoff, 6045 Harwood avenue, Oakland. Location, south 62nd street east of Colby. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architect, W. H. Ratcliff, Jr., First National Bank Bldg., Berkeley. Owner, Mrs. Hazel S. Armstrong. Location, east Buena Vista Way, La Loma Park. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. — Residence, 1½ story and base, frame, \$2,500. Architect, none. Owner, H. S. Swalley, 710 Wacker avenue, Oakland. Location, west Arbor avenue north of Hudson. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel with some elm panels. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Robert Trimlett, 4203 Agua Vista street, Oakland. Location, northwest corner of Brookdale avenue and Short street. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Tile wainscot in bath room. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, O. M. Bullock, 1420 Broadway, Piedmont. Location, south Howard street. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, O. M. Bullock, 1429 Broadway, Oakland. Location, south Magnolia avenue west of El Cerrito. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel with some elm panels. Hardwood floors, open fire place and tile or brick mantel. Automatic water heater. Tile in bath room. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, Justus Norris, 2828 Richmond avenue, Oakland. Location, southwest corner of Arlington avenue and Los Angeles street. Will contain six rooms, bath and sleeping porch. Interior finish pine, elm and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Fraternity house, 3 story and base, frame, \$19,000. Architect, Norman Shaw, associated with W. C. Hays, First National Bank Bldg., S. F. Owners, Delta Deuteron Fraternity. Location, corner of College avenue and Durant Way. Will contain a large number of living rooms, social rooms, baths and banquet hall. Interior finish pine and hardwood. Central heating system, hot water supply and open fire places. Mantels tile or brick. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and in the hands of J. M. Wiley who will sublet all contracts.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, E. L. Ford, Sacramento. Location, 7th avenue. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

STOCKTON, SAN JOAQUIN CO., CAL.—Residence, 1 story and base, frame, \$3,000. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owner, Pierce J. Morrell. Location, North California street. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile or brick. Automatic water heater. Exterior covered with rustic. Plans being prepared.

DANVILLE, CONTRA COSTA CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architects, Sidney B. and Noble Newsom, Nevada Bank Bldg., S. F. Owner, R. Buckman, Danville. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$3,-

200. Architect, none. Owner, Fred Jones, Fresno. Location, Ventura Vista Addition. Will contain eight rooms, bath and sleeping porch. Interior finished in pine, hardwood and white enamel. Hardwood floors, central heating system and open fire places. Mantels, tile or brick. Bath rooms tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,500. Architects, Koenig & Christensen, Humboldt Bank Bldg., S. F. Owner, Ernest Erickson. Location, south Caselli west of Douglas. Will contain seven rooms, bath and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and furnace heat. Mantels tile or brick. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, Paul E. Woodburn, 3965 Greenwood avenue, Oakland. Location, east Broadway south of Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels tile or brick. Tile bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, C. J. Pfarr, 5487 Claremont avenue, Berkeley. Location, south Delano west of California. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SCHOOLS

SAN FRANCISCO—School, 2 story and base, brick and steel. Cost as follows. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, City and County of San Francisco. Bids were opened by the Board of Public Works for the construction of the new Redding School. No awards have been made. A complete list of the figures presented will be found under the heading of San Francisco in this issue.

SAN JOSE, SANTA CLARA CO., CAL.—Class room addition, 1 story, frame and plaster. Cost not stated. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be opened on December 31st for the construction of a frame and plaster addition to the San Jose State Normal School. The addition will consist of a combination class room and domestic science building. Construction will be temporary. An official proposal appears in another column of this issue.

OAKLAND, CAL.—Yard toilet, frame. Cost not stated. Architect, State Architect George B. McDougall, Sacramento.

E. R. Hoerchner

Attorney-at-Law

Phone Garfield 2856

Phelan Bldg.

San Francisco

Owners, State of California. Bids will be received up to December 25th for constructing a yard toilet at the Industrial Home for Adult Blind at Oakland. Plans can be secured from the State Department of Engineering. An official proposal appears in another column of this issue.

BAKERSFIELD, KERN CO., CAL.—Schools, 2, 1 story, frame, \$2,000 and \$1,700. Architect, J. M. Saffell, Bakersfield. Owners, Rosamond and Muroc School Districts. Both buildings have been designed for district schools and will contain but one class room. Interior finish pine. Exterior rustic, shingles or cement plaster. Plans complete and figures being taken.

KINGSBURG, FRESNO CO., CAL.—School, 1 story and base, frame and concrete. Cost not stated. Architect, Anton Johnson, Kingsburg. Owners, Kingsburg High School District. Bids will be received by the Board of School Trustees up to and including December 11th at 2 p. m. for the construction of the new building. Interior will be finished in pine with maple floors in the class rooms. A central heating system will be installed. Exterior of the building will be faced with cement plaster. Plans can be secured from either the architect or from the Clerk of the Board of Education.

FRESNO, FRESNO CO., CAL.—School, 1 story and base, frame, \$15,000. Architect, Fred Schwartz, Rowell Bldg., Fresno. Owners, North Fresno School District. Will be erected near the State Normal School grounds and will contain, besides the usual class rooms, a teachers' cottage and department for domestic science. Exterior will be covered with cement plaster. Plans are now being prepared.

PASO ROBLES, SAN LUIS OBISPO CO., CAL.—School, 1 story and base, brick and concrete. Cost not stated. Architect, W. H. Weeks, 75 Post street, S. F. Owners, Paso Robles School District. The building will contain 6 class rooms and an assembly hall. Interior finish will be of pine with maple floors in the class rooms. Central heating system, oil burning furnace. Exterior faced with cement plaster or pressed brick. Plans are nearly complete.

SEATTLE, WASH.—University building, 2 or 3 story and base. Class A construction, \$150,000. Architects, Charles Lebb and Carl Gould, Denny Bldg., Seattle. Owners, University of Washington. Plans are now being prepared for the first of several new buildings to be erected on the University Campus. Details of the construction have not been given out as the plans are only in the

preliminary stage. Further mention will be made of the work.

BELLINGHAM, WASH.—School, 2 story and base. Class A construction, \$100,000. Architects, Heath & Gove, National Realty Bldg., Tacoma. Owners, City of Bellingham. Will contain a large number of class rooms, assembly hall and auditorium besides science laboratories and office. Construction fire proof throughout. Interior finish pine with maple and tile floors. Steam heat, oil burning system, modern plumbing and vacuum cleaning system. Program clocks. Exterior faced with pressed brick and stone. Plans complete and figures to be taken on approval by Architect T. F. Doan of Bellingham.

RED BLUFF, TEHAMA CO., CAL.—School, 2 story and base, brick and concrete, \$900,000. Architect, W. H. Weeks, 75 Post street, S. F. Owners, Red Bluff Union High School District. Will contain 16 class rooms, assembly hall, offices, teachers' rooms and science laboratories. Interior finish pine with maple floors. Steam heat, oil burning furnace, vacuum cleaning and program clocks. Exterior faced with cement plaster or pressed brick. Plans being prepared.

LOS ANGELES, CAL.—School, 1 story and base, brick, \$20,000. Architect, W. C. Pennell, Baker-Detwiler Bldg., L. A. owners, City of Los Angeles. Location, West Vernon avenue and Olive, covering an area of 68 by 80 feet. Will contain six class rooms. Interior finish pine with maple floors. Central heating system. Exterior faced with pressed brick. Plans complete and figures being taken.

Contracts Awarded

SUISUN, SOLANO CO., CAL.—School, 1 story and base, reinforced concrete, \$30,000. Architects, Edwin J. Symmes, Pacific Bldg., S. F., associated with William H. Crim, Jr., 425 Kearny street, S. F. Owners, Crystal School District. Contractors, H. L. Peterson, S. F., general construction, \$25,700; Pacific Blower and Heating Co., S. F., heating, \$3,387, and Butte Electric and Engineering Co., S. F., electric work, \$1,175. A complete list of the bids received will be found under the head of Marin, Contra Costa and Sonoma Counties in this issue.

SAN FRANCISCO—School lighting fixtures. Cost not stated. Architect, City Dept. of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Thomas Day Co., S. F. Contract price not stated.

LOS ANGELES, CAL.—School, 1 story and base, brick, \$20,000. Architects, Dennis & Hewett, Fay Bldg., L. A. Owners, City of Los Angeles. Contractors, Harber-Bradley Construction Co., 1824 East 15th street, L. A. Contract price, \$20,000.

SEWERS, STREET WORK & WATER SYSTEMS

SACRAMENTO, CAL.—Highway construction. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be opened on December 27th for work in the following counties: Placer County, Roseville to Penryn, 7.5 miles, Portland cement

concrete; Placer County, Penryn to Auburn, 6.5 miles, Portland cement concrete; Tehama County, Corning to Proberta, 10.2 miles, Portland cement concrete; Marin-Sonoma Counties, steel bascule bridge, span 148 feet, 2 concrete approach spans each about 80 feet and about 1120 feet of crosstied pile trestle. Plans can be secured from the office of the Highway Commission or its branch in the Rialto Bldg., S. F. An official proposal appears in another column of this issue.

RICHMOND, CONTRA COSTA CO., CAL.—Electroliters. Cost not stated. Engineer, City Engineer, Richmond. Owners, City of Richmond. Business men of the west side, together with the members of the Commercial Club, will ask the City Council at their next meeting that eight electroliters of the triton style be installed along Washington avenue. If the Council cannot appropriate the money for the electroliters, the petitioners will purchase and install them, providing the city furnishes the light. Further mention will be made of the work.

SAN ANSELMO, MARIN CO., CAL.—Street improvements. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Bids will be opened on December 13th for the following street improvements: Concrete gutters, 2 catch basins, 1 corrugated iron culvert 18 inches in diameter and 42 feet long, also macadamized 11 feet roadway.

SAN ANSELMO, MARIN CO., CAL.—Sewer construction. Cost not stated. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Bids will be opened on December 13th for constructin a corrugated iron storm water sewer. The following are the most important items included in the construction: 181½ feet of 27-inch pipe, 22½ feet of 30-inch pipe, 2 manholes, 26 feet of 12-inch corrugated iron culvert, 34 feet of 15-inch corrugated iron culvert, 39 feet of 15-inch corrugated iron culvert, 9 feet of 20-inch corrugated iron culvert, 9 feet of 18-inch corrugated iron culvert.

HERCULES, CONTRA COSTA CO., CAL.—Road improvement. Cost not stated. Engineer's name not given. Owners, Town of Hercules. The town trustees are preparing to macadamize the road through that town on the Richmond-Martinez road.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. At the last meeting of the City Trustees a resolution ordering work No. 23 along the state highway near Baden crossing was adopted.

SAN MATEO, SAN MATEO CO., CAL.—Street improvement. Cost not stated. Engineer, Town Engineer, San Mateo. Owners, Town of San Mateo. At the last meeting of the City Trustees, the Board adopted a resolution ordering street work on 3rd avenue between A street and El Camino Real, and the Clerk was directed to advertise for bids.

SANTA CRUZ SANTA CRUZ CO., CAL.—Street and sewer work. Cost not stated. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. At the last meeting of the City Council

the City Engineer was instructed to prepare plans and specifications for concrete sidewalks from Rigg street to Van Ness avenue, also for the construction of a sewer in Palm avenue. The sewer will be a 6-inch vitrified iron stone about 500 feet long. The matter of the Almar sewer construction was laid over.

REDWOOD CITY, SAN MATEO CO., CAL.—Highway construction. Cost not stated. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Bids will be received until December 13th for constructing 4-inch waterbound macadam pavement on a portion of Mission road beginning at a point near the entrance of Holy Cross Cemetery and extending northwesterly about 2,000 feet to connect with the state highway.

BERKELEY, ALAMEDA CO., CAL.—Paving playground. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be received until December 10th for furnishing tools, materials and labor for surfacing a play ground, approximately 42,200 square feet in area, in San Pablo Park.

SACRAMENTO, CAL.—Street improvements. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Bids will be received until December 14th at 11 a. m. for improving the following streets: Freeport road from Burnside to El Dorado avenue, Palm avenue from Palmetto avenue to Rose avenue, the alley between Y and Orange avenue, Cypress avenue from Sacramento avenue to 37th street, Cypress avenue from 37th street to the west line of the Upper Stockton road, Hollyhock avenue from the Alta Vista Addition to Washburn avenue, Burbank avenue from Leland Stanford avenue to Rose avenue.

LODI, SAN JOAQUIN CO., CAL.—Pipe. Cost not stated. Engineer, City Engineer, Lodi. Owners, City of Lodi. City Clerk H. S. Clark has been authorized to purchase 3,000 feet of 18-inch sewer pipe in the open market after the City Trustees had rejected all bids on account of the price quoted. Gladding-McBean Co., The California Pottery Co. and N. Clark & Son had offered to supply the pipe at prices ranging from 46½c to 48c per lineal foot. Private correspondence with other manufacturers before the bids were called for named a price considerable lower.

MODESTO, STANISLAUS CO., CAL.—Street and sewer work. Cost not stated. Engineer, City Engineer, Modesto. Owners, City of Modesto. At the last meeting of the City Council the City Engineer was instructed to construct a new sewer to serve certain houses in 4th and 5th streets. A resolution of attention to construct sidewalks on 5th street from I to L was passed. Two ordinances were passed regarding the paving of McFerry avenue.

REDONDO BEACH, LOS ANGELES CO., CAL.—Street work. Cost not stated. Engineer, City Engineer, Redondo Beach. Owners, City of Redondo Beach. Bids are being taken by the City Council for the improvement of Pacific avenue from Carnellian street to Broadway. Resolutions of intention have been passed providing for the im-

improvement of portions of Pacific avenue and portions of Lucia avenue between Anita and Huntington streets. TILLAMOOK, TILLAMOOK CO., ORE. —Road and bridge construction, \$319,228. Engineer, County Surveyor, Tillamook. Owners, Tillamook County. The County Commissioners have completed their 1916 budget and the largest item is that for road construction and new bridges. The total amount to be raised will be \$319,228, of which \$173,389 will be used in the road and bridge fund.

OAKLAND, CAL. —Sewers. Cost not stated. Engineer, City Engineer, Oakland. Owners, City of Oakland. Resolutions of intention to sewer the following streets have been passed by the City Council. To sewer Solano Way between 16th and 17th avenues, and Tompkins avenue from Vale avenue northwesterly. Bids on this work will soon be called.

ONTARIO, SAN BERNARDINO CO., CAL. —Street improvement. Cost not stated. Engineer, City Engineer, Ontario. Owners, City of Ontario. Bids will be opened by the City Council on the evening of January 10th, 1916, for the improvement of east State street and Euclid avenue from the Southern Pacific tracks to State street.

ONTARIO, SAN BERNARDINO CO., CAL. —Street work and electroliers. Cost not stated. Engineer, City Engineer, Ontario. Owners, City of Ontario. Improvements, including widening of the sidewalks and the installation of ornamental electroliers, have been ordered on A street between Laurel and Paul avenues.

Contracts Awarded

MARTINEZ, CONTRA COSTA CO., CAL. —Street improvement. Cost not stated. Engineer, City Engineer, Martinez. Owners, City of Martinez. Contractors, W. E. Price Construction Co., Martinez. Work will include grading and filling in the new Oak Knoll Tract.

RICHMOND, CONTRA COSTA CO., CAL. —Sewer construction, \$1,363.30. Engineer, City Engineer, City Engineer, Richmond. Owners, City of Richmond. Contractors, Galbraith & James, 156 South 11th street, Richmond. Contract price, \$1,363.30.

RICHMOND, CONTRA COSTA CO., CAL. —Street improvement, \$7,006.16. Engineer, City Engineer, Richmond. Owners, City of Richmond. Contractors, Municipal Improvement Co., 802 Macdonald avenue, Richmond. Contract price, \$7,006.16.

SAN MATEO, SAN MATEO CO., CAL. —Road pavement, \$5,126.05. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Contractors, Federal Construction Co., Sharon Bldg., S. E. Contract price, \$5,126.05.

SACRAMENTO, CAL. —Street improvement. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors as follows: Oak avenue from 5th to 7th to McGillivray Construction Co., 1067 7th street, the alley between N and O streets east of 10th and west of 11th to McGillivray Construction Co., Cypress avenue east from 35th to Sacramento avenue awarded to the Clark & Henry Construction Co., Oehner Bldg., Cypress avenue easterly from 36th to yesterday line of 35th street awarded to the Clark & Henry Construction Co.

RECLAMATION, SONOMA CO., CAL. —Highway construction, \$71,182.90. Engineer, State Highway Commission, Sacramento. Owners, State of California. Contractors, Bates, Borland & Ayer, Oakland Bank of Savings, Oakland. Contract price, \$71,182.90.

STORES AND OFFICES

SAN FRANCISCO —Stores, 1 story and base, brick, \$5,000. Architect, none. Owner, William Kyne, 241 Kearny street, S. E. Location, south Mission street, west of 6th, covering an area of 25 by 95 feet. Will contain one store. Interior finish pine. Patent store fronts, marble bases. Exterior pressed brick. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. —Sales rooms, 1 story and base, brick, \$1,000. Architect, A. W. Pattiani. Merchants' National Bank Bldg., S. E. Owner, A. S. Macdonald, Mills Bldg., S. E. Location, east Broadway north of Orchard. Will contain sales rooms for automobiles and repair shop. Interior finish pine. Cement and tile floor. Patent store fronts and marble bases. Exterior faced with pressed brick. Plans complete.

OAKLAND, CAL. —Stores and offices, 2 story and base. Class A construction, \$28,000. Architects, Richardson & Lurrell, Albany Bldg., Oakland. Owner's name withheld. Will have complete steel frame, brick exterior walls, faced with pressed brick and terra cotta. Interior finish pine and hardwood. Marble bases and wainscot. Patent store fronts. Steam heat and hot water system. Plans being prepared.

SAN FRANCISCO —Stores and lofts, 3 story and base. Class A construction, \$175,000. Architects, O'Brien Bros., 240 Montgomery street, S. E. Owners, California State Realty Co., Contractor, James H. Hjul, 210 Montgomery street, S. E. Contract price, \$175,000. Note: The contractor is now letting subcontracts on all parts of the work.

SAN FRANCISCO —Office building addition. Class A, \$150,000 to \$200,000. Architect, Benj. G. McQuigall, Sheldon Bldg., S. E. Owners, Standard Oil Co. Contractors, P. J. Walker Co., Menard Bldg., S. E. Contract has been taken on the percentage basis. Only a one-story addition was originally planned for this building.

Contracts Awarded.

CALIFORNIA, IMPERIAL CO., CAL. —Stores and offices, 2 story and base, stone, \$33,000. Architect, Ralph Swearingin, Calexico. Owners, Imperial Valley Hardware Co. Contractors, Welch &

Wright, El Centro. Contract price, \$33,000.

THEATRES

OAKLAND, CAL. —Theatre alterations, brick and steel. Cost not stated. Architects, Charles Mau and F. W. Dingwell, Macdonough Bldg., Oakland. Owners, Eva Estate. Location, west Broadway between 10th and 11th streets. Work will consist of extensive alterations to both exterior and interior, New plastering, electric work, plumbing and interior finish. Exterior cement plaster. Plans are being prepared.

BERKELEY, ALAMEDA CO., CAL. —Theatre, 2 story and base, Class C construction, \$40,000. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner, Cohn Bros. Location, Adelene street near Alcatraz. Will contain a large motion picture theatre and several stores. Interior finish pine and ornamental plaster. Metal conduit and special electric work. Patent store fronts. Marble bases. Exterior faced with pressed brick. Plans being prepared.

DEPARTMENT OF THE INTERIOR. BUREAU OF MINES.

New Publications, (List 40.—Nov., 1915.) TECHNICAL PAPERS.

Technical Paper 64.—Determination of nitrogen in coal: a comparison of various modifications of the Kjeldahl method with the Lumsay method, by Arno C. Fieldner and Carl A. Taylor, 1915. 25 pp., 5 figs.

Technical Paper 105. Pulmonary disease among miners in the Joplin district, Missouri, and its relation to rock dust in the mines: a preliminary report, by A. J. Lanza and Edwin Higgins, 1915. 49 pp., 5 pls.

Technical Paper 112. The explosibility of acetylene, by George A. Burrell and G. G. Oberfell, 1915. 15 pp.

Technical Paper 116. Miners' wash and change houses, by Joseph H. White, 1915. 27 pp., 3 pls., 3 figs.

Technical Paper 123. Notes on the uses of low-grade fuel in Europe, by R. H. Fernald, 1915. 27 pp., 4 pls., 4 figs.

NOTE.—Only a limited supply of these publications is available for free distribution, and applicants are asked to co-operate in insuring an equitable distribution by selecting publications that are of especial interest. Requests for all papers can not be granted. Publications should be ordered by number and title. Applications should be addressed to the Director of the Bureau of Mines, Washington, D. C.

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OFFICIAL PROPOSALS.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock, noon, Tuesday, December 28, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of a building to be known as "Yard Toilet," Industrial Home for Adult Blind, Oakland, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Ten (\$10.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for 'Yard Toilet,' Industrial Home for Adult Blind, Oakland, California."

(Signed) W. F. McClure,
State Engineer.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock, noon, Friday, December 24th, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of buildings to be known as "Domestic Science and Temporary Class Room Buildings," San Jose State Normal School, San Jose, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen \$15.00 Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for 'Domestic Science and Temporary Class Room Buildings,' San Jose State Normal School, San Jose, California."

(Signed) W. F. McClure,
State Engineer.

PROPOSALS FOR BUILDING.

BUILDING—Treasury Department. Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be opened at this office at 3 p. m. **December 29, 1915**, for the extension, remodeling, etc., of the United States post office and court house at Missoula, Mont. Extension is of four stories and basement, stone faced, fireproof construction and composition roof and includes the addition of a fourth story to present building. Drawings and specifications may be obtained from the custodian at Missoula, Montana, in the discretion of the supervising architect. JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR SKYLIGHT.

SKYLIGHT—Treasury Department. Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be received at this office until **10 a. m. December 27, 1915**, and then opened for enlarging drafting room and new skylight in the U. S. post office at Olympia, Wash., in accordance with drawings Nos. 76 and 77 and the specification, copies of which may be had at this office or from the custodian of the Olympia building. JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR ELEVATOR.

ELEVATOR—Treasury Department. Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be opened in this office at 3 p. m. **December 23, 1915**, for the installation, complete, of an electric passenger elevator in each of the following buildings: The United States post office and court house at Pendleton, Ore.; the United States post office and court house at Brattleboro, Vt., and the United States post office and court house at Ardmore, Okla., in accordance with the drawings and specification, copies of which may be had at this office, in the discretion of the supervising architect. JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 992—Proposals for Motor-Driven Centrifugal Pumps, Cast Iron Bollards, Pinions, Steel Cable, Cold Shuts, Aluminum Pig, Stocks and Dies, Reamers, Twist Drills, Wrenches, Raps, Whistle Valves, Steam Whistles, Brass Hubs, Potato Mashers, Red Rubber Packing, Alcohol, Muratic Acid, Litharge, Japan Red, Lard Oil, Fish Oil, Turbine, Time, Red Lead, White Lead, Orange Shellac, Varnish and Paints.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. December 13, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 992) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Angeles, Cal.; F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.**

GOV WORK

INVITATION FOR PROPOSALS.

TREASURY DEPARTMENT. Supervising Architect's office, Washington, D. C.—November 22, 1915—**SEALED PROPOSALS** will be received at this office until **10 A. M. December 27, 1915**,

and then opened for enlarging Drafting Room, and new skylight in the U. S. Post Office at Olympia, Washington, in accordance with drawings Nos. 76 and 77, and the specifications, copies of which may be had at this office or from the Custodian of the Olympia building. JAS. A. WETMORE, Acting Supervising Architect. (*)

SEALED PROPOSALS.

BIDS WILL BE RECEIVED BY THE City Commission in the Council Chamber, City Hall Building, on I street, between Ninth and Tenth streets, in the City of Sacramento, between the hours of **ten o'clock a. m. and eleven o'clock a. m. on Thursday, December 9th, 1915**, for furnishing all labor and materials for the general construction complete (excepting the nail work), of a Hall of Justice Building for the City of Sacramento, State of California, said building to be erected on portions of Lots Numbers One and Two in the block bounded by Sixth and Seventh and H and I streets in said City, in accordance with plans and specifications prepared by Shea & Lofquist, Architects, said plans and specifications having been heretofore adopted by the City Commission of said City, and said plans and specifications now being on file in the office of the City Clerk of said City, and open to the inspection of the public at all times during office hours, and copies thereof may be obtained by prospecting bidders upon receipt of check on responsible bank made payable to City Clerk in the sum of Fifteen (\$15.00) Dollars, or deposit of cash in said sum, said check or cash deposit to be forwarded to bidder upon return of plans and specifications in good condition.

At the same time, on the same date, and in said Council Chamber, bids will also be received for the furnishing and erection complete of all jail cells and corridor work, concrete floors of same, etc., for said Hall of Justice Building, in accordance with plans and specifications prepared by Shea & Lofquist, Architects, subject to the same conditions as above stipulated for general construction of said building, including deposit for plans and specifications. All work to be performed must be to the satisfaction of said City Commission of said City.

All such proposals must comply with the requirements of the New Charter of the City of Sacramento effective July 1st, 1912, and bidders are hereby cautioned that no bid which fails to comply therewith can be considered.

Bids must be submitted upon printed forms prepared by the City, copies of which may be obtained from the City Clerk. Instructions, will be supplied free upon application to the undersigned, upon receipt of information from bidder whether form required would be personal bid, co-partnership bid, or corporation bid.

The successful bidder must give bond to the City of Sacramento conditioned for the faithful performance of the contract, and containing the stipulations prescribed in Section 160 of the said New Charter and Ordinance No. 186, Third Series of the City of Sacramento.

A certified check on a responsible bank, made payable to City Clerk for an amount not less than ten (10) per cent of the aggregate of the proposal must accompany each bid.

The right to reject any and all bids is reserved to the City by the provisions of said Charter.

M. J. DESMOND,
City Clerk of the City of Sacramento,
County of Sacramento, State of California.

Office City Hall Building, Sacramento, California.

PROPOSALS FOR RAILROAD.

MARINE RAILWAY—Sealed proposals, indorsed "Proposals for Marine Railway" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. December 18, 1915, and then there publicly opened, for constructing a marine railway at the naval station, Pearl Harbor, Hawaii. Proposals are invited on separate component parts of the complete railway. Plans and specifications may be obtained on application to the bureau or to the commandant of the naval station named. The original date of opening was September 18, 1915, which was postponed to November 27, 1915. H. R. STANFORD, chief of bureau.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, Noon, Monday, December 27, 1915, said bids then to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction of paved roads, walks, combined walks, and roads and for drains in the State Normal School grounds, Los Angeles, California, in accordance with the plans and specifications thereof, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

Bids of five (\$5.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Paved Roads, Walks, etc., State Normal School Grounds, Los Angeles, California."

(SIGNED) W. F. MCCLURE,
State Engineer. (*)

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Five Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. January 4, 1916, and then there publicly opened, for a power house and an operating building of reinforced concrete and steel construction and three quarters of wood construction for commanding officer, married operators and bachelor operators at the naval station, Cavite, P. I. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. Proposals will also be received at the naval station, Cavite, P. I., until 4:30 o'clock p. m. January 4, 1916, and opened at 10 o'clock a. m. January 5, 1916. H. R. STANFORD, chief of bureau.

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals indorsed "Proposals for Five Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m. January 4, 1916, and then there publicly opened, for a power house and an operating building of reinforced concrete and steel construction and three quarters of wood construction for commanding officer, married operators and bachelor operators at the naval station, Cavite, P. I. Plans and specifications can be obtained on application to the

bureau or to the commandant of the naval station named. Proposals will also be received at the naval station, Cavite, P. I., until 4:30 o'clock p. m. January 4, 1916, and opened at 10 o'clock a. m. January 5, 1916. H. R. STANFORD, chief of bureau.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 515 Forum Building, Sacramento, Cal., until 2 o'clock P. M. on December 27, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefore, to which special reference is made, portion of State highway as follows:

Placer County, from Roseville to Penryn (111-Pla-17-A), about 7.5 miles in length, to be paved with Portland cement concrete.

Placer County, from Penryn to Auburn (111-Pla-17-B), about 6.5 miles in length, to be paved with Portland cement concrete.

Tehama County, from Corning to Proberta (11-Teh-7-A and 3-B), about 16.2 miles in length, to be paved with Portland cement concrete.

Sonoma and Marin Counties, across Petaluma Creek at Green Point (IV-Son-Mrn-8-A), a bridge comprising a steel bascule span 148 feet long, two concrete and steel approach spans each about 80 feet long, and about 1122 feet of cross-tied pile trestle.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the offices of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated.

The Division Engineers' offices are located at Willits, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions in bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STEEN,
California Highway Commission.
ALSTIN B. FLETCHER,
Highway Engineer.
WILSON R. ELLIS,
Secretary. (*)

Dated: Nov. 23, 1915.

SANITARY EQUIPMENT FOR HONGKONG HOMES.

[Vice Consul A. E. Carelton, Hongkong, British China, Oct. 4.]

In general there is an increasing demand in Hongkong for better equipped bathrooms, and recently inquiries have been made at the Hongkong consulate general for catalogues describing American ranges with hot-water attachments, a better arrangement for heating the water for the bath being the chief requirement.

A modern bathroom is rather the exception than otherwise, and it is generally only in the newer dwellings, particularly those constructed in the apartment-house style, where reasonably equipped bathtubs have been installed. These Chinese have made no attempt to put in up-to-date equipments, with the exception of a few homes owned by Chinese with Western

George Nelson, C. E.

Engineering 560 Mission St.
Financing San Francisco, Cal.
Developments 503 Grant Bldg.
Construction Los Angeles, Cal.

Chester B. Loomis, M. E.

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Los Angeles, California

training, and if the idea should obtain that a modern bathroom is a necessity there would be an immense trade here.

Shanghai Tub Losing Popularity.

The "Shanghai tub" is losing its popularity to a certain extent; it is unsanitary in some ways, as, for instance, the outlet for the water has no outside pipe connection, and the water or some portion thereof is likely to remain on the bathroom floor. But, as before indicated, the chief necessity is the provision of facilities for heating the bath water, whether the Shanghai tub remains or a modern outfit complete is installed. In many houses there is a makeshift shower bath, but without the needle shower and other attachments, and few of these have connections with the bath-heating apparatus.

At present in Hongkong there would be no demand for closets with flush fixtures, as the dry-closet system is still in vogue, and this will not be changed until the sewerage system has been extended and there is sufficient water for flushing purposes. The Government is building another reservoir which will give plenty of water even in the driest season. In connection with the bathroom an enameled lavatory with hot and cold water connections is likewise needed.

SANTA FE GRAVEL COMPANY INCORPORATES.

SACRAMENTO, CAL.—The Santa Fe Gravel Company of Fresno is permitted by the State Corporation Department to issue 1000 shares each to Louis Manuel, W. J. Whitney and Geo. Andrews as administrator of the estate of the late H. D. Carver, the corporation taking over the business heretofore conducted by them as a co-partnership.

ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

RESIDENCE—2 story and base, frame, \$10,000. San Francisco. Architect, Alfred H. Jacobs, 110 Sutter street, S. F. Owner, Dr. Martin E. Hart. Location, 14th avenue north of Balboa. Will contain nine rooms, three baths and basement garage. Interior will be finished in pine, hardwood and white enamel. Hardwood floors throughout except baths, which will be finished in tile. Furnace heat, open fire places and brick mantels. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

RESIDENCE—2 story and base, frame, \$4,500. San Francisco. Architect, Clarkson Swain, Clunie Bldg., S. F. Owner, William A. Larkins. Location, Forest Hill. Will contain eight rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and tile or brick mantels. Automatic water heater. Bath room tile. Exterior covered with cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$4,000. San Francisco. Architect, none. Owner, A. Harrington, 10 Judah street, S. F. Location, west 12th avenue south of Cabrillo. Will contain seven rooms, bath and sleeping porch. Interior finished in pine, hardwood and white enamel. Hardwood floors, open fire places and furnace heat. Automatic water heater. Bath rooms tile. Brick or tile mantels. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE AND STORES—4 story and base, brick and steel, \$40,000. San Francisco. Architect, Joseph Cahen, 45 Kearny street, S. F. Owner, E. J. Greenhood. Location, northwest Bush and Powell streets, covering an area of 57½ by 70 feet. Will contain several stores on the first floor beside the lobby and entrance. Upper floors arranged for 31 suites of two and three rooms. Wall beds and private baths. Interior finish pine and hardwood with some hardwood floors. Steam heat, automatic elevator and hot water supply. Patent store fronts. Exterior faced with pressed brick and cement plaster. Plans complete and ready for figures.

APARTMENT HOUSE—3 story and base, frame, \$15,000. San Francisco. Architect, Benj. G. McDougall, Sheldon Bldg., S. F. Owner, Arthur Arlett, Call Bldg. Location, east Powell north of Washington, covering an area of 19½ by 48 feet. Will contain six apartments of three rooms each with wall beds and private baths. Interior finished in pine and elm panels with some hardwood floors. Central heating system and hot water supply. Bath rooms finished in tile. Exterior faced with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—4 story and base, Class C construction, \$21,000. San Francisco. Architect, J. P. Dunn, Monadnock Bldg., S. F. Owner, W. F. Humphrey Investment Co. Location, north Pine east of Leavenworth. Will contain a total of twelve suites of three and four rooms. Interior finish pine and hardwood with some hardwood floors. All apartments will have wall beds and private baths. Plans provide for steam heat, automatic elevator and hot water supply. Bath rooms tile. Exterior covered with cement plaster and pressed brick. Plans being prepared.

APARTMENT HOUSE—3 story and base, frame, \$17,000. San Francisco. Architect, Joseph M. Geary, 2581 Post street, S. F. Owner, J. H. Kruse, 23rd and Polson streets. Location, southwest corner of 23rd and Howard streets, covering an area of 43 feet 10 inches by 75 feet. Will contain twelve suites of three and four rooms. Interior finish pine and elm panels. Some hardwood floors. Wall beds and private baths. Steam heat and a hot water system. Exterior covered with cement plaster on metal lath. Plans complete, and work to be done by Day Labor.

APARTMENT HOUSE—7 story and base, steel and brick. Cost not stated. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owner's name not given. Location, northwest Pine and Stockton, covering an area of 50 by 67½ feet. Will contain a large number of two and three room apartments with all modern conveniences. Complete steel frame. Interior finish pine and hardwood with hardwood floors. Steam heat, oil burning furnace, automatic elevator and hot water system. Bath rooms tile. Vacuum cleaning. Wall beds. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared and contracts to be let by January 1st.

APARTMENT HOUSE—3 story and base, Class C construction, \$30,000. San Francisco. Architect, W. G. Hind, 46 Kearny street, S. F. Owner, Clyde S. Payne. The following contracts in addition to those previously mentioned have been awarded: Iron work, C. J. Hillard Co., 19th and Minnesota; plumbing, Jas. H. Pinkerton, 2266 Fulton; heating, Atlas Heating and Ventilating Co., 4th and Freelon; metal work and flues, Bartholme & Hartmann; electric work, Brouillet Electric Co., 492 Castro; plastering, J. Marconi, 737 Greenwich; painting, A. Huck, 59 Capp street; hardware, Bennett Bros., 514 Market street; roofing, Thomas H. Price Co., Monadnock Bldg.; lumber, S. F. Lumber Co., foot of Mason street; millwork, Builders Supply Depot, 42 8th street. Bids are still being taken for the marble and tile work, glass, lighting fixtures and shades.

RESIDENCE—2 story and base, frame, \$3,500. San Francisco. Archi-

tect, Koenig & Christensen, Humboldt Bank Bldg., S. F. Owner, Ernest Erickson. Location, south Casell west of Douglas. Will contain seven rooms, bath and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors, open fire places and furnace heat. Mantels tile or brick. Tile bath room. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FACTORY ALTERATIONS—\$2,500. San Francisco. Architect, none. Owners, Rosenberg Bros., 269 Brannan street. Work will consist of cutting a number of openings in the present brick walls and installing fire escapes. Plans are complete and work will be done by Day Labor.

FLATS—3 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, Mrs. Lillie Cook, 635 Minna street, S. F. Location, south Minna west of 9th street. Will contain three flats of four and five rooms. Interior finish pine. Open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic and ship-lap.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, John V. Stiefel, 184 23rd avenue, S. F. Location, south Lake west of 15th avenue, covering an area of 25 by 65 feet. Will contain two flats of five and six rooms. Interior finish pine and elm panels. Hardwood floors. Open fire places and tile mantels. Bath rooms tile. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, A. M. Sylvia, 371 30th avenue, S. F. Location, west 19th avenue south of California, covering an area of 25 by 40 feet. Will contain two flats of five and six rooms. Interior finish pine and elm panels. Hardwood floors, open fire places and tile mantels. Bath rooms tile wainscot. Automatic water heaters. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

FLATS—2, 2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, L. B. Ham, 1643 Lake street, S. F. Location, east 10th avenue north of California. Each building will contain two modern flats of five and six rooms. Interior finish will be of pine, elm and white enamel. Hardwood floors will be used. Open fire places and tile or brick mantels. Bath rooms tile wainscot. Automatic water heaters. Marble and tile entrance. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

ATHLETIC CLUB—4 story and base, brick and steel. Cost not stated. San

Francisco. Architects, Bliss & Paville, Balboa Bldg., S. F. Owners, Women's Athletic Association. Location, north sutter between Mason and Taylor. Revised plans are now out for figures for the structural steel work for this building. About 250 tons of steel is required.

HOTEL AND STORES—5 story and base, brick and reinforced concrete, \$125,000. San Francisco. Architects, Smith & Stewart, 214 Kearny street, S. F. Owner, J. B. Reite, 110 Jessie street, S. F. Location, south Mission west of Mary. Will contain a number of stores on the first floor besides the hotel entrance and lobby. Upper floors will contain in the neighborhood of 200 rooms. Interior finish pine with some hardwood and ornamental plaster in the lobby. Steam heat, oil burning equipment, elevator service, hot water system and vacuum cleaning. Patent store fronts. Marble and tile bases. Exterior faced with cement plaster. Plans complete and subcontracts to be let.

ADDITION TO NURSES' DORMITORY—2 story, reinforced concrete. Cost as follows. Engineer, Constructing Quartermaster, Fort Mason. Owners, United States Government. The following firms have been found low on this work. Contracts have not as yet been awarded: Frank M. Garden & Co., general construction, \$12,793. Extra grading, \$120. Burnham Plumbing Co., plumbing work, \$2,600. Extra plumbing, \$78. Collman & Collman, electric wiring, \$580. The Turner Co., fixtures, \$218. Collman & Collman, heating, \$900. Total cost, \$17,289.

SCHOOL—2 story and base, brick and steel. Cost as follows. San Francisco. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, City and County of San Francisco. Bids were opened by the Board of Public Works for the construction of the new Redding School. No awards have been made. A complete list of the figures presented will be found under the heading of San Francisco in this issue.

CITY HALL DRAPERIES—Cost not stated. San Francisco. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owners, City and County of San Francisco. Bids will be opened on December 15th by the Board of Public Works for furnishing the draperies for the mayor's office and council chambers.

WAREHOUSE—2 story and base, reinforced concrete. Cost not stated. San Francisco. Architect, Charles Paff, Merchants' Exchange Bldg., S. F. Owners, American Marine Paint Co. Location, Brannan and Ellery streets. This project, which was temporarily abandoned, has been revived and working drawings are now being prepared. Exterior will be faced with cement plaster. Construction will be fireproof.

STORES—1 story and base, brick, \$5,000. San Francisco. Architect, none. Owner, William Kyne, 244 Kearny street, S. F. Location, south Mission street west of 6th, covering an area of 25 by 95 feet. Will contain one store. Interior finish pine. Patent store fronts, marble bases. Exterior pressed brick. Plans complete and work to be done by Day Labor.

Contracts Awarded.

FACTORY—3 story and base, reinforced concrete, \$135,000. San Francisco. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, John Bollman Co. Contractors, Lange & Bergstrom, Sharon Bldg., S. F. Contract price, \$135,000.

STORES AND LOFTS—3 story and base. Class A construction, \$175,000. San Francisco. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, California Street Realty Co. Contractor, James H. Hjul, 240 Montgomery street, S. F. Contract price, \$175,000. Note: The contractor is now letting subcontracts on all parts of the work.

OFFICE BUILDING ADDITIONS—2 story. Class A, \$150,000 to \$200,000. San Francisco. Architect, Benj. G. McDougall, Sheldon Bldg., S. F. Owners, Standard Oil Co. Contractors, P. J. Walker Co., Monadnock Bldg., S. F. Contract has been taken on the percentage basis. Only a one-story addition was originally planned for this building.

SCHOOL LIGHTING FIXTURES—Cost not stated. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Thomas Day Co., S. F. Contract price not stated.

City Bids Opened

San Francisco Board of Public Works
Opens Bids for Construction of
Redding School Building.

Bids were opened at the regular Wednesday afternoon session of the San Francisco Board of Public Works for the general construction of the Redding School and for the brick and terra cotta work, plumbing, heating and ventilating and electric work on the same building. Plans for the structure were prepared by Architect Frederick H. Meyer.

Twenty-three sets of figures were received on the general construction, while bidding on other parts of the work was equally heavy. Awards have not been made.

The Board did not take up the matter of an award of contract on the construction of the 67 miles of railroad into the Hetch-Hetchy site and will probably consider this matter until next Wednesday's meeting. Following is a complete list of the bids received for the various parts of the work on the Redding School.

General Construction, Redding School.

Bidder	Prop. 1	Prop. 2
Williams Bros. & Henderson	\$ 84,480	\$69,960
C. L. Woid	81,897	68,246
H. S. Williams	82,500	69,843
Lester H. Stock	102,372	87,553
T. W. McClenahan	88,547	74,000
Elmer Carlson	81,700	68,785
W. A. Newsom	84,485	70,696
S. F. Peterson	86,865	71,998
Musow & Morrison	87,997	75,184
Marcus Marcussen	91,510	76,920
A. Kahn	84,000	71,000
Lange & Bergstrom	85,470	73,312
T. P. F. Riley	86,500	74,000
Ward & Goodwin	90,230	75,532

E. S. Mulford	82,252	68,798
O. Monson	86,324	73,464
Anderson & Klingrose	89,340	74,840
Grace & Beroni	91,333	78,452
Western Bldg. & Eng. Co.	87,191	76,931
Charles Wright	92,750	77,750
W. B. Henderson	86,295	70,489
J. D. Hannah	83,603	70,403
Larsen-Sampson Co.	86,000	70,500

Brick and Terra Cotta Work.

Bidder	Prop. 1	Prop. 2
Thomas J. Campbell	\$28,898	\$22,874
Farrell & Reed	28,985	21,920
Lester H. Stock	28,965	22,965
Charles Hock	23,585	18,585
W. A. Newsom	26,377	19,333
Ward & Goodwin	25,800	20,800
Charles Wright	26,774	19,999
E. Hogberg	25,360	20,360

Plumbing Work.

Bidder	Prop. 1	Prop. 2
F. W. Snook	\$6,544	\$5,792
F. P. McKeon	6,880	5,890
Alexander Coleman	6,578	5,788
Wittman-Lyman Co.	6,994	6,420
A. Lettich	6,376	5,573
Kiernan & O'Brien	7,044	6,266
Scott Co.	6,950	6,200
J. E. O'Mara	7,200	6,800
L. Lawson	7,475	6,775
Turner Co.	6,830	6,150

Heating and Ventilating

Bidder	Prop. 1	Prop. 2
T. P. McKeon	\$3,990	\$3,550
Kiernan & O'Brien	3,960	3,659
Wittman-Lyman Co.	3,721	3,355
F. P. Walsh	4,264	3,721
A. Lettich	3,943	3,551
J. E. O'Mara	4,144	3,667
Turner Co.	3,548	3,550
Scott Co.	3,720	3,220
Siebert Co.	3,491	3,241

Electric Work.

Bidder	Prop. 1	Prop. 2
Butte Eng. & Elec. Co.	\$3,082	\$2,698
Dicker Elec. Co.	3,733	3,449
Central Elec. Co.	2,894	2,600
H. S. Tittle	3,177	2,825
F. N. Watts	3,347	3,022
Rex Elec. Co.	2,963	2,234
Turner Co.	3,292	2,899
Standard Elec. Co.	2,994	2,600
Le Page-McKenny Co.	3,098	2,740

Low Men For Hospital Work.

Official Figures From Constructing Quartermaster Show Low Men For Letterman Hospital Work.

Official figures have been received from the office of the Constructing Quartermaster at Fort Mason for the construction of Addition B to the Nurses' Dormitory at the Letterman General Hospital. From these figures it is shown that the following firms are low on the various parts of the work.

Frank M. Garden & Co., general construction, \$12,793. Extra grading \$120. Burnham Plumbing Co., plumbing work, \$2,600. Extra plumbing, \$78. Collman & Collman, electric wiring, \$580.

The Turner Co., fixtures, \$218. Collman & Collman, heating, \$900. Total cost, \$17,289. Bids forwarded to Washington for approval.

Wire Fencing at Fort Berry.

A. Wagner \$1,945.00

Pringle, Dunn & Co.	1,857.00
C. E. Lumburth.....	2,198.00
Standard Fence Co.....	1,556.15
A. Bendig.....	2,900.00
Grace & Co.....	2,311.00
Zwickert.....	1,675.00

OAKLAND AND ALAMEDA COUNTY

PAVING PLAYGROUND—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Bids will be received until December 10th for furnishing tools, materials and labor for surfacing a playground, approximately 42,000 square feet in area, in San Pablo Park.

RESIDENCE—1½ story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, William H. Sims, 1226 6th avenue, Oakland. Location, east Fairfax avenue north of Ygnacio. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel with some elm panels. Hardwood floors, open fire places and tile or brick mantels. Automatic water heater. Some tile wainscot. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—L. 2 story and base, frame, \$2,500 each. Berkeley, Alameda Co., Cal. Architects, Sydney B. and Noble Newsom, Nevada Bank Bldg., S. F. Owner, Frank Spring. Location, Thousand Oaks Tract. Each will contain seven rooms, bath and sleeping porch. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels tile or brick. Automatic water heaters. Tile wainscot in bath rooms. Exteriors covered with cement plaster on metal lath. Plans complete and figures being taken.

RESIDENCE—1½ story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, John A. Bischof, 6045 Harwood avenue, Oakland. Location, south 62nd street east of Colby. Will contain six rooms and bath. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Berkeley, Alameda Co., Cal. Architect, W. H. Ratcliff, Jr., First National Bank Bldg., Berkeley. Owner, Mrs. Hazel S. Armstrong. Location, east Buena Vista Way, La Loma Park. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1½ story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, H. S. Swalley, 710 Walker avenue, Oakland. Location, west Arbor avenue north of Hudson. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel with some elm panels. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, Robert Trimlett, 4205 Aqua Vista street, Oakland. Location, north west corner of Brookdale avenue and Short street. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Tile wainscot in bath room. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Piedmont, Alameda Co., Cal. Architect, none. Owner, O. M. Bullock, 1120 Broadway, Piedmont. Location, south Howard street. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. Piedmont, Alameda Co., Cal. Architect, none. Owner, O. M. Bullock, 1120 Broadway, Oakland. Location, south Magnolia avenue west of El Cerrito. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel with some elm panels. Hardwood floors, open fire place and tile or brick mantel. Automatic water heater. Tile in bath room. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, Justus Norris, 2828 Richmond avenue, Oakland. Location, southwest corner of Arlington avenue and Los Angeles street. Will contain six rooms, bath and sleeping porch. Interior finish pine, elm and white enamel. Hardwood floors and open fire places. Mantels tile or brick. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FRATERNITY HOUSE—3 story and base, frame, \$19,000. Berkeley, Alameda Co., Cal. Architect, Norman Shaw, associated with W. C. Hays, First National Bank Bldg., S. F. Owners, Delta Deuteron Fraternity. Location, corner of College avenue and Durant Way. Will contain a large number of living rooms, social rooms, baths and banquet hall. Interior finish pine and hardwood. Central heating system, hot water supply and open fire places. Mantels tile or brick. Bath rooms finished in tile. Exterior covered with cement plaster. Plans complete and in the hands of J. M. Wiley who will sublet all contracts.

BATHING RESORT—Frame and concrete. Cost not stated. Alameda, Alameda Co., Cal. Architect, Edwin J. Symmes, Pacific Bldg., S. F. Owners, Surf Beach Amusement Co. Architect Edward J. Symmes states that he has plans complete and will take figures within a week or ten days for the largest reinforced concrete swimming tank in the United States. The tank will be 75x200 feet and will be lined on the bottom and sides with tile. A large

reinforced concrete bulkhead and a pier will also be constructed. Sirehlow, Fiesse & Peterson already have the contract for fencing and for the construction of the passenger station. A large pavilion with maple floor will also be erected and a number of frame and plaster concession booths. H. S. Thompson will construct the largest roller coaster in the country on property at this resort.

APARTMENT HOUSE—3 story and base, frame, \$20,000. Oakland, Cal. Architect, none. Owner, John Conant, 542 25th street, Oakland. Location, north 25th street west of Telegraph. Will contain a number of large apartments which will be finished in pine, hardwoods and white enamel. Hardwood floors. Steam heat and a hot water supply. Open fire places and tile or brick mantels. Bath rooms tile. Wall beds. Exterior covered with cement plaster on metal lath. Plans complete and owner taking subfigures.

GARAGE—1 story and base, brick, \$5,500. Oakland, Cal. Architect, William Wilde, 1725 Broadway, Oakland. Owner, O. J. Mead. Location, Broadway between 29th and Orchid streets. Will be arranged for storage space only. Cement floor. Metal window sash and frames. Exterior faced with pressed brick. Plans complete and figures being taken.

APARTMENT HOUSE COMPLETION—4 story and base, brick. Cost not stated. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners, Sommarstrom Bros. Location, 14th and Alice streets. Bids now being taken for garden furniture, marble, interior decoration, vacuum cleaning system and household furnishings.

APARTMENT HOUSE—3 story and base, frame, \$90,000. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners name withheld. Location, Lake District. Will contain a total of 140 rooms which will be arranged in suites of two, three four and five rooms. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat, oil burning furnace, hot water supply and vacuum cleaning. Bath rooms tile. Wall beds. Exterior covered with pressed brick and cement plaster. Working drawings being completed.

APARTMENT HOUSE AND STORES—4 story and base, brick, \$70,000. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners, Sommarstrom Bros. Location, Telegraph avenue and 24th street, covering an area of 100 by 100 feet. Ground floor arranged for stores and main office and lobby. Upper floors will contain two, three and four room suites. Interior finish pine, hardwood and white enamel. Hardwood floors. Steam heat, vacuum cleaning, hot water system and automatic elevator. Oil burning plant. Bath rooms tile. Wall beds. Patent store fronts. Exterior faced with pressed brick. Plans being prepared.

APARTMENT HOUSE COMPLETION—4 story and base, brick. Cost not stated. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners, Sommarstrom Bros. Location, southwest 11th and Oak streets. Bids are now being taken for marble

work, ornamental iron and interior decorations.

RESIDENCE—2 story and base, frame, \$3,000. Oakland, Cal. Architect, none. Owner, Paul E. Woodburn, 3965 Greenwood avenue, Oakland. Location, east Broadway south of Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Mantels tile or brick. The bath room, Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Berkeley, Alameda Co., Cal. Architect none. Owner, C. J. Pfriang, 5187 Claremont avenue, Berkeley. Location, south Delano west of California. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors and open fire place. Mantel tile or brick. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

FACTORY GROUP—3, 4 story and base, mill construction, \$200,000. Berkeley, Alameda Co., Cal. Architect's name not given. Owners, Peet Bros. Mfg. Co. Superintendents of construction, P. J. Walker Co., Menadnock Bldg., S. E. Location, Pardee and Third streets. Main building will cover an area of 105 by 245 feet, while the other two structures will be but a little smaller. Heavy mill type of construction with brick exterior walls. Modern plumbing and electric work, steam heat. Separate power plant. Work is the first unit of a large soap factory which, when complete, will represent an expenditure in construction of over \$1,000,000.

LIBRARY STEEL AND STEEL ERECTION—\$46,232. Berkeley, Alameda Co., Cal. Architect, John Galen Howard, 604 Mission street, S. E. Owners, Regents of the University of California. The Pacific Rolling Mills submitted the low figure at \$46,232 for furnishing and erecting structural steel for the new addition to the Doe Library on the University Campus. An award has not been made. A complete list of the bids submitted will be found under the heading of Oakland and Alameda County in this issue.

YARD TOILET—Frame. Cost not stated. Oakland, Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be received up to December 15th for constructing a yard toilet at the Industrial Home for Adult Blind at Oakland. Plans can be secured from the State Department of Engineering. An official proposal appears in another column of this issue.

THEATRE ALTERATIONS—Brick and steel. Cost not stated. Oakland, Cal. Architects, Charles Mau and F. W. Dingwell, Macdonough Bldg., Oakland. Owners, Eva Estate. Location, west Broadway between 10th and 11th streets. Work will consist of extensive alterations to both exterior and interior. New plastering, electric work, plumbing and interior finish. Exterior cement plaster. Plans are being prepared.

SEWERS—Cost not stated. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. Resolutions of intention to sewer the following streets have been passed by the City Council: Solano Way between 16th and 17th avenues, Tompkins avenue from Vale avenue northwesterly. Bids on this work will soon be called.

SALES ROOMS—1 story and base, brick, \$4,000. Oakland, Cal. Architect, A. W. Pattianni, Merchants' National Bank Bldg., S. E. Owner, A. S. Macdonald, Mills Bldg., S. E. Location, east Broadway north of Orchard. Will contain sales rooms for automobiles and repair shop. Interior finish pine. Cement and tile floor. Patent store fronts and marble bases. Exterior faced with pressed brick. Plans complete.

THEATRE—2 story and base, Class C construction, \$10,000. Berkeley, Alameda Co., Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owners, Conn Bros. Location, Adeline street near Alcatraz. Will contain a large motion picture theatre and several stores. Interior finish pine and ornamental plaster. Metal conduit and special electric work. Patent store fronts. Marble bases. Exterior faced with pressed brick. Plans being prepared.

STORES AND OFFICES—2 story and base, Class A construction, \$28,000. Oakland, Cal. Architects, Richardson & Burrell, Albany Bldg., Oakland. Owner's name withheld. Will have complete steel frame, brick exterior walls faced with pressed brick and terra cotta. Interior finish pine and hardwood. Marble bases and wainscot. Patent store fronts. Steam heat and hot water system. Plans being prepared.

Contracts Awarded.

WAREHOUSE—2 story and base, Class C construction, \$14,000. Oakland, Cal. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owners, Lukensback Steamship Co. Contractor, G. Armstrong, 1629 Alcatraz avenue, Berkeley. Contract price, \$14,000.

Figures For Steel On U. C. Library.

Pacific Rolling Mills Low For Steel and Steel Erection on New Addition to Doe Library.

Five sets of figures were received by the Regents of the University of California for the steel and steel erection of the new addition to the Doe Library on the University Campus at Berkeley. The Pacific Rolling Mills Co. were low at \$46,232. A contract will be awarded shortly. Following is a complete list of the bids as opened:

Steel and Steel Erection.	
Pacific Rolling Mills, June 15	\$46,232
Western Iron Works 160 days	
after arrival in S. E. 1	49,793
Balston Iron Works, June 15	74,170
California Steel Co., June 15	18,100
Dyer Bros. after June 15 and	
time	49,930

SAN JOSE AND THE SANTA CLARA VALLEY

STREET IMPROVEMENT—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer, City Engineer, South San Francisco. Owners, South San Francisco. At the last meeting of the City Trustees a resolution ordering work No. 25 along the state highway near Baden crossing, was adopted.

STREET IMPROVEMENT—Cost not stated. San Mateo, San Mateo Co., Cal. Engineer, Town Engineer, San Mateo. Owners, Town of San Mateo. At the last meeting of the City Trustees, the board adopted a resolution ordering street work on 3rd avenue between A street and El Camino Road, and the Clerk was directed to advertise for bids.

STREET AND SEWER WORK—Cost not stated. Santa Cruz, Santa Cruz Co., Cal. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. At the last meeting of the City Council the City Engineer was instructed to prepare plans and specifications for concrete sidewalks from Bigg street to Van Ness avenue, also for the construction of a sewer in Palm avenue. The sewer will be a 6-inch vitrified iron stone about 500 feet long. The matter of the Almar sewer construction was laid over.

HIGHWAY CONSTRUCTION—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Bids will be received until December 13th for constructing a 4-inch water-bound macadam pavement on a portion of Mission, road beginning at a point near the entrance of Holy Cross Cemetery and extending northerly about 2,000 feet to connect with the state highway.

CLASS ROOM ADDITION—1 story, frame and plaster. Cost not stated. San Jose, Santa Clara Co., Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Bids will be opened on December 31st for the construction of a frame and plaster addition to the San Jose State Normal School. The addition will consist of a combination class room and domestic science building. Construction will be temporary. An official proposal appears in another column of this issue.

Contracts Awarded.

ROAD PAVEMENT—\$5,126.05. San Mateo, San Mateo Co., Cal. Engineer, City Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Contractors, Federal Construction Co., Sharon Bldg., S. E. Contract price, \$5,126.05.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

ELECTROLIGHTS—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Business men of the west side, together with the members of the Commercial Club, will ask the City Council at their next meeting that eight electrolights of the titon style be installed along Washington avenue. If the Council cannot appropriate the money for the electrolights, the petitioners will purchase and install them providing the city furnishes the light. Further mention will be made of the work.

STREET IMPROVEMENTS—Cost not stated. San Anselmo, Marin Co., Cal. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Bids will be opened on December 13th for the following street improvements: Concrete gutters, 2 catch basins, 1 corrugated iron culvert 18 inches in diameter and 40 feet long, also macadamize 11 feet roadway.

SEWER CONSTRUCTION—Cost not stated. San Anselmo, Marin Co., Cal. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Bids will be opened on December 13th for constructing a corrugated iron storm water sewer. The following are the most important items included in the construction: 181½ feet of 27 inch pipe; 22½ feet of 30-inch pipe, 3 manholes; 26 feet of 12-inch corrugated iron culvert, 54 feet of 15-inch corrugated iron culvert, 39 feet of 15-inch corrugated iron culvert, 9 feet of 20-inch corrugated iron culvert, 9 feet of 18-inch corrugated iron culvert.

ROAD IMPROVEMENT—Cost not stated. Hercules, Contra Costa Co., Cal. Engineer's name not given. Owners, Town of Hercules. The town trustees are preparing to macadamize the road through that town on the Richmond-Martinez road.

RESIDENCE—1 story and base, frame, \$2,500. Danville, Contra Costa Co., Cal. Architects, Sidney B. and Noble Newsom, Nevada Bank Bldg., S. F. Owner, R. Buckman Danville. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RAILROAD STATION—1 story and base, frame and concrete, \$12,000. Martinez, Contra Costa Co., Cal. Architect, Engineering Dept. of Southern Pacific Co., Flood Bldg., S. F. Owners, Southern Pacific Co. Will be designed in the Mission style. Interior finish pine with concrete and tile floor. Exterior faced with cement plaster. Plans being prepared.

RAILROAD EXTENSION—Cost not stated. Mill Valley, Marin Co., Cal. Engineer's name not given. Owners, Mt. Tamalpais Scenic Railway Company. The directors of the Mt. Tamalpais Scenic Railway Company are contemplating the extension of the present railroad to the southerly and highest peak of the mountain. This extension will carry the road to an altitude of 2,640 feet, or several hundred feet higher than the Tavern building. The erection of a hotel building will be considered at a later date, according to manager of the road Buckingham.

Contracts Awarded.

HIGHWAY CONSTRUCTION—\$21,182.90. Reclamation, Sonoma Co., Cal. Engineer, State Highway Commission, Sacramento. Owners, State of California. Contractors, Bates, Borland & Ayer, Oakland Bank of Savings, Oakland. Contract price, \$21,182.90.

STREET IMPROVEMENT—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, City Engineer, Martinez. Owners, City of Martinez. Contractors, W. E. Price Construction Co., Martinez. Work will include grading and filling in the new Oak Knoll Tract.

SEWER CONSTRUCTION—\$1,303.30. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Contractors, Galbraith & James, 156 South 14th street, Richmond. Contract price, \$1,303.30.

STREET IMPROVEMENT—\$7,006.46. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Richmond. Owners, City of Richmond. Contractors, Municipal Improvement Co., 803 Macdonald avenue, Richmond. Contract price, \$7,006.46.

SCHOOL—1 story and base, reinforced concrete, \$30,000. Suisun, Solano Co., Cal. Architects, Edwin J. Synmes, Pacific Bldg., S. F., associated with William H. Crim, Jr., 425 Kearny street, S. F. Owners, Crystal Springs School District. Contractors, H. L. Peterson, S. F., general construction, \$25,700, Pacific Blower and Heating Co., S. F., heating, \$3,987, and Butte Electric and Engineering Co., S. F., electric work, \$1,175. A complete list of the bids received will be found under the head of Marin, Contra Costa and Sonoma Counties in this issue.

INTAKE CANAL—Cost as follows. Byron, Contra Costa Co., Cal. Engineer's name not given. Owners, Byron-Bethany project. Contractor, S. R. Fox, Oakland. Contract price, 13½¢ per cubic yard.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

STREET AND SEWER WORK—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, City Engineer, Modesto. Owners, City of Modesto. At the last meeting of the City Council the City Engineer was instructed to construct a new sewer to serve certain houses in 4th and 5th streets. A resolution of intention to construct side-walks on 5th street from I to L was passed. Two ordinances were passed regarding the paving of McHenry avenue.

RESIDENCE—1 story and base, frame, \$3,200. Fresno, Fresno Co., Cal. Architect, none. Owner, Fred Jones, Fresno. Location, Ventura Vista Addition. Will contain eight rooms, bath and sleeping porch. Interior finished in pine, hardwood and white enamel. Hardwood floors, central heating system and open fire places. Mantels tile or brick. Bath rooms tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SCHOOLS—2, 1 story frame, \$2,000 and \$1,700. Bakersfield, Kern Co., Cal. Architect, J. M. Saffell, Bakersfield. Owners, Rosamond and Muroc School Districts. Both buildings have been designed for district schools and will contain but one class room. Interior finish pine. Exterior rustic, shingles or cement plaster. Plans complete and figures being taken.

SCHOOL—1 story and base, frame and concrete. Cost not stated. Kingsburg, Fresno Co., Cal. Architect, Anton Johnson, Kingsburg. Owners, Kingsburg High School District. Bids will be received by the Board of School Trustees up to and including December 11th at 2 p. m. for the construction of the new building. Interior will be finished

in pine with maple floors in the class rooms. A central heating system will be installed. Exterior of the building will be faced with cement plaster. Plans can be secured from either the architect or from the Clerk of the Board of Education.

SCHOOL—1 story and base, frame, \$15,000. Fresno, Fresno Co., Cal. Architect, Fred Schwartz, Rowell Bldg., Fresno. Owners, North Fresno School District. Will be erected near the State Normal School grounds and will contain besides the usual class rooms, a teachers' cottage and department for domestic science. Exterior will be covered with cement plaster. Plans are now being prepared.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

HIGHWAY CONSTRUCTION—Cost not stated. Sacramento, Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids will be opened on December 27th for work in the following counties: Placer County, Roseville to Penryn, 7.5 miles, Portland cement concrete; Placer County, Penryn to Auburn, 6.5 miles, Portland cement concrete; Tehama County, Corning to Proberta, 10.2 miles, Portland cement concrete; Marin-Sonoma Counties, steel bascule bridge, span 145 feet, 2 concrete approach spans each about 80 feet and about 120 feet of creosoted pile trestle. Plans can be secured from the office of the Highway Commission or its branch in the Rialto Bldg., S. F. An official proposal appears in another column of this issue.

STREET IMPROVEMENTS—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Bids will be received until December 14th at 11 a. m. for improving the following streets: Fireport road from Burnside to El Dorado avenue, Palm avenue from Palmetto avenue to Rose avenue, the alley between Y and Orange avenue, Cypress avenue from Sacramento avenue to 37th street, Cypress avenue from 37th street to the west line of the Upper Stockton road, Hollyhock avenue from the Alta Vista Addition to Wabash avenue, Burbank avenue from Leland Stanford avenue to Rose avenue.

PIPE—Cost not stated. Lodi, San Joaquin Co., Cal. Engineer, City Engineer, Lodi. Owners, City of Lodi. City Clerk H. S. Clark has been authorized to purchase 3,000 feet of 18-inch sewer pipe in the open market after the City Trustees had rejected all bids on account of the price quoted. Gladding-McBean Co., the California Pottery Co., and N. Clark & Son had offered to supply the pipe at prices ranging from 46½¢ to 48¢ per lineal foot. Private correspondence with other manufacturers before the bids were called for named a price considerably lower.

STREET IMPROVEMENT—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors as follow: Oak avenue from 5th to 7th to McGillivray Construction Co., 1007 7th street. The alley between N and O streets east of 10th and west of 11th to the McGillivray Construction Co.

Cypress avenue east from 35th to Sacramento avenue awarded to the Clark & Henery Construction Co., Ochsner Bldg. Cypress avenue easterly from 30th to westerly line of 35th street awarded to the Clark & Henery Construction Co.

BRIDGE—Steel and concrete, \$28,061.13. Sacramento, Cal. Engineer, State Highway Commission, Sacramento. Owners, State of California. Bids opened at the last meeting of the State Highway Commission for the construction of a bridge over the Yolo By-Pass show the Security Construction Co., L. A. low at \$24,671. Bids have been taken under advisement. The engineer's estimate was \$28,061.13. A complete list of the bids received will be found under the heading of Sacramento in this issue.

RESIDENCE—1 story and base, frame, \$2,000. Sacramento, Cal. Architect, none. Owner, E. L. Ford, Sacramento. Location, 7th avenue. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$3,000. Stockton, San Joaquin Co., Cal. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owner, Pierce J. Morrell, Location, North California street. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile or brick. Automatic water heater. Exterior covered with rustic. Plans being prepared.

MAUSOLEUM—1 story and base, reinforced concrete, \$60,000. Yuba City, Yuba Co., Cal. Architect, Consolidated Mausoleum Co., Plafiron Bldg., S. F. Owners, Sutter-Yuba Cemetery Association. Will contain a number of crypts, chapel and office. Interior finished in stone and marble. Exterior faced with cement plaster and granite. Plans complete and work to be done by Day Labor.

HOTEL—2 story and base, brick, \$15,000. Stockton, San Joaquin Co., Cal. Architect, Ralph P. Morrell, Odd Fellows Bldg., Stockton. Owner, G. Sanquettini. Will cover an area of 62 by 100 feet. Interior finish pine. Hot water system. Exterior faced with pressed brick. Plans being prepared.

RESORT HOTEL—1, 2 and 3 story, reinforced concrete. Cost not stated. Lake Tahoe, Placer Co., Cal. Architect, Walter Weber, Ferguson Bldg., L. A. Owner, Anita M. Baldwin. Will contain 112 rooms, large office and lobby, dining room and 98 baths. Interior finish pine and redwood. Hardwood floors. Power and heating plant in separate building. Vacuum cleaning and hot water system. Bath rooms tile. Exterior faced with natural stone. Plans being prepared.

SCHOOL—2 story and base, brick and concrete, \$30,000. Red Bluff, Tehama Co., Cal. Architect, W. H. Weeks, 75 Post street, S. F. Owners, Red Bluff Union High School District. Will contain 16 class rooms, assembly hall, of fices, teachers' rooms and science laboratories. Interior finish pine with

maple floors. Steam heat, oil burning furnace, vacuum cleaning and program clocks. Exterior faced with cement plaster or pressed brick. Plans being prepared.

IRRIGATION WORK—Cost not stated. Colusa, Colusa Co., Cal. Engineer, Charles G. St. Maurice, Colusa. Owners, Cheney Slough District. The land owners in the proposed Cheney Slough District have in incorporated and have selected Engineer Charles G. St. Maurice to deal with the engineering features of the district. Canals, ditches, pumping plant and concrete intake are the improvements to go under way immediately. The directors elected are B. H. Mitchell, B. H. Burton, P. B. Arnold, W. H. Ash and W. F. Klewe.

GATES AND WEIRS—Reinforced concrete. Cost not stated. Colusa, Colusa Co., Cal. Engineer's name not given. Owners, Sutter-Butte Canal Co., Colusa. The Sutter-Butte Canal Co. is putting in concrete gates and weirs to replace wooden structures that were put in originally. The work is being done in pursuance of a settled policy of the company to make all its plant of permanent construction.

Contracts Awarded.

BANK AND OFFICES—1 story and base, Class A construction. Cost not stated. Stockton, San Joaquin Co., Cal. Architect, C. W. Dickey, Central Bank Bldg., Oakland. Owners, Stockton Savings Bank. Contractors, P. J. Walker Co., Monadnock Bldg., S. F. Contract price not stated. Note: The contractors are now taking subfigures on the work and have awarded the structural steel work to the Builders' Iron Works of Stockton.

Open Figures For Suisun School.

Contracts Awarded for New Reinforced Concrete Building for The Crystal School District.

Bids were opened by the Crystal School Trustees at Suisun for the construction of a one-story and basement reinforced concrete school, designed by Edwin J. Symmes associated with William H. Crim, Jr. The general contract including the plumbing was awarded to H. L. Peterson on his bid of \$25,760. The Pacific Blower & Heating Co. secured the contract for the heating at \$3,987, and the Butte Electric & Engineering Co. was awarded the electric work at \$1,175. Following is a complete list of the bids received:

Crystal School (General Construction),	
H. L. Peterson, S. F.	\$25,760
Thomas Elam & Son, S. F.	27,760
Howard S. Williams, S. F.	27,850
Western Bldg. & Eng. Co., S. F.	28,500
Carnahan & Mulford, S. F.	28,898
T. H. Carnahan	29,575
L. A. Williams, S. F.	29,835
J. S. Hannah, S. F.	29,997
M. Fisher, S. F.	30,000
Robert Glaze, S. F.	30,198
Caldwell & Son, S. F.	30,187
McLaren & Peterson, S. F.	30,913
Collman & Collman, S. F.	32,710
Welch Bros. & Hannaman, Grid	
by, Cal.	33,357
L. G. Bergren & Son, S. F.	37,572

Heating.

John Ringius Sheet Metal Wks.	\$4,418.82
Modern Sheet Metal Works	4,441.50
McKeon & Mack	1,570.00
Scott Co.	4,180.00
Pacific Blower & Heating Co.	3,987.50
Sichert & Co.	3,997.00

Electric Work.

McLaren & Peterson	\$1,650
Butte Eng. & Elec. Co.	1,475
Central Elec. Co.	1,500
Solano Supply & Const. Co.	1,530

Program Clocks.

Standard Electric Time Co.	\$796
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Bridge Bids Opened At Sacramento.

Eight Bids Received By State Highway Commission For Construction of Bridge Over Yolo By-Pass.

(By Special Wire.)

SACRAMENTO, CAL., Nov. 29th, 1915.—The following bids were opened by the State Highway Commission for the construction of an 80-foot steel span plate girder bridge with concrete approaches for the Yolo By-Pass. The total length of the structure is about 111 feet. The security Construction Co. of Los Angeles presented the low bid at \$24,671. A contract will be awarded at the next meeting of the Highway Commission. The engineer's estimate on the work was \$28,061.13. Following is a complete list of the bids as opened:

Yolo By-Pass Bridge.	
Security Constr. Co., L. A.	\$24,671
J. D. Hannah, San Francisco	25,795
C. E. Lumburth, S. F.	25,800
Ross Constr. Co., Sacramento	26,919
Jenkins & Well, Sacramento	28,846
Petersen & Grier, S. F.	29,410
Midland Bridge Co., Kansas, Mo.	30,870
S. B. Peterson, S. F.	30,990

LOS ANGELES & SOUTHERN CALIFORNIA.

STREET WORK—Cost not stated. Redondo Beach, Los Angeles Co., Cal. Engineer, City Engineer, Redondo Beach. Owners, City of Redondo Beach. Bids are being taken by the City Council for the improvement of Pacific avenue from Carlelan street to Broadway. Resolutions of intention have been passed providing for the improvement of portions of Pacific avenue and portions of Lucia avenue between Anita and Huntington streets.

BRIDGE—Steel and reinforced concrete, \$100,000 to \$125,000. Santa Barbara, Santa Barbara Co., Cal. Engineer, A. V. Saph, Rialto Bldg., S. F. Owners, Santa Barbara County. A. V. Saph has been appointed consulting engineer for the state highway bridge across the Santa Ynez River at Cuesta and Zaca Canyons, and will start on plans for the work immediately. The Cuesta-Zaca bridge is the largest and most expensive structure to be built on the state highway out of the county bridge fund. From this fund \$50,000 will be taken as the county's contribution toward the cost of the bridge, while the state will contribute between \$50,000 and \$75,000.

SCHOOL—1 story and base, brick and concrete. Cost not stated. Paso Robles, San Luis Obispo Co., Cal. Architect, W.

H. Weeks, 75 Post street, S. F. Owner, Paso Robles School District. The building will contain six class rooms and an assembly hall. Interior finish will be of pine with maple floors in the class rooms. Central heating system, oil burning furnace. Exterior faced with cement plaster or pressed brick. Plans are nearly complete.

STREET IMPROVEMENT—Cost not stated. Ontario, San Bernardino Co., Cal. Engineer, City Engineer, Ontario. Owners, City of Ontario. Bids will be opened by the City Council on the evening of January 10th, 1916, for the improvement of East State street and Euclid avenue from the Southern Pacific tracks to State street.

STREET WORK AND ELECTROLIGHTS—Cost not stated. Ontario, San Bernardino Co., Cal. Engineer, City Engineer, Ontario. Owners, City of Ontario. Improvements, including widening of the sidewalks and the installation of ornamental electrolights, have been ordered on A street between Laurel and Paul avenues.

CHURCH—2 story and base, brick, \$56,000. Los Angeles, Cal. Architect, Frank L. Meline, 6772 Hollywood Boulevard, L. A. Owners, Fifth Church of Christ, Scientist. Location, Hollywood and La Brea. Will contain large main auditorium, reading rooms and Sunday school rooms. Interior finish hardwood and ornamental plaster. Art glass windows. Central heating system. Exterior faced with pressed brick. Revised plans complete and figures being taken.

CHURCH—1 story and base, reinforced concrete or hollow tile, \$35,000. San Bernardino, San Bernardino Co., Cal. Architects, Jeffery & Schaefer, Wesley Roberts Bldg., L. A. Owners, First Congregational Church. Will cover an area of 95 by 150 feet. Interior arranged for main auditorium, seating 350 people, fifteen class rooms, social parlors and pastor's study. Interior finish pine and ornamental plaster. Art glass windows. Exterior faced with cement plaster. Plans complete and figures being taken.

GLASS FACTORY—5, 1 and 2 story, frame and corrugated iron, \$40,000. Torrence, Imperial Co., Cal. Architect's name not given. Owners, The Hurtle Window Glass Co. Work is now under way by Day Labor on this group of buildings. Concrete floors will be used. Exteriors will be covered with corrugated iron. Adolph Sieroty, Eastern Outfitting Co., L. A., is the secretary of the company.

IRRIGATION DISTRIBUTING SYSTEM—Cost not stated. San Fernando, Los Angeles Co., Cal. Engineers, Los Angeles County Water Board, L. A. Owners, Los Angeles County. The Supervisors and members of the Water Board have reached an agreement as to the policy that shall govern the laying of the distributing system in the San Fernando Valley irrigation system, for which \$2,604,000 of bonds some time ago were voted under the Shenk Act. The Supervisors will follow the usual course of advertising for bids. In case these bids come within the limits of the funds provided for by the bond issue, the work will be done by private contract. In case it is found that the work cannot be done in this way within this limit, the county will do the work

itself, purchasing the necessary materials and having the labor performed by force account under the supervision of Chief engineer Mulholland of the water department. The system will involve the laying of 300 miles of pipe.

HOSPITAL GROUP—4 story with 2, 2 story wings, reinforced concrete, \$130,000. San Bernardino Co., Cal. Architect, Lyman Farwell, Story Bldg., L. A. Owners, San Bernardino County. The building will be Spanish Renaissance in design, and will have concrete foundation and basement, brick exterior walls, pressed brick facing, clay tile roofs, reinforced concrete interior columns and floors, tile and metal lath partitions, elevators, steam heat, hospital plumbing. Working drawings have been completed.

SCHOOL—1 story and base, brick, \$20,000. Los Angeles, Cal. Architect, W. C. Pennell, Baker-Detwiler Bldg., L. A. Owners, City of Los Angeles. Location, West Vernon avenue and Olive, covering an area of 68 by 80 feet. Will contain six class rooms. Interior finish pine with maple floors. Central heating system. Exterior faced with pressed brick. Plans complete and figures being taken.

Contracts Awarded.

BRIDGE—Reinforced concrete. Cost \$15,600. Meyers Creek, Imperial Co., Cal. Engineer, State Highway Commission, Sacramento. Owners, State of California. Contractors, Holland Construction Co., Granger Bldg., San Diego. Contract price, \$15,600. Engineer's estimate, \$25,320.53.

POWER STATION—1 story and base, reinforced concrete. Cost not stated. San Pedro, Los Angeles Co., Cal. Architect, none. Owners, American Trona Co., Pacific Electric Bldg., L. A. Contractors, F. O. Engstrom Co., 5th and Seaton streets, L. A. Contract price not stated.

SCHOOL—1 story and base, brick, \$20,000. Los Angeles, Cal. Architects, Dennis & Hewett, Fay Bldg., L. A. Owners, City of Los Angeles. Contractors, Barber-Bradley Construction Co., 1821 East 15th street, L. A. Contract price, \$20,000.

STORES AND OFFICES—2 story and base, stone, \$33,000. Calexico, Imperial Co., Cal. Architect, Ralph Swearingen, Calexico. Owners, Imperial Valley Hardware Co. Contractors, Welch & Wright, El Centro. Contract price, \$33,000.

PORTLAND AND OREGON

ROAD AND BRIDGE CONSTRUCTION—\$319,228. Tillamook, Tillamook Co., Ore. Engineer, County Surveyor, Tillamook. Owners, Tillamook County. The County Commissioners have completed their 1916 budget and the largest item is that for road construction and new bridges. The total amount to be raised will be \$319,228, of which \$173,389 will be used in the road and bridge fund.

BRIDGE—Steel or reinforced concrete, \$125,000 or more. Salem, Ore. Engineer's name not given. Owners, Marion and Polk Counties. Competitive plans will be submitted with proposals for the construction of the proposed bridge to be built jointly by Marion and Polk Counties. The selection of plans will probably be made

by the State Highway Department. Plans will include a draw span and will be for either a steel or concrete structure.

SEATTLE AND WASHINGTON

BRIDGE—Steel and reinforced concrete. Cost not stated. Pasco, Wash. Engineer, C. E. Fowler, Central Bldg., Seattle. Owners, Walla Walla and Franklin Counties. C. E. Fowler, consulting engineer, is preparing plans for the construction of a steel bridge over the Snake River between Pasco and Burbank for Franklin and Walla Walla Counties, and will have them ready for contractors the latter part of December. The bridge will rest on concrete piers, will be about 800 feet long with about 2,000 feet of approaches.

APARTMENT HOUSE—5 story and base, Mill construction, \$75,000. Seattle, Wash. Architects, Martin & Pagan, Northern Bank Bldg., Seattle. Owners, Gardner and Lessey, 2021 4th avenue. Location, 4th avenue, covering an area of 60 by 108 feet. Will contain a large number of two, three and four room apartments with wall beds and private baths. Interior finished in pine and hardwood with some hardwood floors. Steam heat, automatic elevators and a hot water supply. Bath rooms tile. Exterior faced with pressed brick, trimmed with terra cotta. Plans complete and segregated figures being taken.

APARTMENT HOUSE—3 story and base, brick, \$40,000. Seattle, Wash. Architect, J. I. Ripley, 2447 4th avenue, Seattle. Owner, F. H. Webber. Location, corner of 24th avenue and Spruce streets, covering an area of 53 by 66 feet. Will contain two and three room apartments with wall beds and private baths. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat, oil burning plant and hot water supply. Bath rooms tile. Marble and tile wainscot. Exterior faced with pressed brick. Plans complete and segregated figures to be taken.

APARTMENT HOUSE—2 story and base, brick, \$45,000. Seattle, Wash. Architect, H. Ryan, Northern Bank Bldg., Seattle. Owner's name not given. Location, Capitol Hill, covering an area of 80 by 120 feet. Will contain 42 suites of two and three rooms with wall beds and private baths. Interior finish pine and hardwood with some hardwood floors and white enamel. Steam heat, automatic elevator and hot water supply. Bath rooms finished in tile. Marble and tile wainscot. Exterior faced with pressed brick. Plans complete and figures being taken.

WAREHOUSE—4 story and base, reinforced concrete, \$50,000. Seattle, Wash. Architect, Engineering Dept. American Paper Co., 85 Atlantic street, Seattle. Owners, American Paper Co. Location, southwest Juneau and Atlantic streets, covering an area of 120 by 150 feet. Construction fireproof with reinforced concrete floors and walls. No interior finish. Elevator service, metal window sash and frames and fireproof doors. Exterior faced with cement plaster. Plans complete and figures being taken.

STREET RAILWAY EXTENSION—Cost not stated. Tacoma, Wash. Engineer, Engineering Dept. Pacific Traction Co., Tacoma. Owners, Pacific Traction Co. The Pacific Traction Co., Geo. W. Rounds, general superintendent, proposes the construction of an extension of 2 miles on the Steilacoom boulevard, Starling street and Steilacoom avenue to Union and La Fayette, involving 14,317 cubic yards of excavation and 12,850 cubic yards of embankment work.

UNIVERSITY BUILDING—2 or 3 story and base. Class A construction, \$150,000. Seattle, Wash. Architects, Charles Bebb and Carl Gould, Denny Bldg., Seattle. Owners, University of Washington. Plans are now being prepared for the first of several new buildings to be erected on the University Campus. Details of the construction have not been given out as the plans are only in the preliminary stage. Further mention will be made of the work.

SCHOOL—2 story and base. Class A construction, \$100,000. Bellingham, Wash. Architects, Heath & Gove, National Realty Bldg., Tacoma. Owners, City of Bellingham. Will contain a large number of class rooms, assembly hall and auditorium, besides science laboratories and office. Construction are-proof throughout. Interior finish pine with maple and tile floors. Steam heat, oil burning system, modern plumbing and vacuum cleaning system. Program clocks. Exterior faced with pressed brick and stone. Plans complete and figures to be taken on approval by Architect T. F. Doan of Bellingham.

Contracts Awarded.

APARTMENT HOUSE—3 story and base, mil construction, \$75,000. Seattle, Wash. Architect, David Dow, 21st and Spruce streets, Seattle. Owner's name not given. Contractor, David Dow, 21st and Spruce. Contract price, \$75,000.

MANCHURIAN MERCHANTS REGARD AMERICAN TERMS SEVERE.

[Translated by the American consulate at Harbin from the Harbinski Vestnik (official organ of the administration of the Chinese Eastern Railway) of October 10.]

Merchants at Harbin, in reply to inquiries, are complaining that the principal obstacle in the development of trade with the United States are the difficult terms insisted upon by American firms. For example, these firms insist that half the money must be paid down with the order and the other half paid upon the arrival of the steamer delivering the goods at the nearest port. These terms are indeed very hard. If one takes into consideration the lack of credit at present.—Commerce Reports.

AMERICAN SUBSTITUTE FOUND FOR FOREIGN LIME.

A firm of importers in New York, which was receiving high-priced lime from Germany and Austria, has found in this country a lime which is a good substitute for the foreign product. It is used for abrasive purposes, principally as a cleaner before nickel plating, or in combination with other materials for buffing purposes on nickel-plated work.

Associated Catalogues.

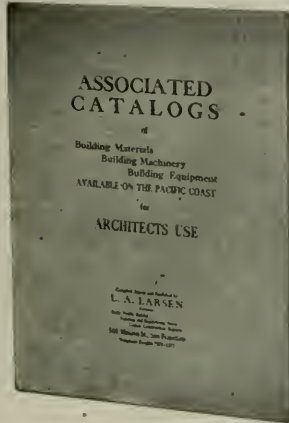


Here is where the Architect usually files the circulars, catalogues, announcements, etc., that come to his office. He can't take care of them. There are too many of them.

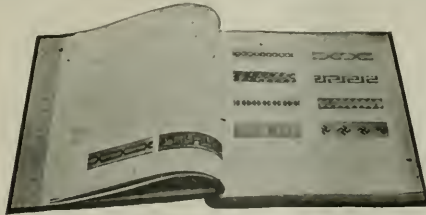


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Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

SAN FRANCISCO COUNTY.

No.	Owner	Contractor	Am't.
3398	Pacific Un Club.....	Allyn	1700
3399	Kerman.....	Bateman	1800
3400	Ruegg.....	Ruegg	6000
3401	Same.....	Same	6250
3402	Blum.....	Old Gear	1000
3403	Winship.....	Brandt	2500
3404	Arlett.....	Arlett	1100
3405	Basso.....	Lopz	500
3406	Gerard.....	Gerard	400
3407	Pembroke.....	Murray	1500
3408	Lambs.....	Novelty	400
3409	McKenna.....	Smith	400
3410	Cunco.....	Cunco	2500
3411	McLelland.....	McLelland	2500
3412	Urban Rty.....	Urban Rty	4000
3413	Pacific G & E.....	Hughson	938
3414	Montg Bk.....	Petersen	3455
3415	Lepetch.....	Leigh	3000
3416	Same.....	Same	2000
3417	Same.....	Same	2000
3418	Same.....	Same	2000
3419	Sale.....	Leigh	2000
3420	Schultz.....	Leigh	2000
3421	Young.....	Young	8000
3422	O'Reilly.....	Purcell	2700
3423	Williar.....	Klimm	1065
3424	Schlessinger.....	Holt	16200
3425	Lahryy Tr.....	Emmer	2295
3426	Same.....	Schrader	3258
3427	Same.....	Gilley	1374
3428	Same.....	O'Mara	713
3429	Same.....	Gladding	4100
3430	Same.....	Central	400
3431	Same.....	Neal	400
3432	Cooper.....	Burns	5228
3433	Cogswell.....	Grassi	1380
3434	Ham.....	Ham	5000
3435	Ham.....	Ham	5000
3436	Harrington.....	Harrington	7398
3437	Rosenberg.....	Rosenberg	3500
3438	Miller.....	Miller	1950
3439	Cook.....	Cook	2500
3440	Felton.....	Petersen	4761
3441	Same.....	Central	7398
3442	Moran.....	De Lew	2141
3443	Gray.....	Hamill	2800
3444	S P Co.....	Pay Impv	
3445	C & E F.....	McGivray	350863
3446	Pacific G & E.....	Am M & M	4532
3447	Buck.....	Palmer	20900
3448	Mugele.....	Ahlbach	7700
3449	Plattner.....	Plattner	1500
3450	Same.....	Same	1500
3451	Same.....	Same	1500
3452	Same.....	Same	1500
3453	Scott.....	Dilks	1000
3454	Conway.....	Mager	5450
3455	Sierra Inv.....	Sierra	1500
3456	Wienrank.....	Hinson	9000
3457	Bathjens.....	Munster	4000
3458	Same.....	Same	4000
3459	Cavagnaro.....	Cavagnaro	6000
3460	Same.....	Same	6000
3461	Clark.....	Clark	1500
3462	Lansdale.....	Lansdale	425
3463	Stohman.....	Deming	400
3464	Campbell.....	Campbell	500
3465	Will.....	Dreyfus	500
3466	Brandt.....	Brandt	400
3467	Kruse.....	Johnson	15581
3468	Jacob.....	Welsh	4100
3469	Selig.....	Monson	13525

(Correction in Payments) CHURCH

(3330) NW GEARY AND TWENTY-third Ave. Grading, concrete, reinforcements, rat proofing, carpentry mill work, etc, for superstructure for St. Monica Church building.
Owner.....Roman Catholic Archbishop of San Francisco, 1100 Franklin, S. F.
Architect...Frank T. Shea and Jno. O. Lofquist, 748 Market, S. F.
Contractor...A. Lynch.
Filed Nov. 19, '15. Dated Nov. 4, '15.

Progressive payments on 1st of each month..... 75%
Usual 35 days.....\$4750
TOTAL COST, \$19,000
Bond, none. Limit, 90 days. Forfeit.
\$10. Plans and specifications filed.

ALTERATIONS

(3398) NE POST AND STOCKTON.
Alter store.
Owner....Pacific Union Club, California and Mason, S. F.
Architect...Willis Polk, Hobart Bldg., San Francisco.
Contractor...Stockholm & Allyn, Madnock Bldg., S. F.

COST, \$1700

FRAME DWELLING

(3399) E FORTY-SECOND AVE 125 S Lincoln Way. One and one-half-story frame dwelling.
Owner.....Frank Kerman, 1218 42nd Ave., San Francisco.
Architect...None.
Contractor...C. E. Bateman, 1321 45th Ave., San Francisco.

COST, \$1500

FRAME FLATS

(3400) W ELEVENTH AVE 225 N Anza. Two-story and basement frame (4) flats.
Owner.....Leo J. Ruegg, Pacific Bldg San Francisco.

Architect...None.
Contractor...Ruegg Bros., 719 Pacific Bldg., San Francisco.

COST, \$6000

FRAME FLATS

(3401) E THIRD AVE 100 N Balboa. Two-story and basement frame (4) flats.
Owner.....Leo J. Ruegg, 719 Pacific Bldg., San Francisco.
Architect...None.
Contractor...Ruegg Bros., 719 Pacific Bldg., San Francisco.

COST, \$6250

FREIGHT ELEVATOR

(3402) NO. 1336 GROVE. Install freight elevator.
Owner...E. M. Blum, Premises.
Architect...None.
Contractor...Oakland Gear & Machine Works, 225 Broadway, Okd. San Francisco.

COST, \$1000

ALTERATIONS

(3403) NW CALIFORNIA & PIERCE. Alter front and interior of dwelling.
Owner.....K. D. Winship, 354 Pine, San Francisco.
Architect...Smith & Stewart, 244 Kearny, San Francisco.
Contractor...Brandt & Stevens, 612 Hearst Bldg., S. F.

COST, \$2500

FRAME APARTMENTS

(3404) E POWELL 77-6 N Washington. Three-story and basement frame (6) apartments.

Owner.....Arthur Arlett, Call Bldg., San Francisco.
Architect...B. G. McDougall, Sheldon Bldg., San Francisco.
Day's work. COST, \$11,000

DWELLING

(3405) W INGALLS 75 S Jamestown. One-story frame dwelling.
Owner.....Luigi Basso.
Architect...None.
Contractor...Alex Lopz, 979 Ingerson, San Francisco.

COST, \$500

ALTERATIONS

(3406) SW BUSH AND JONES. Alter cloak and storage rooms.
Owner.....Gerard Invt Co., 110 Sutter, San Francisco.
Architect...Rousseau & Rousseau, 110 Sutter, San Francisco.
Day's work. COST, \$100

FRAME DWELLING

(3407) E ZOE 137-6 S Bryant. One-story and basement frame dwelling.
Owner.....Wm. Pembroke, 526 3rd, San Francisco.
Architect...None.
Contractor...Murray & Doig, 1160 Naples, San Francisco.

COST, \$1500

ELECTRIC SIGN

(3408) NO. 106 POWELL. Electric sign.
Owner.....Lamb's Cafe.
Architect...None.
Contractor...Novelty Elec. Sign Co., 165 Eddy, San Francisco.

COST, \$100

ALTERATIONS

(3409) NOS. 2517-19 POST. Minor alterations on plumbing and interior of dwelling.
Owner.....Mrs. McKenna, 1387 Post, San Francisco.
Architect...None.
Contractor...Wm. Smith, 35 Delano, San Francisco.

COST, \$100

FRAME DWELLING

(3410) S TWENTYETH 155 E Sanchez. Two-story and basement frame dwlg.
Owner.....William J. Cuneo, 686 Capp San Francisco.
Architect...None.
Day's work. COST, \$2500

FRAME DWELLING

(3411) E TWELFTH AVE 35 N Carbrillo. Two-story and basement frame dwelling.
Owner.....J. S. McLelland, 530 12th Ave., San Francisco.
Architect...None.
Day's work. COST, \$2500

FRAME DWELLING

(3412) W URBANO DRIVE 285 N Victoria. One-story and basement frame dwelling.

Owner.....Urban Realty Improvement Co., 85 Cerritos Ave., S. F.
Architect...J. A. Leonard, 85 Cerritos Ave., San Francisco.
Day's work.....COST, \$4000

VACUUM CLEANER

(3113) S SUTTER 115-9 E Powell S 137-6xE 45-6. All work for 7½ horse power 3 sweeper vertical, direct connected Spencer Turbine vacuum cleaner for eight-story Class "A" office building.
Owner.....Pacific Gas & Electric Co., 415 Sutter, San Francisco.
Architect...None.

Contractor...Hughson & Merton, Inc., 330 Golden Gate Ave., S. F.
Filed Nov. 27, '15. Dated Nov. 10, '15.
On completion.....75%
Usual 35 days.....25%
TOTAL COST, \$938

Bond, \$500. Surety, American Surety Co. of New York. Lmt. 30 days. Forfeit, none. Plans and specifications, none.

STEAM HEATING SYSTEM

(3414) SE WASHINGTON AND MONTGOMERY No. 628 Montgomery. All work for steam heating system, oil burning apparatus and fireproofing of boiler room for four-story office building.
Owner.....Montgomery Block Real Estate Associates.
Superintendent...P. Barbierl.

Contractor...Petersen-James Co., 710 Larkin, San Francisco.
Filed Nov. 27, '15. Dated Nov. 27, '15.
Completed and accepted, 75%...\$2591
Usual 35 days, 25%.....864
TOTAL COST, \$3455

Bond, none. Lmt. 45 days. Forfeit, none. Specifications only filed.

FRAME DWELLING

(3415) NE NINETEENTH AVE AND Cabrillo. Two-story and basement frame dwelling.
Owner.....J. N. Lepetich, 4405 California, San Francisco.
Architect...None.

Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.
COST, \$3000

FRAME DWELLING

(3416) E NINETEENTH AVE 25 N Cabrillo. Two-story and basement frame dwelling.
Owner.....J. N. Lepetich, 4405 California, San Francisco.
Architect...None.

Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.
COST, \$2000

FRAME DWELLING

(3417) E NINETEENTH AVE 50 N Cabrillo. Two-story and basement frame dwelling.
Owner.....J. N. Lepetich, 4405 California, San Francisco.
Architect...None.

Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.
COST, \$2000

FRAME DWELLING

(3418) E NINETEENTH AVE 75 N Cabrillo. Two-story and basement frame dwelling
Owner.....J. N. Lepetich, 4405 California, San Francisco.

Architect...None.

Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.
COST, \$2000

FRAME DWELLING

(3419) E NINETEENTH AVE 125 N Cabrillo. Two-story and basement frame dwelling.
Owner.....W. H. Sale, 1015 Chestnut, San Francisco.
Architect...None.

Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.
COST, \$2000

FRAME DWELLING

(3420) E NINETEENTH AVE 100 N Cabrillo. Two-story and basement frame dwelling.
Owner.....Leigh & Schultz, 419 21st Ave., San Francisco.
Architect...None.

Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.
COST, \$2000

FRAME FLATS

(3421) S CLAY 43 W Leavenworth. Three-story and basement frame (4) flats.
Owner.....E. E. Young, 251 Kearny, San Francisco.
Architect...E. E. Loung, 251 Kearny, San Francisco.

Day's work.....COST, \$5000

DWELLING

(3422) W THIRTEENTH AVE 125 S Kirkham 25x120. All work for two-story and basement, six-room and bath dwelling.
Owner.....John O'Reilly.
Architect...None.

Contractor...J. S. Purcell, 356 Presidio Ave., San Francisco.
Filed Nov. 29, '15. Dated Nov. 29, '15.
Frame up and rafters on.....\$675
Brown coated.....675
Completed and accepted.....675
Usual 35 days.....675
TOTAL COST, \$2700

Bond, none. Lmt. 60 days. Forfeit, none. Plans and specifications filed.

PLUMBING, ETC.

(3423) N VALLEJO 103-1½ E Divisadero E 34-4½xN 137-6. Plumbing, gas fitting, etc., for two-story and basement frame residence.
Owner.....Henry R. Williar, 260 California, San Francisco.

Architect...W. H. Crim Jr., 425 Kearny San Francisco.
Contractor...Frank J. Klimm, 221 Oak, San Francisco.
Filed Nov. 29, '15. Dated Nov. 23, '15.
Roughed in.....\$399.25
Completed and accepted.....399.25
Usual 35 days.....266.50
TOTAL COST, \$1065.00

Bond, \$553. Sureties, Jeremiah Donovan and David Lyons. Lmt. 15 days after 2nd coat plaster on. Forfeit, none. Plans and specifications filed.

BRICK STORE

(3424) NW SUTTER AND MASON W 45xN 136-4. All work for two-story brick store building.
Owner.....Chas. Schlessinger, Mills Bldg., San Francisco.
Architect...Alfred H. Jacobs, 110 Sutter, San Francisco.

Contractor...O. C. Holt, 110 Jessie, S. F.
Filed Nov. 29, '15. Dated Nov. 18, '15.

Brick work completed and composition roof on.....\$5700.00
1st coat of interior plaster on.....3127.50
Completed and accepted.....3277.50
Usual 35 days.....4050.00
TOTAL, COST, \$16,200.00

Bond, \$8100. Surety New Amsterdam Casualty Co. Lmt. April 1, 1916. Forfeit, none. Plans and specifications filed.

BRANCH LIBRARY

(3425) S JERSEY 240 W Castro W 80 xS 114. Clearing, excavating, filling, grading, concrete, brick, setting terra cotta, carpentry, mill, roofing, sheet metal, furring, lathing, plastering, ornamental iron, marble, tile, terrazzo, mosaic, glazing and hardware for Noe Valley Branch S. F. Library.
Owner.....City & County of San Francisco (Board of Trustees of Public Library and Reading Rooms.)
Architect...John Reid, Jr., 1st Nat'l. Bank Bldg., S. F.

Contractor...P. A. Palmer, Monadnock Bldg., San Francisco.
Filed Nov. 29, '15. Dated Nov. 26, '15.

Concrete foundations ready to receive steel columns.....\$2000
Brick and terra cotta to main floor level.....2000
All brick and terra cotta in.....3000
Brown coated and roof on.....2500
Plastering completed and sash glazed.....2500
Completed and accepted.....3745
Usual 35 days.....5250
TOTAL COST, \$20,995

Bond, \$5243.75 in favor of owner and \$10,487.50 in favor of material men. Lmt. 66 days after steel frame is ready. Forfeit, \$10. Plans and specifications filed.

(3426) STRUCTURAL STEEL AND cast iron on above.

Contractor...Schrader Iron Works, 1247 Harrison, San Francisco.
Filed Nov. 29, '15. Dated Nov. 26, '15.
All steel & cast iron delivered.....\$1800
Steel frame completed and accepted.....643
Usual 35 days.....815
TOTAL COST, \$3258

Bond, \$1629 in favor material men and \$814.50 in favor of owner. Surety, Hartford Accident & Indemnity Co. Lmt. 7 days after foundation is ready for steel. Forfeit, \$10. Plans and specifications filed.

(3427) HEATING AND OIL BURNING apparatus on above.

Contractor...Gilley-Schmid Co., Inc., 198 Otis, San Francisco.
Filed Nov. 29, '15. Dated Nov. 26, '15.
Entire system installed.....\$400
Entire plant completed.....630
Usual 35 days.....344
TOTAL COST, \$1374

Bond, \$687. Surety, Etna Accident & Liability Co. Lmt. 10 days after ready for radiators. Forfeit, \$5. Plans and specifications filed.

(3428) PLUMBING AND GAS FITTING on above.

Contractor, J. E. O'Mara, 119 Minna, San Francisco.
Filed Nov. 23, '15. Dated Nov. 26, '15.
Toughed in \$334
Completed and accepted 200
Usual 35 days 179
TOTAL COST, \$713

Bond, \$357. Surety, Fidelity & Deposit Co. of Maryland. Limit, 10 days after ready for plumbing fixtures. Forfeit, \$5. Plans and specifications filed.

(3429) ARCHITECTURAL TERRA cotta work on above.

Contractor, Gladding-McBean Co., Crocker Bldg., S. F.
Filed Nov. 29, 15. Dated Nov. 29, 15.
Terra cotta up to 1st floor belt course \$1500
Terra cotta delivered and accepted 1575
Usual 35 days 1025
TOTAL COST, \$3100

Bond, \$2100. Surety, Hartford Accident & Indemnity Co. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

(3430) ELECTRICAL FIXTURES ON above.

Contractor, Central Elec. Co., 618 Mission, San Francisco.

Filed Nov. 29, 15. Dated Nov. 29, 15.
All conduit work in \$150
Completed and accepted 150
Usual 35 days 100
TOTAL COST, \$400

Bond, \$200. Surety, Pacific Coast Casualty Co. Limit, 3 days after building ready for finish hardware. Forfeit, \$5. Plans and specifications filed.

(3431) PAINTING ON ABOVE.

Contractor, L. J. Neal, 461 Hayes, S. F.
Filed Nov. 29, 15. Dated Nov. 29, '15.
Completed and accepted \$485
Usual 35 days 165
TOTAL COST, \$650

Bond, \$165. Surety, Pacific Coast Casualty Co. Limit, 20 days. Forfeit, \$5. Plans and specifications filed.

FRAME FLATS

(3432) S NINETEENTH 225 W Guerrero S 11xW 25. All work for two-story and basement frame flats.
Owner, Michael and Annie B. Cooper, 1462 Guerrero, S. F.
Architect, John J. Foley, 46 Kearny, San Francisco.

Contractor, John Burns, 2612 McAlister, San Francisco.
Filed Nov. 30, '15. Dated Nov. 18, '15.
Frame up \$1307
Brown coated 1307
Completed and accepted 1307
Usual 35 days 1307
TOTAL COST, \$5228

Bond, \$2614. Sureties, Jos. Burns and M. J. Connelly. Limit, 70 days. Forfeit, none. Plans and specifications filed.

COVERING TERRAZZO, ETC.

(3433) SW FOLSOM AND TWENTY-SIXTH W 170 S 150-99, m or 1 S 86 deg 75 min E 175 m or 1 N 173. Covering terrazzo, etc., for three-story and basement Class "A" school.

Owner, Board of Trustees of Cogswell Polytechnical College by Lange & Bergstrom, Sharon Bldg., S. F.
Architect, Frederick H. Meyer, Bankers' Invest. Bldg., S. F.

Contractor, P. Grassi & Co., 145 Tehama, San Francisco.

Filed Nov. 30, '15. Dated Nov. 23, '15.
On 10th of each month 75%
Usual 35 days 25%
TOTAL COST, \$1380

Bond, init, forfeit, plans and specifications, none.

FRAME FLATS

(3434) E TENTH AVE 150 N California. Two-story and basement frame (2) flats.

Owner, L. B. Ham, 1643 Lake, S. F.
Architect, None.
Day's work. COST, \$5000

FRAME FLATS

(3435) E TENTH AVE 125 N California. Two-story and basement frame (2) flats.

Owner, L. B. Ham, 1643 Lake, S. F.
Architect, None.
Day's work. COST, \$5000

FRAME DWELLING

(3436) W TWELFTH AVE 25 S California. Two-story and basement frame dwelling.

Owner, A. Harrington, 10 Judah, San Francisco.
Architect, None.
Day's work. Cost, \$4000

ALTERATIONS

(3437) NO. 269 BRANNAN. Erect fire escapes on warehouse, cut openings and install stairways.

Owner, Rosenberg Bros., Premises
Architect, None.
Day's work. COST, \$3500

FRAME DWELLING

(3438) NW ARLINGTON 153 SW Miguel. One-story and basement frame dwelling.

Owner, Wm. Miller, 49 Park, S. F.
Architect, None.
Day's work. COST, \$1950

FRAME FLATS

(3439) S MINNA 176 W Eighth. Three-story and basement frame (3) flats.

Owner, Mrs. Lillie Cook, 635 Minna, San Francisco.
Architect, None.
Day's work. COST, \$2500

ALTERATIONS

(3440) S MARKET 150 W Seventh W 75 S 165 E 75 N 150. Excavation and concrete work for alterations to American Theatre.

Owner, The Felton Co., Mills Bldg., San Francisco.
Architect, Chas. P. Weeks, Mutual Bank Bldg., S. F.

Contractor, H. L. Petersen, 62 Post, San Francisco.

Filed Dec. 1, '15. Dated Nov. 30, '15.
On 1st of each month 75%
Usual 35 days 25%
TOTAL COST, \$1761

Bond, \$2400. Surety, Pacific Coast Casualty Co. Limit, 35 days. Forfeit, none. Plans and specifications filed.

(3441) STRUCTURAL STEEL AND erection on above.

Contractor, Central Iron Works, 651 Florida, San Francisco.

Filed Dec. 1, '15. Dated Nov. 24, '15.
1/2 material delivered at site, \$1849.50
All material delivered 1849.50

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Completed and accepted..... \$149.50
Usual 35 days..... \$149.50
TOTAL COST, \$299.00
Bond, \$269.9. Sureties, A. F. Schuler
and H. G. Natenstedt. Limit, 28 days.
Forfeit, none. Plans and specifications
filed.

FRAME STORES AND APARTMENTS
(3142) SE HAYES AND OCTAVIA E
62-68S 120. Electric work for three-
story and basement frame stores and
apartments.

Owner.....Daniel M. Moran, 154 6th,
San Francisco.
Architect...Chas. J. I. Devlin, Pacific
Bldg., San Francisco.
Contractor...M. A. De Lew, 189 Steven-
son, San Francisco.

Filed Dec. 1, '15. Dated Nov. 27, '15.
On 1st and 15th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$2141
Bond, \$1050. Surety, The Aetna Acci-
dent & Liability Co. Limit, 25 days
after finished carpenter work done.
Forfeit, \$25. Plans and specifications
filed.

FRAME RESIDENCE
(3113) W TWENTY-FOURTH AVE
100 N California N 25XW 120. All
work for two-story frame residence.
Owner.....John Gray, 2252 Clement,
San Francisco.

Architect...None.
Contractor...Thos. Hamill, 5535 Geary,
San Francisco.
Filed Dec. 1, '15. Dated Nov. 30, '15.
Frame up \$700
Brown coated 700
Completed and accepted..... 700
Usual 35 days..... 700
TOTAL COST, \$2800
Bond, none. Limit, 90 days. Forfeit,
plans and specifications, none.

PAVEMENT, ETC.
(3114) ON THIRD STREET FROM
Channel to Fourth. 6000 sq. ft. new
basalt block pavement at 22c per sq.
ft.; 1120 lineal ft. basalt block gut-
ter 3 feet wide at \$1.26 per lineal ft.,
650 lineal ft. 12 in. drain pipe at \$1.25
per lineal ft.; 1 man hole for \$55 and
3 storm water inlets at \$25 each.
Owner.....Southern Pacific Co., Flood
Bldg., San Francisco.
Architect...None.
Contractor...The Pay Improvement Co.,
1801 Harrison, S. F.

Filed Dec. 1, '15. Dated Nov. 15, '15.
Payments not given.....
TOTAL COST, \$ —
Bond limit, forfeit, none. Specifica-
tions only filed.

GRANITE WORK
(3145) BLK BDED BY LARKIN, Mc-
Allister, Hyde and Fulton. Granite
work for S. F. Public Library Bldg.
Owner.....Board of Trustees of the
Public Library & Reading
Rooms of City and County
of San Francisco.

Architect...Geo. W. Kelham, Sharon
Bldg., San Francisco.
Contractor...The McGilvray-Raymond
Granite Co., 634 Townsend,
San Francisco.

Filed Dec. 2, '15. Dated Nov. 29, '15.
On 15th of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$320,869

Bond, \$87,150. Sureties, Robt. Dewar
and John D. McGilvray. Limit, 309
days. Forfeit, \$100. Plans and speci-
fications filed.

MARBLE AND MOSAIC WORK
(3116) S SUTTER 115-9 E Powell S
137-6XE 45-6. Marble and mosaic
work for eight-story Class "A" office
building.

Owner.....Pacific Gas & Electric Co.,
415 Sutter, San Francisco.
Architect...Edgar A. Mathews, 251
Post, San Francisco.
Contractor...American Marble & Mosaic
Co., 25 Columbus Ave, S. F.

Filed Dec. 2, '15. Dated Nov. 24, '15.
1/2 stair marble in place and 1/2
of all marble above 1st floor
done \$1040
Other 1/2 done and all stair mar-
ble in 1040
Wainscoting, base, pilasters col-
umns, etc., on 1st floor in place 1638
Counter and screen work on 1st
floor done 1725
Completed and accepted..... 1005
Usual 35 days..... 2150
TOTAL COST, \$5593

Bond, \$1500. Surety, The Aetna Acci-
dent & Liability Co. Limit, due dili-
gence. Forfeit, none. Plans and speci-
fications filed.

FRAME RESIDENCE
(3147) SW LOCUST & WASHINGTON
W 45X 100. All work for frame
residence.

Owner.....John A. Buck, Jr., 503 Mar-
ket, San Francisco.
Architect...G. A. Applegarth, Claus
Spreckels Bldg., S. F.
Contractor...P. A. Palmer, Monadnock
Bldg., San Francisco.
Filed Dec. 2, '15. Dated Nov. 23, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$20,900
Bond, \$10,150. Surety, New England
Equitable Insurance Co. Limit, for-
feit, none. Plans and specifications filed

FRAME APARTMENTS
(3148) W CHURCH 86 N 26th 28-6X
80. All work except plastering,
finish hardware, gas and electric fix-
tures and window shades and cut and
fancy glass for three-story frame
apartments.

Owner.....G. Muehle, 260 9th, S. F.
Architect...None.
Contractor...A. Ahlbach.
Filed Dec. 2, '15. Dated Nov. 29, '15.
Frame up \$1925.25
Brown coated 1925.25
Completed and accepted..... 1925.25
Usual 35 days..... 1925.25
TOTAL COST, \$7600.00

Bond, \$3850. Sureties, Jos. R. Castro
and Wm. J. Ahlbach. Limit, 100 days.
Forfeit, none. Plans and specifications
filed.

FRAME DWELLING
(3149) N STAPLES 200 E Detroit One
and one-half-story & basement frame
dwelling.

Owner.....J. H. Plattner, 300 Russ
Bldg., San Francisco.
Architect...None.
Day's work..... COST, \$1500

FRAME DWELLING
(3150) N STAPLES 225 E Detroit One
and one-half-story & basement frame
dwelling.

Owner.....J. H. Plattner, 300 Russ
Bldg., San Francisco.
Architect...None.
Day's work..... COST, \$1500

FRAME DWELLING
(3151) N STAPLES 250 E Detroit One
and one-half-story & basement frame
dwelling

Owner.....J. H. Plattner, 300 Russ
Bldg., San Francisco.
Architect...None.
Day's work..... COST, \$1500

FRAME DWELLING
(3152) N STAPLES 275 E Detroit One
and one-half-story & basement frame
dwelling.

Owner.....J. H. Plattner, 300 Russ
Bldg., San Francisco.
Architect...None.
Day's work..... COST, \$1500

ALTERATIONS
(3153) NOS. 276-86 EMBARCADERO.
Raise and underpin and concrete floor
Owner.....A. W. Scott, 10 California,
San Francisco.

Architect...None.
Contractor...H. A. Dilks, 58 Faxon
Ave., San Francisco.
TOTAL COST, \$1000

FRAME FLATS
(3154) S TWENTY-FOURTH 75 W
Hampshire. Two-story and base-
ment frame (1) flats.

Owner.....James J. Conway, 2725
24th, San Francisco.
Architect...None.
Contractor...Mager Bros., 110 Jessie
San Francisco.

COST, \$2150

ALTERATIONS
(3155) NO. 310 STOCKTON. Alter
hotel lobby.

Owner.....Sierra Investment Co.
Architect...Macdonald & Macdonald,
Holbrook Bldg., S. F.

Day's work..... COST, \$1500

FRAME APARTMENTS
(3156) SE D L RES& FIFTEENTH
Three story and basement frame 40
apartments.

Owner.....Christoph Wienrank, 821
Castro, San Francisco.
Architect...Chas. Frye and O. R.
Thayer, 20 Montgomery,
San Francisco.

Contractor...L. A. Hinson, 180 Jessie,
San Francisco.

COST, \$3000

ALTERATIONS
(3158) NO. 1921 PACIFIC Cutting off
old 14th addition new 3000 sq. ft.
interior room and making beams

Owner.....P. F. Rathjens, 1331 Pacific,
San Francisco.
Architect...None.
Contractor...Munster & Hornholdt, 1530
Broderick, San Francisco.
COST, \$4000

FRAME FLATS

(3459) W TAYLOR 87-6 S Lombard.
Three-story and basement frame (3)
flats.
Owner.....L. Cavagnaro Co., Prem.
Architect...L. Traverso, 854 Union,
San Francisco.
Day's work. COST, \$6000

FRAME FLATS

(3460) W TAYLOR 62-6 S Lombard
Three-story and basement frame (2)
flats.
Owner.....L. Cavagnaro Co., Prem.
Architect...L. Traverso, 854 Union,
San Francisco.
Day's work. COST, \$6000

FRAME STORAGE ROOM

(3461) NW DIVISION AND TENTH.
Two one-story frame storage rooms.
Owner.....N. Clark & Sons, 116 Na-
toma, San Francisco.
Architect...None.
Day's work. COST, \$1500

ADDITION

(3462) NE BROADWAY & WEBSTER.
Add hot house and porch.
Owner.....Mrs. Philip Lamsdale, Prem
Architect...John R. Hamilton, Kohl
Bldg., San Francisco.
Day's work. COST, \$425

ALTERATIONS

(3463) N CASELLA 175 W Clover.
Alter and add to dwelling.
Owner.....Mrs. Wm. Stohman, 210
Douglass, S. F.
Architect...None.
Contractor...Chas. Deming, 653 Duncan
San Francisco.
COST, \$400

ALTERATIONS

(3464) NO. 126 OAK. Alter and add
to dwelling.
Owner.....J. B. Campbell, 1827 Mc-
Allister, San Francisco.
Architect...None.
Day's work. COST, \$500

ALTERATIONS

(3465) NO. 2169 BROADWAY. Alter
vestibule of dwelling.
Owner.....Irwin J. Wiel, Kohl Bldg.,
San Francisco.
Architect...None.
Contractor...Dreyfus Bros., 324 Cali-
fornia, San Francisco.
COST, \$500

FRAME DWELLING

(3466) S LIBERTY 205 W Dolores.
One-story frame dwelling.
Owner.....H. L. Brandt, 229 Liberty,
San Francisco.
Architect...None.
Day's work. COST, \$400

FRAME APARTMENTS

(3467) S TWENTY-THIRD 81-8 W
Howard S 27 E 3-8 S 58 N 44-6 N 85
E 40-10. All work for three-story
and basement frame apartments.
Owner.....J. H. Kruse, 23rd and Pol-
son, San Francisco.

Architect...Jos. M. Geary, 2581 Post.
San Francisco.
Contractor...Joel Johnson, 110 Jessie,
San Francisco.

Filed Dec. 3, '15. Dated Dec. 1, '15.
Frame up\$3116.20
Brown coated 3116.20
Standing finish on 3116.20
Completed 3116.20
Usual 35 days 3116.20
TOTAL COST, \$15,581.00

Bond, \$7790.50. Surety, Pacific Coast
Casualty Co. Limit, as soon as possi-
ble. Forfeit, none. Plans and speci-
fications filed.

FRAME DWELLING

(3468) E CLAYTON 875 m or 1 S Fred-
erick S 30xE 90 m or 1. All work
for six-room frame dwelling.
Owner.....Henry Jacob.
Architect...None.
Contractor...Jas. Welsh.

Filed Dec. 3, '15. Dated Nov. 3, '15.
Rafters on\$1025
Brown coated 1025
Completed 1025
Usual 5 days 1025
TOTAL COST, \$4100

Bond, none. Limit, 90 days after Nov.
4. Forfeit, none. Plans and specifica-
tions filed.

STORES AND APARTMENTS

(3469) S EDDY 137-6 W Jones. All
work for three-story and basement
Class "C" stores and apartments.
Owner.....Alvin C. and Estelle R.
Schig, 32 Powell, S. F.
Architect...Milton Lichtenstein, 111
Ellis, San Francisco.
Contractor...Monson Bros., 1907 Bryant,
San Francisco.

Filed Dec. 3, '15. Dated Dec. 2, '15.
Roof on\$3600
Brown coated 3500
Completed and accepted 2825
Usual 35 days 3600
TOTAL COST, \$13,525

Bond, \$6800. Surety New England
Casualty Co. Limit, March 2, 1916.
Forfeit, none. Plans and specifications
filed.

NOVEMBER BUILDING TOTALS.

The following is a report of Build-
ing Operations for the month of No-
vember, 1915, as shown by the records
of the Bureau of Building Inspection of
the Board of Public Works:

Class	No. of Bldgs.	Amount
"A"	2	\$ 85,378
"C"	13	278,250
Frames	140	524,183
Alterations	342	242,677
Harbor Commission	1	112,560
Public Buildings	1	89,000

Total 499 \$1,332,053
For the month of November, 1914, the
totals were estimated at \$988,587.

LEASE.

Dec. 2, 1915—E VALENCIA 135 S 15th
S 75xE 80. Richard J Glazier to C
J McDonald. 10 years. \$23,400.
Nov. 29, 1915—NO. 1392 CHURCH. Jno.
Murray to P McMahon. 5 years. \$10
per month.
Nov. 29, 1915—N SUTTER 160 E Polk
No. 1156 Sutter. Alicia McCone and
Mary M McDonald to Jno Wertschnig

and Frank Schindler (as Wertschnig
& Schindler. 3 years 1 month. \$7400
Nov. 29, 1915—NO. 293 DIVISADERO.
Pio Taminelli to Martin Winther, 2
years. \$360.

Dec. 3, 1915—SE TAYLOR & VALLEJO
E 82-6XS 67-6. Eliza and Eli T Shep-
pard to Jessie S Westfall. 5 years.
\$75 per month.

Dec. 1, 1915—NO. 2301 JACKSON S line
bet. Webster and Fillmore; No. 2322
Webster SW Cor. Jackson. S J, E D
and A K Tichenor to S Coturri and
A Carretti. 5 years. \$30 per month
and option to renew.

ASSIGNMENT OF LIEN.

SAN FRANCISCO COUNTY.

Dec. 1, 1915—N TWENTIETH 75 E
Collingwood E 25XN 75. R A Hal-
gesson and S R Brower to H Baier

NOTICE OF NON-RESPONSIBILITY.

Nov. 27, 1915—SE NAPLES 100 SW
Frame Ave SW 37-6XE 100; Ptn
Lot 1 Blk 58, Excel Ltd As'n. Louis
Levy as to improvements on leased
property

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED

Nov. 22, 1915—E TWENTY-THIRD
Ave 125 S "A." Emil E Johnson to
whom it may concern.....Nov. 6, 1915
Nov. 27, 1915—N RUTLEDGE 105 E
Alabama E 25XN 100 Ptn Lots 204
and 205 P. V. William J and Cath-
erine Foley to Wm G McDiarmid
.....Nov. 26, 1915
Nov. 27, 1915—NW VIENNA 100 NE
Persia Ave NE 25XNW 100 Blk 35
Excel Hd. William Joseph and
Jessie Anna Bowler to Louis J
Roberts.....Nov. 20, 1915
Nov. 27, 1915—LOT 28 BLK 9, Crocker
Amazon Tract Sub 1, John Bjork-
man to whom it may concern.....
.....Nov. 27, 1915

Nov. 27, 1915—W FORTY-THIRD
Ave 156 S Cabrillo S 32x120. Thos
or Thomas Scoble to whom it may
concern.....Nov. 20, 1915
Nov. 27, 1915—W FORTY-THIRD
Ave 188 S Cabrillo S 32x120. Thos
or Thomas Scoble to whom it may
concern.....Nov. 20, 1915
Nov. 27, 1915—W DELMAR 185 S
Waller 25x86-3. Anton Wipfler to
H C Mangles.....Nov. 24, 1915
Nov. 29, 1915—N WASHINGTON 137-6
E Laguna E 137-6x255-4½. Mary
Louise Phelan to Wm F Wilson Co
.....Nov. 29, 1915
Nov. 29, 1915—N WASHINGTON 137-6
W Octavia W 137-6x255-4½. Mary
Louise Phelan to Floodberg & Mc-
CafferyNov. 22, 1915
Nov. 29, 1915—COMG. 83.4 W 17TH
Ave; No. 5521 California. Meyer
and Esther Sirbu to G Sangiacomo
.....Nov. 29, 1915
Nov. 29, 1915—S MARKET & THIRD
SW 75XSE 70. City Investment Co
to The McGilvray Stone Co.....
.....Nov. 26, 1915
Nov. 30, 1915—N HAIGHT 60 W La-
guna N 137-6xE 60. The Helpers

of the Holy Souls to McCarthy & Walker.....Nov. 27, 1915
Nov. 30, 1915—W SEVENTH AVE 100 S California S 27-6xW 120. Eda Tiedemann to S J Sterner. Nov. 27, 1915
Nov. 30, 1915—SW PAGE & SCOTT W 100xS 37-6. Hlout Realty Co to Michael Brueck, Neil H Dunn and Henry Kunst.....Nov. 23, 1915
Nov. 30, 1915—S NINETEENTH 200 W Guerrero W 25xS 114. Jos Giblin to Jno Burns.....Nov. 12, 1915
Nov. 30, 1915—W JUPITER 100 S Thornton Ave S 25xW 100. John and Annie Morawski to Wm H Grahn.....Nov. 26, 1915
Dec. 1, 1915—S SACRAMENTO 98-9 W Jones W 30xS 97-6. James Cantley to E J Montgomery.....Dec. 1, 1915
Dec. 1, 1915—E BRYANT 87-3½ N Army N 25xW 100. Clarence W Hamilton to Jno B Woolfrey.....Nov. 26, 1915
Dec. 1, 1915—W MISSION 163-6 N 17th N 23-6xW 98. Frank M Scoonover to A D Nelson.....Dec. 1, 1915
Dec. 1, 1915—E SEVENTEENTH AVE 75 N Balboa N 25xW 82-6. W Bahrs and J B Spaeth to whom it may concern.....Dec. 1, 1915
Dec. 1, 1915—SW DIVISION AND Kansas S 260 W 200 N 191 NE 57. Jno G Rapp to Ahlbach & Mayer.....Nov. 30, 1915
Dec. 1, 1915—SW DIVISION AND Kansas S 260 W 200 N 191 NE to Division E 57. Jno G Rapp to R A Chisholm, Nov. 30: California Elec Constr Co.....Nov. 30, 1915
Dec. 1, 1915—S SACRAMENTO 100 E Presidio Ave E 25xS 132-7½. N L Nielsen to J Harold.....Nov. 1, 1915
Dec. 2, 1915—NW JONES AND Sacramento W 100xN 50: Grace Tobin Payne and Ethel L Payne to Geo N Zaro, J Marconi and F J Heegle & Co.....Nov. 25, 1915
Dec. 2, 1915—S MARKET 45-10 W Spear. Max Sommer to Frank A Wikkie.....Dec. 1, 1915
Dec. 2, 1915—E EIGHTEENTH AVE 335-6 N Cabrillo N 47-4xW 120. N J Nelson to whom it may concern.....Nov. 27, 1915
Dec. 2, 1915—E SIXTEENTH AVE 225 S Anza S 25xW 127-6. S J Giebel to Gus E Thunberg. Nov. 20, 1915
Dec. 2, 1915—W FOURTEENTH AVE 205 S Geary. Celesti M Ousset to Geo W McKay & Co.....Nov. 13, 1915
Dec. 2, 1915—N SEVENTEENTH 30 E Church W 20 to E Church 82-4 S 87½ deg E to a pt 30 E Church S to beg. H D Junck to Ludwig R G Koeling.....Dec. 2, 1915
Dec. 2, 1915—S IRVING 60 E 9th Ave E 35x7½. Olga Zeller to William Lemser and L A Piske.....Dec. 2, 1915
Dec. 2, 1915—NW WHITING AND Grant Ave: 16 on Grant Ave and 70 on Whiting. T M and Jane Dixon to C Rosina.....Nov. 30, 1915
Dec. 3, 1915—Sacramento 102½ W Baker, 35 feet frontage. Charles E Reinhart to Alex Martinette.....Dec. 2, 1915
Dec. 3, 1915—W EIGHTEENTH AVE 200 N Balboa. H W Johns for Johns Bros (H W and P G Johns) to whom it may concern.....Dec. 3, 1915
Dec. 3, 1915—E AUBURN 92-3 S Pacific S 23-6xW 50. L Ravan to G B Pasqualett and G Trevia.....Dec. 2, 1915
Dec. 3, 1915—S TURK 47-6 E Hyde

E 60xS 102-6. O A Craemer to whom it may concern.....Dec. 3, 1915
Dec. 3, 1915—E SIXTH AVE 125 N Geary N 50x120. Marie Sterner to whom it may concern.....Dec. 3, 1915
Dec. 3, 1915—S CALIFORNIA 137-6 E Jones E 137-6xS 137-6. Towne Realty Co to S Lagomarsino.....Nov. 26, 1915
Dec. 3, 1915—W SCOTT 77-8¼ N Clay N 25xW 90. Harry F Davis to Wm Larsen.....Dec. 2, 1915

LIENS FILED San Francisco

Nov. 26, 1915—N FRANCISCO 135 W Larkin. Acme Lumber Co vs A McEwen and F Hollberg Reimers.....\$332.53
Nov. 27, 1915—W FORTY-FIFTH Ave 225 S Irving S 25xW 120. M Stulsaft Co vs Chas M Nutting, Fred Warden and Arthur J Landtborn.....\$26.64
Dec. 3, 1915—SE "J" & ELEVENTH Ave S 30xW 75. Schroder Bros vs M A McCann and H T McCann.....\$424.32
Dec. 3, 1915—S JUDAH (J) 75 E 11th Ave E 25xS 90. Schroder Bros vs M A McCann and Josephine M Thayer.....\$441.25
Dec. 3, 1915—E ELEVENTH AVE 60 S Judah (J) S 29xW 75. Schroder Bros vs M A and H T McCann.....\$446.58
Dec. 3, 1915—E ELEVENTH AVE 30 S Judah (J) S 30xW 75. Schroder Bros vs M A McCann and E L Darmon.....\$531.25
Dec. 3, 1915—N SUNNYSIDE AVE 175 E Acadia E 25xN 100. J H Kruse vs R F Marcus.....\$179.70

Building Contracts Awarded Oakland.

2544	Hart	Hart	1600
2545	Werum	Brown	18000
2546	Millen	Millen	1700
2547	Norris	Norris	2500
2549	Conant	Conant	20000
2550	Gillespie	Pendrey	2500
2553	Alexander	Doell	2497
2554	Steinmetz	Smith	1500
2555	Jewell	Jewell	400
2556	Blackman	Francis	500
2557	Clock	Carlson	2800
2558	Goss	Goss	500
2559	Nielsen	Patrick	1750
2560	Nick	Nick	400
2561	Dice	Dice	1500
2563	Bischoff	Bischoff	2500
2564	Elks	Kelly	3500
2565	Bell	Stewart	2500
2566	Creighton	Woolley	3000
2567	Bullock	Bullock	1750
2568	Same	Same	2500
2570	Trimlett	Trimlett	2000
2571	Cripe	Gohalet	450
2572	Swalley	Swalley	2500
2574	Shrdd.	Wheat.	4094
2576	Commatto	Lockhardt	800
2577	Berger	Robinson	3000
2578	McDonald	Owner	3600
2579	Ness	Wendt	2500
2580	Carlson	Wade	1000
2581	Williams	Williams	1700
2582	O'Keefe	Chambers	2500
2583	Sims	Sims	3000
2588	Scheyer	Stewart	1650
2589	S P Co.	Harris	325
2594	Dorgan	Corbett	3000
2595	Woodburn	Woodburn	3000
2596	Luckenback	Armstrong	1374
2597	Heeseman	Central Inn	17120
2598	Same	Van Sant	45600
2599	Jackson	Central Inn	3700

DWELLING
(2544) E THIRTY-EIGHTH AVE 155 N Kanning, Oakland. One-story 5-room dwelling.

Owner Chas. D. Hart, 615 22nd, Oakland.
Architect None.
Day's work. COST, \$1600
BRICK THEATRE
(2545) N FOOTHILL BLVD. 125 W 35th Ave., Oakland. One-story brick theatre.
Owner.....A. E. Werum, 3498 Boulevard, Oakland.
Architect.....M. L. Newsom, 1748 Broadway, Oakland.
Contractor.....W. C. Brown, 1624 64th Ave., Oakland.
COST, \$18,000

DWELLING
(2546) W OPAL 145 S 42nd, Oakland. One-story 5-room dwelling.
Owner.....Jalmar Millen, 57½ Broadway, Oakland.
Architect.....None.
Day's work. COST, \$1700

DWELLING
(2547) SW ARLINGTON AVE AND Los Angeles, Oakland. One-story 5-room dwelling.
Owner.....Justus Norris, 2828 Richmond Ave., Oakland.
Architect.....None.
Day's work. COST, \$2500

APARTMENTS
(2549) N TWENTY-FIFTH 250 W Telegraph, Oakland. Three-story 59 room apartments.
Owner.....John Conant, 542 25th, Okd
Architect.....None.
Day's work. COST, \$20,000

DWELLING
(2550) N RUTH AVE 100 W 55th Ave., Oakland. One-story 5-room dwlg.
Owner.....W. M. Gillespie, 2310 Howard, San Francisco.
Architect.....None.
Contractor.....A. F. Pendrey, 239 Bartlett San Francisco.
COST, \$2500

CLASS "C" DWELLING
(2552) LOTS 4 AND 5 Map Craig Property and Lots 15 and 17 and W ½ Lot 19, Piedmont Tract, Piedmont. Plumbing, except sewer work in the yard or under the house for one-story Class "C" dwelling.
Owner.....Juliette Alexander, 1006 16th, Oakland.
Architect.....C. W. Dickey, Central Bank Bldg., Oakland.
Contractor.....Carl Doell, 467 21st, Okd.
Filed Nov. 29, '15. Dated Nov. 24, '15.
1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$2497
Bond, \$..... Sureties, R. W. Kinney and G. A. Scott. Limit, as soon as possible. Forfeit, none. Plans and specifications filed.

DWELLING
(2554) NO. 3871 LOMA VISTA, Oakland. One-story 5-room dwelling.
Owner.....H. Steinmetz, 13th and Broadway, Oakland.
Architect.....None.
Contractor.....C. M. Smith, 3106 35th Ave., Oakland.
COST, \$1500

ADDITION
(2555) NO. 8724 "B," Oakland. Addition.

Owner.....C. O. Jewell, Premises.
 Architect...None.
 Day's work. COST, \$400

ALTERATIONS
 (2556) S E-FIFTEENTH 70 E 41st
 Ave., Oakland. Alterations.
 Owner.....E. L. Blackman, Premises.
 Architect...None.
 Contractor...Francis & Omo, 566 Hobart, Oakland.
 COST, \$500

DWELLING
 (2557) E TERRACE 400 S Mather,
 Oakland. Two-story 8-room dwelling
 Owner.....M. E. Clock, 958 14th, Okd.
 Architect...None.
 Contractor...H. Carlson, 2012 22nd Ave.,
 Oakland.
 COST, \$2800

DWELLING
 (2558) W RUBY 225 S 40th, Oakland.
 One-story 4-room dwelling.
 Owner.....F. E. Goss, 3923 Ruby, Okd.
 Architect...None.
 Day's work. COST, \$500

DWELLING
 (2559) N NEILSEN 209 S Sonoma, Albany.
 One-story 5-room dwelling.
 Owner.....Neilson Security & Investment Co., Albany.
 Architect...None.
 Contractor...B. F. Patrick.
 COST, \$1750

ALTERATIONS
 (2560) W EVELYN 250 N Washington
 Albany. Alterations.
 Owner.....B. Nick.
 Architect...None.
 Day's work. COST, \$400

DWELLING
 (2561) W PALOME 242 S Main, Albany.
 One-story 5-room dwelling.
 Owner.....B. A. Dice.
 Architect...None.
 Contractor...J. M. Dice.
 COST, \$1500

(2563) S SIXTY-SECOND 220 E Colby
 Oakland. One and one-half-story 7-room dwelling.
 Owner.....John A. Bischoff, 6045 Harwood Ave., Oakland.
 Architect...None.
 Day's work. COST, \$2500

ALTERATIONS
 (2564) NO. 416 FOURTEENTH, Oakland. Alter real estate offices to store
 Owner.....Elks' Bldg. Ass'n., Prem.
 Architect...John H. Powers, 460 Montgomery, San Francisco.
 Contractor...R. E. Kelly, 165 Hancock, S. F.
 COST, \$2500

DWELLING
 (2566) E SOUTH COURT 175 N Pleasant Valley Ave., Oakland. One-story six-room dwelling.
 Owner.....Glenn R. Bell, 8 Fairview Ave., Piedmont.
 Architect...None.
 Contractor...B. A. Stewart & Fairview Ave., Piedmont.
 COST, \$2500

FRAME DWELLING
 (2566) N BOWIE, bet. Grand Ave and Manor Drive, Piedmont. One-story frame dwelling.

Owner.....W. H. Creighton, 466 Stow Ave., Oakland.
 Architect...None.
 Contractor...Woolley & Rich, 3868 Lusk, Oakland.
 COST, \$3000

FRAME DWELLING
 (2567) S HOWARD AVE., Piedmont. One-story 5-room frame dwelling.
 Owner.....O. M. Bullock, 1420 Broadway, Oakland.
 Architect...None.
 Day's work. COST, \$1750

FRAME DWELLING
 (2568) S MAGNOLIA AVE — W El Cerrito Ave., Piedmont. Two-story frame dwelling.
 Owner.....O. M. Bullock, 1420 Broadway, Oakland.
 Architect...None.
 Day's work. COST, \$2500

DWELLING
 (2570) NW BROOKDALE AVE AND Short, Oakland. One-story 6-room dwelling.
 Owner.....Robt. Trimlett, 4202 Agua Vista, Oakland.
 Architect...None.
 Day's work. COST, \$2000

DWELLING
 (2571) N E-SEVENTEENTH 60 E 40th Ave., Oakland. One-story 3-room dwelling.
 Owner.....Amanda Cripe, 70 Park Place, San Francisco.
 Architect...None.
 Contractor...Chas Gobalet, 4029 E-17th, Oakland.
 COST, \$450

DWELLING
 (2572) W ARBOR AVE 40 N Hudson, Oakland. One and one-half-story 6-room dwelling.
 Owner.....H. M. Swalley, 710 Walker Ave., Oakland.
 Architect...None.
 Day's work. COST, \$2500

TANK, ETC.
 (2574) LOTS 5 TO 24 INCL. and Ptn Lots 4, 5, 6, 7, and 25 to 31, incl. Map R P McMullen's Sbdvn of Blk 576, Oakland. All work for 60,000 gal. gravity tank and frame and erection of risers, (pipes supplied by owner)
 Owner.....Pacific Coast Shredded Wheat Co.
 Architect...Hobart & Cheney, Crocker Bldg., San Francisco.
 Contractor...Pittsburgh-De Moines Steel Company.
 Filed Dec. 1, '15. Dated Nov. 8, '15.
 Monthly payments of..... 75%
 Usual 35 days..... 25%
 TOTAL COST, \$4094
 Bond, \$2047. Surety, Globe Indemnity Co. Limit, 120 days. Forfeit, \$10. Plans and specifications filed.

DWELLING
 (2576) W NINETY-SECOND AVE 150 S "D", Oakland. One-story 4-room dwelling.
 Owner.....A. Commatto, 1118 92nd Ave., Oakland.
 Architect...None.
 Contractor...A. G. Lockhardt 1102 92d Ave., Oakland.
 COST, \$800

ALTERATIONS
 (2577) NO. 708 THIRTY-SECOND, Oakland. Alterations.
 Owner.....Elias Berger, Premises.
 Architect...None.
 Contractor...J. Robinson, 2201 Myrtle, Oakland.
 COST, \$500

BRICK BUILDING
 (2578) E BROADWAY 320 N Orchard, Oakland. One-story brick auto sales building.
 Owner.....A. S. Macdonald, Mills Bldg San Francisco.
 Architect...A. W. Pattiani, Merchants National Bank Bldg., S. F.
 Day's work. COST, \$3600

DWELLING
 (2579) S FORTY-FIRST 180 W Lusk, Oakland. One-story 6-room dwlg.
 Owner.....A. E. Ness, 879 41st, Okd.
 Architect...None.
 Contractor...Geo. H. Wendt, 2425 Le Conte Ave., Berkeley.
 COST, \$2500

ALTERATIONS
 (2580) NO. 1017 SIXTIETH, Oakland. Alterations.
 Owner.....C. Carlson Premises.
 Architect...None.
 Contractor...Wade & Carlson, 245 Waller, San Francisco.
 COST, \$1000

DWELLING
 (2581) N EDGERLEY 200 W Seventh Ave., Oakland. One-story five-room dwelling.
 Owner.....Ross Williams 4606 Edgerley, Oakland.
 Architect...None.
 Day's work. COST, \$1700

DWELLING
 (2582) E EIGHTH AVE 110 S E-24th, Oakland. One-story 5-room dwlg.
 Owner.....John M. O'Keefe, 2232 8th Ave., Oakland.
 Architect...None.
 Contractor...J. F. Chambers, Plaza Bldg., Oakland.
 COST, \$2500

DWELLING
 (2583) E FAIRFAX AVE 250 N Ygnacio, Oakland. One and one-half story 8-room dwelling.
 Owner.....Wm. H. Sims, 1926 64th Ave., Oakland.
 Architect...None.
 Day's work. COST, \$3000

STORE AND DWELLING
 (2588) NW TWENTY-FOURTH AND Market, Oakland. All work for one-story store and dwelling.
 Owner.....S. Scheyer.
 Architect...Wm. Spivock.
 Contractor...J. L. Stewart and G. A. Webb.
 Filed Dec. 2, '15. Dated Dec. 2, '15.
 Roof on 1/4
 Plumbing and wiring roughed in 1/4
 Completed and accepted..... 1/4
 Usual 35 days..... 1/4
 TOTAL COST, \$1660
 Bond, \$830. Surety, E. J. Burns. Limit, forfeit, none. Plans and specifications filed.

REPAIRS

(2589) WEST OAKLAND YARDS, Oakland. Repairing roofs on planing mills.

Owner.....Southern Pacific Co., Flood Bldg., San Francisco.

Architect...None.

Contractor...B. S. Harris.

Filed Dec. 2, '15. Dated Dec. 2, '15.

15 days after completed and accepted.....\$200

Usual 35 days after completed

and accepted.....125

TOTAL COST, \$325

Bond, none. Limit, 30 days. Forfeit.

Plans and specifications, none.

ALTERATIONS

(2594) NO. 474 TWELFTH, Oakland.

Alterations.

Owner.....T. Dorgan & Co., 472 12th, Oakland.

Architect...None.

Contractor...Corbett & Bayless, 1110 Franklin, Oakland.

COST, \$1000

DWELLING

(2595) E BROADWAY 40 S Prospect

Drive, Oakland. Two-story 7-room

dwelling.

Owner.....Paul E. Woodburn, 3965

Greenwood Ave., Oakland.

Architect...None.

Day's work. COST, \$3000

CLASS "C" WAREHOUSE

(2596) SE SIXTH AND WEST 75x100,

Oakland. All work for two-story

Class "C" warehouse.

Owner.....Mary J. Luckenback, Crag-

mont, Berkeley.

Architect...C. W. Dickey, Central Bank

Bldg., Oakland.

Contractor...Geo. Armstrong, 1639

Alcatraz Ave., Berkeley.

Filed Dec. 3, '15. Dated Nov. 30, '15.

1st and 15th of each month.... 75%

Usual 35 days..... 25%

TOTAL COST, \$13,784

Bond, none. Limit, 90 days. Forfeit.

Plans only filed.

STEEL FRAME

(2599) W CLAY, bet. 13th and 14th,

Oakland. All work for steel frame

for mezzanine floor.

Owner.....Jackson Furniture Co.,

Premises.

Architect...Carl Werner, Phelan Bldg.,

San Francisco.

Contractor...Central Iron Works, Inc.,

651 Florida, San Francisco.

Filed Dec. 3, '15. Dated Nov. 24, '15.

Completed.....\$2775

Usual 35 days..... 925

TOTAL COST, \$3700

Bond, none. Limit, 60 days. Forfeit.

Plans and specifications filed.

Building Contracts Awarded

Berkeley.

2548 Heywood.....Texdahl 15348

2551 Allison.....Allison 1000

2552 Cleveland.....Kollmer 500

2562 Newton.....Stanage 1000

2569 Werner.....Werner 1500

2573 Gushee.....Van Sant 1580

2590 Pfirang.....Pfifrang 2550

2591 Baker.....Baker 1000

2592 Krebs.....Krebs 450

2593 Gloer.....Glover 1500

STORE AND APARTMENTS

(2548) SE UNIVERSITY AVE AND

Grove, Berkeley. All work except

heating and finish hardware for two-story and basement store and apartments.

Owner.....Wm. H. Heywood, 1401 Walnut, Berkeley.

Architect...James W. Plachek, Acheson Bldg., Berkeley.

Contractor...C. Texdahl, 3035 Harper, Berkeley.

Filed Nov. 29, '15. Dated Nov. 23, '15.

Frame up.....\$3000

Plumbing and electric work

roughed in.....1000

Plastered.....3000

Completed and accepted.....4000

Usual 35 days.....4348

TOTAL COST, \$15,348

Bond, \$7674. Surety, Pacific Coast

Casualty Co. Limit, 110 days. Forfeit.

Plans and specifications filed.

DWELLING

(2551) N DERBY 340 E Mabel, Ber-

keley. One-story 3-room dwelling.

Owner.....C. H. Allison, 34 Brook-

side, Berkeley.

Architect...None.

Day's work. COST, \$1000

GARAGE

(2552) NO. 2512 CEDAR, Berkeley.

Garage.

Owner.....N. Cleveland, Premises.

Architect...None.

Contractor...Jacob Kollmer, 2817 Stuart

Berkeley.

COST, \$500

ALTERATIONS

(2562) NO. 2225 DWIGHT WAY, Ber-

keley. Alterations.

Owner.....E. E. Newton, 6052 Ross,

Berkeley.

Architect...L. F. Hyde, 2745 26th Ave.,

Oakland.

Contractor...D. W. Stanage, 896 53th,

Oakland.

COST, \$1000

DWELLING

(2569) S BLAKE 210 W Mathews, Ber-

keley. One-story 4-room dwelling.

Owner.....Chas. A. Werner, 2416 10th,

Berkeley.

Architect...None.

Day's work. COST, \$1500

FRAME RESIDENCE

(2573) NE DWIGHT WAY & PROS-

pect N 100 E 100 S 105 W 100.3, Ber-

keley. Plumbing work for two-story

basement and attic frame residence.

Owner.....Horace Gushee Co., Bkly.

Architect...Bakewell & Brown, 251

Kearny, San Francisco.

Contractor...Van Sant-Houghton Co.,

503 Market, San Francisco.

Filed Dec. 1, '15. Dated Nov. 17, '15.

On 15th of each month..... 75%

Usual 35 days..... 25%

TOTAL COST, \$1580

Bond, \$790. Surety, New England

Equitable Insurance Co. Limit, May 1,

1916. Forfeit, \$10. Plans and speci-

fications filed.

DWELLING

(2590) S DELAWARE 120 W Califor-

nia, Berkeley. One-story 5-room

dwelling.

Owner.....C. J. Pfifrang, 5487 Clare-

mont Ave., Berkeley.

Architect...None.

Day's work. COST, \$2250

DWELLING

(2591) N ASHBY AVE 71-6 E Sacra-

mento. One-story 4-room dwelling.

Owner.....Wm. J. Baker, 1590 Allee,

Oakland.

Architect...None.

Day's work. COST, \$1000

ALTERATIONS

(2592) E TENTH 70 S Fardee, Ber-

keley. Alterations.

Owner.....C. Krebs.

Architect...None.

Contractor...C. M. Lee, 1526 Morton,

Alameda.

COST, \$450

DWELLING

(2593) N WEBSTER 50 W Regent,

Berkeley. Two-story 5-room dwlg.

Owner.....D. S. Glover, 2445 Webster

Berkeley.

Architect...None.

Day's work. COST, \$1500

Building Contracts Awarded

Alameda

No.	Owner	Contractor	Amt.
2575	Townsend	Nichols	1250
2584	Gutleben	Gutleben	400
2585	Strang	Strang	3000
2586	Elvin	Elvin	1500
2587	Cole	Kopf	2500

DWELLING

(2575) NO. 2140 CLEMENT AVE., Ala-

meda. One-story 4-room dwelling.

Owner.....H. C. Townsend, 2167 San

Antonio Ave., Alameda.

Architect...None.

Contractor...W. E. Nichols, 2152 San

Antonio Ave., Alameda.

COST, \$1250

FORTABLE HOUSE

(2584) 3245 CENTRAL AVE, Alameda

Portable house.

Owner.....J. S. Gutleben, Municipal

Boathouse, Oakland.

Architect...None.

Contractor...Jacob Gutleben, 2228 High

Oakland.

COST, \$400

DWELLING

(2585) E BAYO VISTA AVE 40 N

Monta Vista, Alameda. Two-story 7-

room dwelling.

Owner.....F. N. Strang, 805 Pacific

Ave., Alameda.

Architect...None.

Day's work. COST, \$3000

DWELLING

(2586) NO. 1413 SIXTH, Alameda. One

story 5-room dwelling.

Owner.....F. Elvin, 1115 6th, Alameda

Architect...None.

Day's work. COST, \$1500

DWELLING

(2587) NO. 3255 BAYO VISTA, Ala-

meda. One-story 6-room dwelling.

Owner.....M. T. Cole, 3200 Fernside

Bldg., Alameda.

Architect...None.

Contractor...B. F. Kopf, 1015 52nd Ave.,

Oakland.

COST, \$2500

COMPLETION NOTICES.

ALAMEDA COUNTY.

RECORDED AMOUNT

Nov. 26, 1915—W SPAULDING AVE 392.16 N Dwight Way N 35xW 129.25, Bkly. Ann Nordt to O M and H G Patriek.....Nov. 18, 1915	
Nov. 26, 1915—E GRANT 70 S Hearst Ave S 35x100, Bkly. B F Butler to Butler & Aylworth.....Nov. 26, 1915	
Nov. 27, 1915—WEST OAKLAND Yards, Okd. Southern Pacific Co to B S Harris.....Nov. 24, 1915	
Nov. 27, 1915—E BRUCE 66½ S Ban- croft Way S 33½xE 80, Bkly. Carl Ericsson and R L Langworthy to Carl Ericsson.....Nov. 26, 1915	
Nov. 27, 1915—S PARKER 200 W Mathews W 40xS 132½, Bkly. Carl Ericsson and Kingston Investment Co to Carl Ericsson.....Nov. 26, 1915	
Nov. 27, 1915—SE BRUCE AND BAN- croft Way S 33½xE 80, Bkly. Carl Ericsson and Kingston Investment Co to Carl Ericsson.....Nov. 26, 1915	
Nov. 29, 1915—N ALLSTON WAY 40 E Byron E 40xN 100, Bkly. Hans Gunderson to whom it may concern.....Nov. 20, 1915	
Nov. 29, 1915—LOT 33 BLK 4 Oak- ridge, Claremont, Bkly. Jesse Mc- Cargar and Addie G McCargar to John A Bischoff.....Nov. 27, 1915	
Nov. 30, 1915—LOT 8 Rulfs Tract, Brooklyn Tp. Alexander Shields to Alex C Wieben.....Nov. 23, 1915	
Nov. 30, 1915—N THIRTY-SECOND 50 E Linden E 25xN 100, Oakland. Rachel Cohen to Frank Marino..... .....Nov. 29, 1915	
Nov. 30, 1915—NW PLEASANT VAL- ley Ave and Oakland Ave, being Ptn Lot 36 Map Bowle Property, Piedmont. Maud Cords to Alfred Cords.....Nov. 30, 1915	
Dec. 1, 1915—LOT 16 BLK "M" Map Northrae Terrace, Bkly. Berkeley Development Co to Mason-McDuffie Co.....Nov. 26, 1915	
Dec. 1, 1915—N WALLA VISTA AVE being Lot 8 Blk 2 Subdivision East Piedmont Heights Exd., Okd. E H Heavey and J H Fitzmaurice to G A Scott.....Nov. 30, 1915	
Dec. 3, 1915—N FOURTEENTH 80 W Harrison 40 on 14th, Okd. Louis P Howe to A F Eliel and United Home Bldrs.....Dec. 2, 1915	
Dec. 2, 1915—LOTS 10 AND 11 BLK 2 Kellogg Ppty, Bkly. Thomas F Hunt to Ben Pearson.....Dec. 1, 1915	
Dec. 2, 1915—LOT 33 Map A J Snyder's Piedmont Terrace-by-the-Lake, Okd. Louise Dorsch to I W Button.....Nov. 22, 1915	
Dec. 3, 1915—NE ELSTON AVE AND Miami Court 33.5x100, Okd. C A Werle to whom it may concern.. .....Dec. 3, 1915	

LIENS FILED

ALAMEDA COUNTY.

Nov. 26, 1915—LOT 11 Map Sylvan Crest Tract, Okd. John P Max- well (Maxwell Hardware Co) vs W A Whitaker and Hannah Gold- stein .....\$28.93	
Nov. 26, 1915—LOT 12 Map Sylvan Crest Tract, Okd. John P Max- well (Maxwell Hardware Co) vs	

W A Whitaker and Simon Hart- man .....\$30	
Nov. 29, 1915—LOT 17 Map Kelton Terrace, Okd. Panama Lumber & Mill Co vs A L Young and R M Barton .....\$37.32	

GAIN IN ALAMEDA COUNTY BUILD-
ING OPERATIONS.Oakland Building Summary For the
Month of November, 1915.

The Oakland building totals for the eleven months of 1915 more than equal that of the entire year of 1914. The summary for November follows:

Classification of	No. of Permits	Costs
Bldgs.		
1-story dwellings.....	61	\$113,868
1½-story dwelling.....	7	15,300
2-story dwellings.....	14	49,350
2-story apartments.....	1	10,000
3-story apartments.....	3	49,000
2-story flats & stores..	2	7,500
1-story dwlgs & stores..	1	2,250
2-story stores.....	1	2,266
1-story stores.....	1	4,000
1-story brick theatre..	1	18,000
1-story brick warehouse	1	1,200
1-story basement re- inforced concrete		
library building.....	1	32,000
1-story concrete garage	1	175
1-story frame school... 1		540
Greenhouse	1	50
Footbridge	1	498
Garages, sheds and stables	57	9,210
Workshops, tank frames and barns.....	3	560
Alterations, additions and repairs.....	117	139,693
Total	275	\$455,460

SUMMARY.

New construction.....	153	\$315,767
Alterations, additions and repairs.....	117	139,693
Total	275	\$455,460
Total for the year, 1914....		\$4,717,520.00
Total for 11 months, 1915..		4,758,739.89
Berkeley building operations jumped from \$126,150 for October to \$173,075 for November.		

Alameda building operations for No-
vember amounts to \$61,521 against \$29,-
146 for October or a gain of \$32,375.

BUILDING CONTRACTS

SANTA CLARA COUNTY.

COTTAGE	
TWELFTH AND SAN SALVADOR, San Jose. Five-room cottage.	
Owner.....W. H. Jones, 505 S-20th, San Jose.	
Architect...None.	
Contractor...Al. Compton, 447 N-17th, San Jose.	
COST, \$2500	

DWELLING	
E NINTH, bet. Margaret and Virginia, San Jose. Seven-room dwelling.	
Owner.....J. L. Haskins, 42 E-Santa Clara, San Jose.	
Architect...None.	
Day's work.	COST, \$2500

GARAGE	
NW THIRD AND KEYS STS., San Jose. Garage.	
Owner.....Jos. Umbricco, 205 Pomona Ave., San Jose.	
Architect...None.	
Day's work.	COST, \$500

COTTAGE	
NINTH AND EMPIRE STS., San Jose. Three-room cottage.	
Owner.....G. M. Sickers.	
Architect...None.	
Day's work.	COST, \$400

BUILDING CONTRACTS

MARIN COUNTY.

DWELLING	
KENTFIELD, Marin Co. All work for one-story and basement dwelling.	
Owner.....Wm. Kent.	
Architect...J. W. Dolliver, 701 Royal Insurance Bldg., S. F.	
Contractor...Fred H. Field, Kentfield, California.	
Filed Nov. 26, '15. Dated Nov. 23, '15.	
Frame up	¼
When plastered	¼
When completed	¼
Usual 35 days.....	¼

TOTAL COST, \$2115

Bond, \$1060. Surety, Pacific Coast
Casualty Co. Limit, 40 working days.
Forfeit, none. Plans and specifications
filed.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

FRAME BUILDING	
NW WEST AND WINSLOW STREETS, Crockett, Cal. All work as per plans and specifications for two-story and basement frame building.	
Owner.....P. and Mary Murphy, Crockett, Cal.	
Designer...A. H. Bouche.	
Contractor...J. W. & J. E. Slate.	
Filed Nov. 24, '15. Dated Sept. 27, '15.	
Frame up	¼
Building hoisted and 1st coat plaster in place.....	¼
Building completed	¼
Usual 35 days.....	¼

TOTAL COST, \$3125

Bond, none. Limit, within 90 days.
Forfeit, none. Plans and specifications
filed.

COMPLETION NOTICES.

MARIN COUNTY.

RECORDED	ACCEPTED
Nov. 26, 1915—NEAR SAUSALITO. Ant. Borel & Co to Frank J Silva.....Nov. 23, 1915	
Nov. 26, 1915—ROSS. S B Weber and wife to Wm D Dwyer.....Nov. 20, 1915	
Nov. 29, 1915—SAN RAFAEL. Frances G Reynolds to L L Jessup.....Nov. 29, '15	

BUILDING CONTRACTS.

FRESNO COUNTY.

DWELLING	
LOTS 4 AND 5 BLK 54, Ventura Vista Addition, Fresno. Dwelling.	
Owner.....Fred Jones, Fresno.	
Architect...None.	
Day's work.	COST, \$3200

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED ACCEPTED
Nov. 30, 1915—LOTS 7 AND 8 BLK 1,
Fresno. Fresno Home Builders to
A D Wilkins.....Nov. 17, 1915
Nov. 29, 1915—NE VAN NESS AVE &
Verde, Fresno. L M Mendelsohn to
whom it may concern.....Nov. 29, 1915
Nov. 27, 1915—LOTS 1 TO 4 Mc-
Kinley Heights, Fresno. Helen G
Kleiser to whom it may concern
.....Nov. 19, 1915

LIENS FILED.

FRESNO COUNTY.

RECORDED AMOUNT
Nov. 50, 1915—LOTS 14, 15, 16 BLK
35, Arlington Heights Tct, Fresno.
Valley Lumber Co, \$596; Fresno
Hardware Co, \$25 vs O N Leathers
and Wm Stahl

NOTICE OF NON-RESPONSIBILITY.

FRESNO COUNTY.

Nov. 27, 1915—LOTS 1, 2, 3 BLK 69,
to improvements on leased prop-
Fresno. W Parker Lyon Estate as
erty

Dec. 2, 1915—LOTS 14, 15, 16 BLK 82,
Fresno. J T Tupper et al as to im-
provements on leased property...

BUILDING CONTRACTS.

SACRAMENTO COUNTY.

ADDITIONS
LOT 2 AND W 1/2 LOT 3 BLK M, N, 26th
and 27th Sts, Sacramento. Additions
to stone and concrete church.
Owner.....Trinity Cathedral Chapter.
Architect....None.
Contractor.....Seoble & Matson, 1911 12th
St., Sacramento.

COST, \$1245

FRAME RESIDENCE
LOT 104 East Sacramento. One-story
5-room and bath frame residence.
Owner.....B. Steinkoenia, 516 1/2 20th
St., Sacramento.
Architect....None.
Contractor.....J. G. Grant, 1127 33rd St.,
Sacramento.

COST, \$1500

REPAIRS

NOS. 2114-226 THIRTEENTH ST., on
Ptn Lot 6 Blk B, C, 12th and 13th
Sts., Sacramento. General repairs to
frame residence.

Owner.....Arthur E. Miller, 21st and
H Sts., Sacramento.
Architect....None.
Contractor.....A. W. Norris, 3012 G St.,
Sacramento. COST, \$1000

FRAME RESIDENCE

SEVENTH AVE ON LOT 238 Blk 1, Oak
Grove Tract, Sacramento. One-story
5-room frame residence.
Owner.....E. W. Ford.
Architect....None.
Day's work.

COST, \$1500

ALTERATIONS

NO. 208 J ST., on W 1/2 Lot 2 Blk J, K,
2nd and 3rd Sts., Sacramento. Re-

model and improve press room in
building.

Owner.....Chas. H. Crocker, 565 Mar-
ket, San Francisco.

Architect....R. A. Herold, 437 Forum
Bldg., Sacramento.

Day's work. COST, \$700

ALTERATIONS

NO. 1217 FIFTEENTH ST., on N 1/2 Lot
8, Blk L, M, 15th and 16th Sts., Sac-
ramento. Remodel residence to make
8 apartments.

Owner.....George Stack, 421 J St.,
Sacramento.

Architect....P. J. Herold, Forum Bldg.,
Sacram. nto.

Contractor.....Chatterton Bros., T St.
Court, Sacramento.

COST, \$8000

FRAME RESIDENCE

NO. 1914 TWENTY-NINTH ST., on S 1/2
Lot 4 Blk S, T, 25th and 29th Sts.,
Sacramento. One-story 5-room and
bath frame residence.

Owner.....G. A. White, 1297 Cypress
Ave., Sacramento.

Architect....None.
Contractor.....D. Lamorue, Oak Park,
Sacramento.

COST, \$1600

NOTICE OF NON-LIABILITY.

SACRAMENTO COUNTY.

Nov. 22, 1915—LOT 4, S, T, 3rd & 4th
Sts., No. 1910 4th St., Sacramento.
Maria Silva Mendoza as to im-
provements on leased property...

BUILDING CONTRACTS.

SAN JOAQUIN COUNTY.

HEATING EQUIPMENT

NE WEBER AVE AND CALIFORNIA
St., Stockton. Heating equipment for
Class "C" store and office building.

Owner.....P. A. Jordan, Care Dodge
& Sweeney, Oakland.

Architect....H. C. White & F. E. War-
ner, Room 37, San Joaquin
Bldg., Stockton.

Contractor.....Gilley-Schmidt Co., 198 Otis,
San Francisco.

Filed Nov. 25, '15. Dated Nov. 16, '15.

Work completed preceding month
..... 75%

36 days after.....Balance
TOTAL COST, \$2048

Bond, \$1024. Surety, The Aetna Acci-
dent & Liability Co. Limit, not defined.
Forfeit, not defined. Plans and speci-
fications filed.

MASONRY AND BRICK WORK ON ABOVE.

Contractor.....Frank W. Whitney and
William T. Davies.

Filed Nov. 23, '15. Dated Nov. 19, '15.

Payments same as above.....

TOTAL COST, \$4980

Bond, \$2490. Surety, Globe Indemnity
Co. Limit, not defined. Forfeit, not
defined. Plans and specifications filed.

PLUMBING WORK ON ABOVE.

Contractor.....Frederick W. Snook Co.,
596 Clay, San Francisco.

Filed Nov. 23, '15. Dated Nov. 19, '15.

Payments same as above.....

TOTAL COST, \$1790

Bond, \$895. Surety, The Aetna Acci-
dent & Liability Co. Limit, not defined.
Forfeit, not defined. Plans and speci-
fications filed.

COMPLETION NOTICES

SACRAMENTO COUNTY.

RECORDED ACCEPTED
Nov. 27, 1915—E 40 FEET OF W 70
feet Lot 7, K, L, 8th and 9th Sts.,
Sacramento. John H Shade, Geo A
Schade and Henrietta S Coggeshall
to W H Coggeshall.....Nov. 26, 1915
Nov. 30, 1915—W 1/2 LOT 4, M, N, 3rd
and 4th Sts., Sacramento. Geo W
Locke & Son to R M Smith. Nov. 4, '15

LIENS FILED.

SACRAMENTO COUNTY.

RECORDED AMOUNT
Nov. 26, 1915—W 20 FEET LOT 5
and E 1/2 Lot 6, G, H, 13th and 14th
Sts., Sacramento. The Whitney
Window Co, \$150; R O Kimbrough,
\$55; Schneider, Chappell & Jones,
\$46.50 vs J M E Morrill, H C John-
son and Chas W Johnson.....
Nov. 27, 1915—E 40 FEET LOT 6 and
W 20 feet Lot 5, G, H, 13th and 14th
Sts., Sacramento. Sacramento Bldg
Block Co vs C W and H C Johnson
and John E Morrill et al.....\$152
Nov. 27, 1915—W 1/2 LOT 6, W, X, 23d
and 24th Sts., Sacramento. Fred H
Betz vs William Morris.....\$35
Nov. 27, 1915—W 20 FEET LOT 5 and
E 1/2 Lot 6, G, H, 13th and 14th Sts.,
Sacramento. California Door Co,
\$305.48; C O McFarland, \$154.50;
John Breuner, \$150; Friend & Terry
Lumber Co, \$1235.69; Sacramento
Planing Mill & Furniture Co, \$732.
89; California Artistic Metal & Wire
Co, \$40; Henry Finnigan, \$113 and
The Palm Iron & Bridge Co \$325 vs
H C Johnson, Chas W Johnson and
J M E Morrill.....
Nov. 30, 1915—S 1/4 LOT 1, O, P, 21th
and 25th Sts., Sacramento. Fred H
Betz vs J W Jones.....\$90.75
Nov. 20, 1915—W 20 FEET LOT 5
and E 1/2 Lot 6, G, H, 13th and 14th
Sts., Sacramento. F T Davenport,
\$33; T I Berman, \$160; Henry
Covell Lime & Cement Co, \$40.75
vs C W Johnson et al.....
Nov. 24, 1915—W 20 FEET LOT 5
and E 1/2 Lot 6, G, H, 13th and 14th
Sts., Sacramento. J Cady vs C W
Johnson, H C Johnson and John
M E Morrill.....\$321.86

COMPLETION NOTICES.

SAN JOAQUIN COUNTY.

RECORDED ACCEPTED
Dec. 2, 1915—LOT 4 BLK 31 E of
Center St., Stockton. Alexander
Eymard to Bert Fisher

.....Nov. 20, 1915

NEW IRRIGATION DISTRICT.

CHICO, CAL.—Embracing 20,000
acres, a new irrigation district has
been formed near Richvale by an
election held by property owners in
the district.

Fine Arts Building Can Be Saved.

L. C. MAUER OF IMPERIAL COMPANY, SPECIALIZERS IN WATER-PROOFING PROBLEMS, TAKES ISSUE WITH GENERAL CONTRACTORS' ASSOCIATION.

Claims That Fine Arts Building at P. P. L. C. Can Be Preserved.

A committee from the General Contractors' Association was recently appointed by that body to investigate and report upon the feasibility of preserving the Fine Arts Building. That committee came to the conclusion that the building ought to be torn down for several reasons, principally among which being the expense of keeping the structure in repair because the exterior coatings, columns and enrichments were of plaster of Paris composition, which they claim would not last more than two or three seasons unless the surface were entirely filled or waterproofed with lead and oil paint or other enduring form of damp-proofing of which the committee had no knowledge; that the porous nature of the cast work presented an insuperable difficulty to any effective attempt at securing a waterproof wearing surface.

Mr. Maurer claims that the staff work, etc., can be economically waterproofed. Here is his reply:

Today it seems no subject is of such general interest and magnitude to the loyal citizens of San Francisco, and apparently so little understood, as the preservation of the Fine Arts Building and other prominent structures of the Panama-Pacific International Exposition.

This subject has been approached from every angle, criticized by all professions, civic organizations, welfare societies, special appointed committees and numerous progressive private citizens. In various statements through the press we have the candid opinion of a great many able and experienced men and committees, quoting their views as to the feasibility, practical and permanent results obtainable, and the possible expense it would incur accomplishing this most desired feat.

It is an established fact that the main building has a pile foundation, steel frame and metal lath, coated with a Portland cement plaster, forming the structural part of the walls. This method of construction is generally recognized as of a permanent nature. The surface or exterior coating, including all columns and enrichments in fact all ornamental and decorative designs, have been made of Plaster Paris (hard wall coating). It is a well known fact that this material is the most commonly used in general building construction for all ornamental purposes, but where in direct contact with an element of nature (WATER), it will soon decay and disintegrate. This is caused solely by the absorptive nature of the material itself. Eliminate this CAUSE and the PRESERVING of the FINE ARTS BUILDING IS ACCOMPLISHED. This can be done—due to the advancement of MODERN SCIENTIFIC METHODS, without in any way destroying the artistic texture and color effects. This fact is demonstrable by the efficient and permanent results obtained throughout this State.

To produce the highly artistic designs, textures and color effects it was absolutely necessary to use material of this nature (Plaster of Paris or a similar product), it being at this time the only material that will permit the artist and artisan to create the beauti-

ful designs and enrichments of form, texture of surface and last, and also—a very important factor—the highly artistic color effects, not obtainable by a surface coating of oil paint but by an integral mixture of colors in the exterior of Plaster Paris coating, in this manner reproducing the beauty of nature itself—TRAVERTINE STONE.

It has been stated and seems to be the general impression that it would be utterly impossible to so treat the porous and slightly cracked or otherwise defective surface of the Fine Arts and other buildings without the rough portions of the surface being entirely filled or waterproofed with a lead and oil paint. Remember, this is an age of progress and evolution. There was a time when it was perfectly proper and correct to state that we have no other means of ocean navigation than the SAIL SHIP; no other means of artificial light than the TALLOW CANDLE and COAL OIL LAMP; no other means of overland travel than the OX CART and STAGE COACH. All of these and numerous other ancient ideas have been supplanted by modern inventions. So it is with the race-inherited idea that no structural building material of a porous nature can be made WATER-PROOF and PERMANENT without closing all pores and voids.

It is not universally understood and acknowledged that the basic cause of all dampness, decay and disintegration of all STONE, BRICK, CEMENT or any other porous and absorptive building material is the ABSORPTIVE NATURE OF THE MATERIAL ITSELF. Eliminate this factor and the so-called porous building material can be made permanent, even though it may be Plaster Paris. Nothing, of course, can be built to last forever. We must acknowledge and respect the even-tempered laws of nature—evolution, transformation—change from one form into another, destruction of the elements such as storms, fires and earthquakes.

Any one who is a resident of San Francisco or the State of California can readily satisfy himself or herself that there is a method of treatment which will absolutely PRESERVE and material through which water will percolate. Generally speaking, this method is comparatively new, yet it has been in use for a sufficient number of years to give efficient, practical and permanent results, not filling the pores and texture or surface coating, but simply by making the material itself NON-ABSORPTIVE. Some of the prominent buildings in San Francisco have been treated solely for the purpose of PRESERVING their structure and eliminating absorption. They have stood the test for years.

Everyone who has visited the Exposition has admired this most beautiful structure. Not only from the citizens of California, but from every corner of the globe you can hear praise and admiration of its artistic design and harmonious color effect. WHY NOT PERPETUATE this famous landmark in memory of the P. P. I. E., the greatest achievement of its kind in the history of the world? IT CAN BE DONE, without reconstructing the exterior finish or losing any of its artistic features or color effect. The expense is very insignificant, taking into consideration the magnitude of the repairs, all defective places can be repaired, pointed up and made waterproof, so that not a square inch of the exterior surface could act as a trans-mitter of dampness and water; this mania beyond any question is accomplished.

It is with deepest regret that the writer frequently observes discouraging comments in the press relative to the preservation of the Fine Arts Building, to the effect that it is impossible to save the structure without reconstruction. If that is the only or dominant factor in retaining this building for an indefinite length of time, the problem is already solved and can be easily overcome. This article is written and published to enlighten those who labor under the illusion that the Fine Arts Building cannot be preserved in

its present state of construction, for the reason that the exterior finish material is of a very porous and absorptive nature, permitting premature decay and disintegration.

AMERICAN TRADE RECORD.

American foreign trade rose to the new high level of \$5,000,000,000 in the 12 months ending with October, 1915, according to figures made public by the Bureau of Foreign and Domestic Commerce, Department of Commerce. Imports of merchandise amounted to \$1,691,748,013, compared with \$1,830,414,501 in the preceding period, while exports aggregated \$3,318,634,636 against \$2,140,847,829 in the 12 months ending with October, 1914.

October exports also established a new high record, rising to \$334,635,578, or \$33,961,756 above the former record made in September last, and comparing with \$194,711,170 in October, 1914, and \$271,861,464 in October, 1913. October imports were \$148,529,620 against \$135,080,520 in October, 1914, and \$177,987,986 in October, 1912, the former October record.

The export balance for October was \$186,108,958, against \$56,630,650 in October, 1914, and for the 12 months ending with October \$1,626,886,623, compared with \$260,433,328 in the preceding period.

Free merchandise comprised 70.91 per cent of the total imports of October, 1915, as against 62.97 per cent of those of October, 1914.

Gold imports during October, 1915, amounted to \$79,669,259, against \$5,345,003 in October last year, and gold exports were valued at \$2,935,300 in October, 1915, compared with \$50,301,972 in October, 1914. October thus showed a net inward gold movement of \$76,731,959 instead of a net outward gold movement of \$44,356,969 in October last year. For the 12 months ending with October gold imports aggregated \$357,061,165, compared with \$58,401,088 in the preceding period, and gold exports for the 12 months ending with October amounted to \$30,532,386, against \$225,194,301 a year earlier. A net outward gold movement of \$167,193,213 in the 12 months ending with October last year has been followed by a net inward gold movement of \$326,528,779 in the 12 months just ended.—Commerce Reports.

GOLD MINE AND POWER COMPANY INCORPORATES.

SACRAMENTO, CAL.—The Trinity Gold Mining and Power Company has filed articles of incorporation in the office of the Secretary of State. The concern is to operate in Trinity County, but the headquarters will be in San Francisco.

The Directors and organizers are J. A. Snook, B. A. Wilbrand, C. F. Callonan, J. F. Sullivan and F. A. Schmitz. The capital stock total is \$500,000 and the paid-up capital \$5.

The recent sale of an American cement mixer to the city of Kingston and of two carloads of raisins to a wholesaler in that Canadian port resulted from the trade-extension efforts of Consul Felix S. S. Johnson.

Catarrh Can Be Relieved

THERE IS NO NEED for you to continually suffer from Catarrh and Cold in the Head. It makes you miserable, doesn't it? You really don't care whether things go right or not and you wonder when you'll ever get over it. And you will not get over it until you get the Clover Leaf Catarrh Remedy, and use it. It will relieve you, and you'll wonder why you had not used it sooner. We are so positive that this will relieve you of your Catarrh or Cold in the Head, that we guarantee you satisfaction or we will refund your money.

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Clover Leaf Toilet Cream

A Delight of the Toilet

The one Perfect Preparation for Bringing that Delicate Beauty to the Skin so desired by the Ladies and admired by the Gentlemen. Fine for the face after shaving.
At all Druggists 25c.

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Without Slamming

Strictly An Air Cushion Check, working automatically.
Simplicity and Durability combined Applied
to either side of any size of door either
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In ordering, give size of Door; also projection of Casing (if any)
over door, when Bracket will be sent to fit.

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Hot Water

Unlimited--Always on tap

Any home that can
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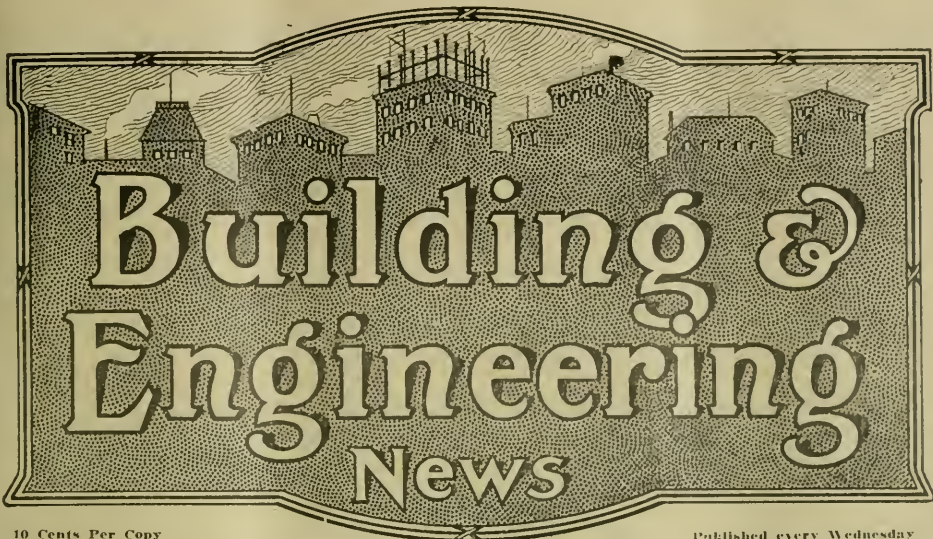
Latest and Best in Wall Beds.

This bed is not fastened to any door or door jamb. It is portable--movable--you can move it to any part of the room or building. Goes through any stock door 6 ft. 8 in. high and 18 in. or more wide.

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December 29th

Will contain descriptions of all kinds of Street and Paving

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George Nelson, C. E., Editor.

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Circulates among the leading Engineers, Surveyors, Architects, Contractors and Municipal Authorities on the Pacific Coast.

Entered as second-class matter at San Francisco Post Office under act of Congress of March 3, 1879.

Subscription Rates.—One Year, \$3.00; Two Years, \$5.00; Five Years, \$12.00, payable strictly in advance. Single copies, 10c.

Advertising rates on application.

L. A. LARSEN,
Publisher and Proprietor.
SAN FRANCISCO OFFICE
560 Mission Street,
Telephone—Houglas 2372.

W. D. Manville, News Editor.

December 15, 1915

Leading Articles in this Issue:

California Railroad Commission Opposes Railroad Valuation Idea.

Staff Article.

Railroad Commission News.

The Duplex Process of Steel Manufacture.

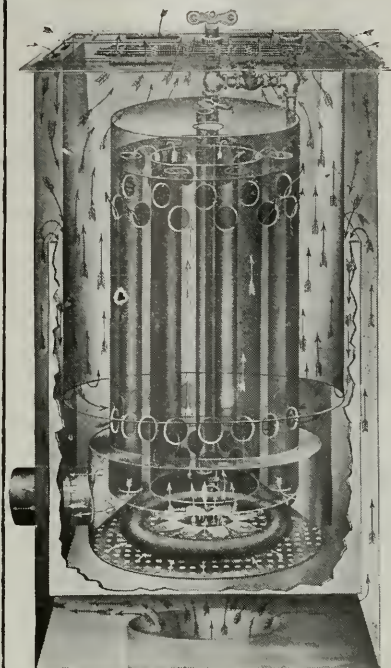
By F. F. Lines, Maryland Steel Company
Sparrow's Point, Maryland.

Items of Interest.

By George Nelson, C. E.

Our "STREET WORK and PAVING ISSUE" will appear on December 29th. It will be of "Special Interest" to you and will contain many important items on Street Work and Paving.

" Watch For It. "



FLOOR FURNACE STYLE B
Size 14½ in. square by 2 ft. high
Has 8-in. Fresh Air Intake with Damper.
Has 3-in. Outlet Vent
Fits in space between floor joists
Hangs from Register which lays flush with floor.

Style

- A. Floor Furnace with fresh air intake on side. For use in buildings having sufficient fresh air circulation under same. For artificial gas only.
 - B. Floor Furnace with fresh air intake at bottom. For use in buildings where it is desirable to obtain air directly from outside of cellar or basement. For artificial gas only.
 - NOTE—Style A and B are built alike except for position of fresh air intake.
 - C. Wall Furnace with fresh air intake at bottom. For artificial gas only.
 - D. Wall Furnace with fresh air intake at back. For artificial gas only.
 - NOTE—Style C and D are built alike except for position of fresh air intake.
- Prices and Information on Natural Gas Furnaces Furnished on Application.

Unit Plant Hot Blast Furnaces

On Display, Booth 33

Collective Gas Exhibit

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San Francisco.
Manufactured under Patents, and Patents pending, by

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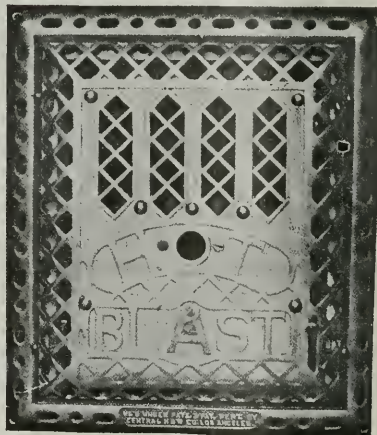
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Sales Agent for Northern Cal.

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Delivers the Heat

A Complete Answer to the Heating Question.

- Instantaneous**—Furnishes an instantaneous and continuous supply of
- Sanitary**—fresh warm air free from gas fumes, odors, smoke or dust.
- Hygienic**—Maintains an even temperature necessary to health and comfort.
- Scientific**—Built like a real hot air furnace reduced in size.
- Convenient**—Operated from inside of room, saving many steps to cellar.
- Simple**—Any child 10 years of age can operate, turn the key and apply match.
- Economical**—Wall furnace burns 10 cubic feet and floor furnace 20 cubic feet of gas per hour.
- Efficient**—Each furnace will heat from 2 to 5 rooms or from 3,000 to 9,000 cubic feet of space.
- Fireproof**—Has four thicknesses of metal and three air spaces of one inch each between fire and wood; fire is 20 inches from floor.
- Up to Date**—Uses exclusively the Johnson Hot Blast Burner, recognized as the most efficient ever constructed.
- Durable**—Is made from best grade of metal to be obtained.
- Finish**—Register electro plated Flemish Brass. The finish that lasts.
- Installation**—Can be installed by any gas appliance dealer, plumber, tinsmith or hardware merchant at nominal cost.
- Retail Prices**—Wall Furnace, any style \$22.50
Floor Furnace, any style \$30.00
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WALL FURNACE STYLE C

Size of Wall Furnace front is 11x19 inches, with a recessed portion of 14x17½ inches between studding. Recessed portion has a 2-inch vent opening at top and a fresh air intake 3x12 inches at bottom operated with damper in front. Both vent and fresh air intake pipes go between studding.

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With Our Unit Plant Hot Blast Floor And Wall Furnaces You Can Furnish Your Customers Auxiliary Or General Heating Results Gas With Gas In Competition With Coal or Oil

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Products

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busition

Will Come

Into

Rooms

Heated

Fresh

Pure Air

Coming In,

All Bad Air

Goes Out

We Will

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Money Paid

For

Any of Our

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Furnaces

Which Does

Not Prove

Efficient

According to

Our

Statements



Benj. G. McDougall, Architect.
ST. LUKE'S CHURCH. S. F.

South and east cement walls waterproofed with Imperial Water Proofing.
Color effect produced with Imperial Concrete Finish to match stone work
of street fronts



METCALF HOTEL, Geary nr Taylor.
Righetti & Headman, Architects.

Interior walls dampproofed with Imperial Damp Proofing. Exterior walls waterproofed with Imperial Water Proofing. Color effects with Imperial Pigments.



TEMPORARY CITY HALL, San Francisco
Wright, Rushford & Cahill, Architects

Exterior waterproofed with Imperial and color effects with Imperial pigments.



KAHN BROS. DEPARTMENT STORE, OAKLAND
C. W. Dickey, Architect

Seventy-five thousand sq. ft. basement floor and walls waterproofed with Imperial

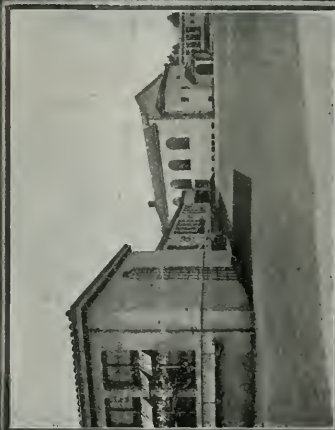


GERMAN HOUSE, San Francisco
Frederick H. Meyer, Architect

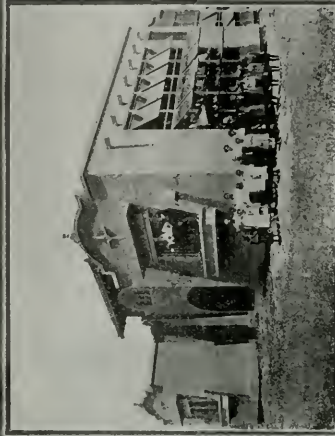
Stone and terra cotta work treated with Imperial Water Proofing preserving and to prevent discoloration

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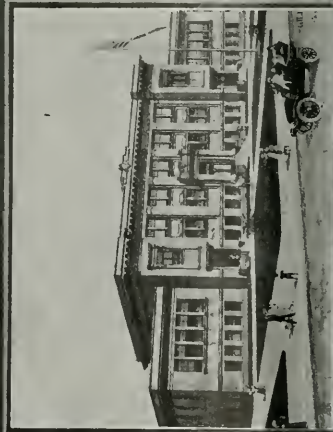
IMPERIAL COMPANY 183 STEVENSON STREET
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ROCK RIDGE SCHOOL, OAKLAND. - J.J. Donovan Supervising Archt.



COLLEGE PARK SCHOOL - SAN JOSE. - Frank Q. Wolfe Architect



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Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
of the Pacific Coast.

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Fifteenth Year, No 50

California Railroad Commission Opposes Railroad Valuation Idea.

STAFF ARTICLE

Max Thelen, President.
H. D. Loveland.
Mex. Gordon.
Edwin O. Edgerton.
Frank H. Devlin.

California, through its Railroad Commission is opposing before the Interstate Commerce Commission at Washington, on behalf of the people of the United States, the alleged extravagant claims of the railroads of the nation, with reference to the value of their property. An exhaustive review, analyzing the principles that the California Commission believes should be followed in estimating the worth of the lines, has been filed before the national body, signed by all the members of the California Commission, and by Max Thelen and Douglas Brookman as counsel.

In 1913 Congress passed the Federal Valuation Act directing the Interstate Commerce Commission to make valuation of every railroad subject to its jurisdiction. The Commission invited a discussion of the fundamental principles of valuation to be followed in that work. The railroads immediately took advantage of this opportunity. They filed with the Interstate Commerce Commission a brief of about six hundred pages and also appeared before the Commission to present their views orally. The railroads organized a large corps of engineers, statisticians and other experts to keep in constant touch with the representatives of the Interstate Commerce Commission while the valuations were being made.

The railroads in their brief, in their oral arguments, and in consultation with representatives of the Interstate Commerce Commission, are insisting upon those principles of valuation that will result in the highest valuation possible being put upon the railroad property. They are presenting a strong front for the adoption of their views.

The California Commission says that these proceedings are of tremendous importance to the entire country and that it is essential the interests of the public be represented before the Interstate Commerce Commission and the dangers pointed out that would result from the adoption of the carriers' contentions.

In its brief the California Railroad Commission analyzes the provisions of the Federal valuation Act and says that contrary to the claim of the railroads, the Act does not require the Interstate Commerce Commission to make

any ultimate finding of value of the property of the railroads, but merely to make certain findings of fact, such as the original cost, the cost of reproducing the property new, the cost of reproducing the property less depreciation, and certain other specific findings. The California Commission points out that it is impossible to make any ultimate finding of value without having in mind the purpose for which the value is to be made, and that the Valuation Act does not state the purpose for which the valuation is to be made.

The railroads claim that the Interstate Commerce Commission must find as the value of their property, the cost of today reproducing that property new entirely, irrespective of what the property may have originally cost when it was first constructed, or the extent to which the property may have been depreciated by wear or tear since it was originally constructed. The California Commission says that the United States Supreme Court directly refutes the claim of the carriers, and holds that while the estimated cost of reproducing certain of the property—not lands—may be useful in finding the value of such property, it is but one of a number of elements, such as original cost, depreciation, etc., which must be considered.

The California Commission points out that the Valuation Act requires the Interstate Commerce Commission to determine the original cost of the railroad properties and reference is made to a number of valuations made by the California Commission in which the original cost of the property valued was found and used in fixing the valuation.

The California Commission discusses the "reproduction new" theory of the carriers and says:

"The carriers are apparently seeking to create the impression that reproduction cost new is the only element of any significance to be considered in ascertaining the fair value of railroad property for any purpose, if not indeed, the ultimate fact of value itself. This is entirely without justification either in authority or in the every day estimates of business life with reference to utility properties. The emphasis laid on the reproduction cost theory is due to the fact that if this theory alone is applied, it will generally result in a higher value than from the consideration of any other element referred to by the Supreme Court of the

United States. In many cases the application of the reproduction cost theory would have produced results outrageously unjust and unfair to the public.

"The basis of the reproduction cost theory, as applied to a public utility, is that the property of the public utility is worth what it would cost to reproduce it, for the reason that it is assumed that any intending competitor, either private or public, would be compelled to pay this much before he could produce a property of similar character with the same amount of business. The difficulty with this theory is primarily that it rests on the false analogies of competitive business and ignores the fact that public utilities are generally more or less monopolistic in character, and that the legal principles applicable to the regulation of monopolies are entirely different from the principles in ordinary competitive business.

"The entire theory underlying the regulation of monopolies is that by reason of the fact that they have the power to do great injury to the public, by reason of the absence of competition, the government refuses to permit them to earn a portion of the profits which they would earn if unregulated. In the interest of equity and fair play, and acting under the police power in the interest of the general welfare, the government, in limiting the earnings of public utilities and thus diminishing the value of their property in a commercial sense, just as clearly takes value away and destroys value as would be the case if the government should appropriate a part of the utilities physical property. Nevertheless it has been recognized in England since the days of William and Mary and in this country for long that the government clearly has this power with reference to public utilities. In the exercise of this power, the agencies of government are charged with the duty, not primarily of permitting a return on what it would cost to reproduce a certain property, but of establishing rates which shall be fair, just and reasonable."

A number of concrete illustrations from the experience of the California Commission are then recited to show that in many instances the estimated cost of reproducing new the property of the utility is so high that the utility itself will not presume to ask for

(Continued on Page 7, Col 3)

Railroad Commission News.

The United Railroads of San Francisco has filed with the Railroad Commission an application for authority to issue \$1,800,000 6 per cent two year promissory notes, and also an application to issue \$2,250,000 5 per cent gold bonds, the bonds as security for the notes. The proceeds of the notes are to discharge \$1,800,000 of the 6 per cent bonds of the Market Street Cable Railway Company. These bonds were issued in 1882, and they totaled \$3,000,000. Of this amount \$1,200,000 has been paid off. The application says that the holders of the remaining \$1,800,000 require payment by December 15, 1915. The United Railroads of San Francisco and the Market Street Cable Railway Company seek to postpone this payment until October 15, 1916, and say that it will be impossible so to do unless provision is made for the payment of the overdue bonds before October 15, 1916. For these reasons they ask for the note issue and the new issue of bonds to secure the note.

The Great Western Power Company of California, which has its headquarters in San Francisco, has filed with the Railroad Commission an application for authority to issue to the Western Power Company 274,986 shares of its common stock, of the par value of \$27,498,560 in exchange for a like number of shares of the Great Western Power Company of a similar par value, which is all the stock of the latter company, except directors' qualifying shares.

The Great Western Power Company of California also asks permission to issue and sell to the Western Power Company all or part of \$5,000,000 face value of its 10 year 6 per cent convertible gold debentures at 91 per cent of the face amount and accrued interest.

The application is signed by Mortimer Fleishacker, president of the Great Western Power Company of California, and by Guy C. Earl and Chaffee E. Hall, attorneys for the company. It recites that the company has an authorized capital of \$60,000,000, divided into 600,000 shares of the par value of \$100 each. Three hundred thousand shares are preferred and 300,000 common stock. The preferred stock is non-assessable and bears interest at 7 per cent. The company sells electricity and steam in Plumas, Butte, Sutter, Yuba, Sacramento, Solano, Napa, Sonoma, Contra Costa and Alameda counties, in San Francisco and elsewhere. Its plant includes a storage reservoir at Big Meadows, Plumas County, with more than 250,000 acre feet capacity, a hydroelectric generating plant at Big Bend, Butte County, with an installed of 70,000 horse power, and 800 miles of distributing lines.

The Great Western Power Company of California was organized on November 23, 1915, to acquire the properties and securities of a part or all

of the corporations comprising what is known as the Great Western Power System. The corporations in the system are: The Western Power Company, the Great Western Power Company, the City Electric Company, the California Electric Generating Company, the United Light and Power Company of New Jersey, and the United Light and Power Company of California, the Central Oakland Light and Power Company, the Equitable Light and Power Company, the Southside Light and Power Company, and the Consolidated Electric Company.

The relations existing between the above companies are as follows:

The Western Power Company owns all the capital stock, except directors' shares, of the Great Western Power Company; the Great Western Power Company owns substantially all of the capital stock of the City Electric Company, all of the capital stock, except directors' shares, of the California Electric Generating Company, and all of the capital stock, except directors' shares, of the Consolidated Electric Company.

The Consolidated Electric Company owns the controlling stock interest in the United Light and Power Company (of New Jersey), the United Light and Power Company (of California), the Central Oakland Light and Power Company, the Consumers Light and Power Company, the Southside Light and Power Company and the Equitable Light and Power Company.

For the purpose of securing money for the development and extension of its system, the following financial plan has been devised, says the application:

A debenture issue, supported by an agreement, for \$5,000,000 dated November 1, 1915, payable in ten years, at 6 per cent, convertible at par and accrued interest after two years and before five years from date into preferred stock at 95 and accrued dividends, redeemable at 101 and accrued interest at any time, on four weeks' published notice.

Of the \$5,000,000 debentures referred to, \$4,500,000 debentures are to be delivered when required by the Western Power Company during the next year, and \$50,000 are to be taken within the same period on the option of the Western Power Company.

The Great Western Power Company, of California, the applicant, is to buy from the Great Western Power Company \$1,998,000 par value of shares of the City Electric Company, for not less than \$2,000,000 cash, which money is to be lodged with the trustees of the first mortgage of the Great Western Power Company, to be withdrawn to pay for improvements on and additions to the Great Western Power Company's plant. This is all the stock of the City Electric Company except twenty shares.

A general and refunding mortgage is to be secured by direct lien on all

the property of the City Electric Company, subject to its first mortgage, and on all the properties and franchises of the Great Western Power Company of California, and by the deposit of certain first mortgage bonds of the City Electric Company, and the Great Western Power Company, which are treasury assets of those companies.

The aggregate amount of bonds to be issued under the general and refunding mortgage is to be unlimited, or not more than \$150,000,000. These bonds are to run for not less than 30 years at 6 per cent.

The Western Power Company has agreed with E. H. Rollins & Sons, and W. P. Bonbright & Company, to sell them all the \$4,500,000 of debentures to be acquired by the Western Power Company, at 96 per cent, except debentures bought by the Western Power Company and Western Power Corporation stockholders at the same figures. These two banking firms also agreed to sell to the Western Power Company \$500,000 of the first mortgage bonds of the City Electric Company at 90 per cent.

The plan is stated in the application in much more detail, but the above are its main features.

The Atchison, Topeka and Santa Fe Railway Company has filed with the Railroad Commission a petition for postponement of the effective date of the Commission's order directing the company to build its lines so as to connect the gap between Temecula, Riverside County, and Oceanside, San Diego County. The company says that it is preparing a petition to the Supreme Court of California for a writ of review of the Commission's decision, and will present it about December 15. The order of the Commission, dated September 17, 1915, was that the railroad should within 90 days, or by December 17, 1915, present to the Commission plans for a direct connecting line standard gauge railroad between Oceanside and Temecula, either by means of the present existing line between Oceanside and Fallbrook, and thence by way of Fallbrook and Temecula Canyon, or by means of Rainbow Valley, the second route tapping an undeveloped section containing valleys of 10,000 acres and more. The Commission recommended Rainbow Valley route. The Commission required that the line be completed within a year after approval of the plan.

The State of California, by the Department of Engineering, has filed with the Railroad Commission an application for authority to build a State highway over the tracks of the Central Pacific Railway Company and Southern Pacific Company, six hundred feet north of the crossing of the Oakland-San Jose road, at Milpitas, Santa Clara County.

The Duplex Process of Steel Manufacture.

By F. F. Lines, Maryland Steel Company, Sparrow's Point, Maryland.

The Duplex Process, in a broad sense, consists of a combination of any two processes. As generally employed in the steel industry it is a combination of the acid Bessemer and the basic open-hearth processes. The acid converter oxidizes the silicon, together with the manganese and a certain portion of the carbon, the exact amount depending upon the practice. The blown metal is then transferred to the basic open-hearth furnace where the phosphorus and the remainder of the carbon is removed.

The Duplex Process shortens the open-hearth purification by more than five-sixths of the usual period, giving a steel of the same quality as the straight open-hearth process.

There are two general methods of operation: In the first method the charge is desiliconized and partially decarbonized in the Bessemer, the remainder of the carbon and the phosphorus being eliminated in the open-hearth furnace. On account of the difficulty in regulating the carbon in the blown metal, this method is not desirable where the amount of phosphorus or other impurities is so low that the duration of the subsequent open-hearth process is determined by the time required to adjust the carbon to the specification limits. In the second method, the charge is desiliconized and the carbon blown down to about 0.10%. The exact amount of carbon desired in the blown metal is obtained by a pig iron addition, made either in the transfer ladle or in the open-hearth furnace, the carbon protecting the metal from excessive oxidation, while the phosphorus is being worked down. This method commends itself on account of the regularity of the carbon content of the metal going into the open-hearth furnace.

The number of blows required for one duplex heat or one complete open-hearth charge depends on the relative capacities of the converters and the open-hearth furnaces. The usual ratio met with in duplex operation is one to three—three twenty-ton converters supplying sixty-ton open-hearth furnaces with metal, if the three converters are blown at the same time, which is the most efficient method, and the metal assembled in one transfer ladle for removal to the open hearth. Such a Bessemer plant can keep four or five open-hearth furnaces in continuous operation. This is due to the difference in time required by the Bessemer and open-hearth purifications, the former requiring from 15 to 20 minutes, while the latter average from 90 to 110 minutes.

In practice, pig iron is poured into the converters, the blast turned on, and the heats blown, until in the judgment of the blower the metal is of the

desired carbon content. In the case of high phosphorus iron, the blow is stopped when the metal contains, approximately, 1.0% carbon; while if the phosphorus is low, the metal is nearly decarbonized. In either case the blown metal together with two or three percent of lime, to give a basic slag, is charged into an open-hearth furnace; if the metal has been decarbonized, 10% of molten pig iron is added, either in the transfer ladle or in the open-hearth furnace. After the metal is in the furnace an action takes place, the phosphorus oxidizes and enters the slag as phosphate of lime, while the carbon is removed as carbon dioxide. When the phosphorus is within the specified limits, as determined by a rapid laboratory analysis, the heat is tapped and the proper additions for the required manganese and carbon content are made in the steel ladle.

When tapping heats from the open hearth, they may be caught "coming down," or recarburized in the steel ladle. In the first case, the metal is tapped when the carbon content of the bath is within the limits of the specifications of the finished steel, and the manganese in the form of ferro manganese is added in the steel ladle. The disadvantage of the method is that the time required to determine the carbon in the sample is of such duration that by the time the results are known, the metal in the furnace has not the composition it had when the test was taken; and since the carbon does not drop uniformly, heats are tapped from time to time that do not come within the prescribed limits. When the steel is recarburized in the ladle, the heat is not tapped until it is below 0.20% carbon. In this case, molten spiegel, together with enough iron to give the correct manganese carbon content in the steel, is poured into the ladle as the heat is run out of the furnace. This method has been found to give the most uniform carbon results in the finished steel.

The loss in the duplex process is greater than that in the straight open-hearth process, but this is largely due to the elimination of carbon, silicon, etc., in the converter, whereas the scrap in the ordinary open-hearth process has already withstood such a loss in its original conversion. To satisfy the slag in the Bessemer conversion, two per cent of metallic iron is oxidized in the converter; this together with a small loss in "shot" and "splittings" are the only losses sustained in the duplex process not common to both processes, working with the same materials.

Mr. City Official:

A proposal ad in the "Building and Engineering News" will bring you inquiries and real competition on your public work, that's what you want!

CALIFORNIA RAILROAD COMMISSION OPPOSES RAILROAD VALUATION IDEA.

(Continued from Page 5)

rates based upon such an exorbitant valuation.

The injustice of the "reproduction new" theory, from the public point of view, as pointed out in the brief of the California Commission is most apparent when applied to lands. The railroads contended that in finding the value of the lands owned by them the Interstate Commerce Commission must imagine that the railroad is not in existence, but that the value of the surrounding property due to the railroad having been built does exist. The Interstate Commerce Commission is asked to assume that the carriers go into the market today to acquire land at its present value to build their railroads, and to this value they add a number of additional costs for damages to surrounding property, cost of condemning the property, etc.

The brief of the California Commission also discusses the intangible values demanded by the railroads, such as franchises, going-concern and other values difficult to estimate but upon which the railroads place a remarkable figure.

NEW BOOK ON IRRIGATION PRACTICE.

Bernard A. Etcheverry, associate professor of irrigation engineering in the University of California, has just published the first of what is to be a series of three volumes on "Irrigation Practice and Engineering."

He discloses the fundamentals of the distribution of moisture in the soil and the influence of the character of the soil upon the availability of water for plant use, illustrating by diagrams the percolation of water. He expounds the problems of the duty of water and the wastefulness and harmfulness of excessive irrigation, discusses the question of how frequently water ought to be applied, and presents a wide range of data concerning the relations of area of land surface and quantity of water used. Other subjects discussed are the preparation of land for irrigation, methods of distributing water, and pumping problems and costs.

"The subject of which this book treats is still in the making," says Professor F. H. Newell, head of the civil engineering department of the University of Illinois, in a commendatory review of Professor Etcheverry's book in the Engineering Record of October 9th, "and the book presents clearly our present state of knowledge of rapidly evolving phase of engineering and agricultural development."

*A paper presented at the International Engineering Congress, San Francisco, 1915.

Items Of Interest.

By George Nelson, C. E.

SUTTER IS FAST IMPROVING ALL COUNTY ROADS.

That Sutter County is fast developing a road system which will have few equals in the State is manifested by the figures just announced showing the expenditures for the last two fiscal years in road building and improvements. In all the Supervisors have expended \$217,439 in the construction of new roads and bridges.

During the fiscal year ending in July, 1914, the sum of \$18,921.46 was expended and during the fiscal year ending July, 1915, about the same sum, or \$48,513.46. During the current fiscal year it is believed that a still greater sum will be expended, this to include the construction of a road near Nicolaus and a bridge across the Feather River at that point.

Included in the expenditures for the past two fiscal years is an item of \$68,000 which was to pay for the construction of the Butte Slough bridge. Another item is for \$45,000 which was spent in payment on the Meridian bridge.

A good road through the Sutter Buttes, another through Meridian and at other points in the county have been laid.

GOOD HIGHWAY WORK BOOSTED BY ROAD MEET.

A great deal of important good roads work and development will probably result from the recent Pan-American Road Congress, which was held at San Francisco and Oakland.

As a direct result of this congress representatives of the American Road Builders' Association, the American Highway Association, the Pacific Highway Association and the Tri-State Highway Association are now working throughout the country on the question of improving highways and roads, and in no part of the country will there be greater results from this work than along the Pacific Coast.

Almost every State in the Union has under extensive State-wide plans, district, county and city road improvements for its principal object. The Pacific Highway Association for the last four years has been energetically at work for highways from Canada to Mexico, and so the Tri-State Good Roads Association, organized in 1913, is continually in the field working for the construction of better roads, and especially for the building of lateral roads to and from the markets and main highways now under construction in the three States.

According to George E. Boos, secretary of the Tri-State Good Roads Association, one of the primal objects of this association is to assist county, commercial, municipal and district corporations by promotion, exploitation and publicity; furnishing statistics regarding lateral road developments

and by other legitimate means bringing about the construction of lateral or link highways connecting and intersecting both main and trunk railways in California, Oregon and Washington.

There are a number of highly efficient highway and good roads associations with a purpose centered upon specified localities. These are properly recognized as the advocates of the main and trunk highways. On the Pacific Coast there are four of the main highways contemplated, which are all important to Washington, Oregon and California. They are known as the Pacific Highway, extending north and south through the States of Washington, Oregon and California; the Northern Highway, extending east and west from the Northeastern States intersecting the Pacific Highway at Seattle and Portland over the Columbia Highway; the Lincoln Highway, extending east and west from the Middle States intersecting the Pacific Highway at San Francisco, Cal.; and the Southern Highway, extending from the Southern States, intersecting the Pacific Highway at Los Angeles and San Diego, Cal.

2,130 FEET OF JETTY AT EUREKA COMPLETED.

The north jetty is now 2,130 feet long and when completed will be in the neighborhood of 3,200 feet in actual length, leaving 3,070 feet to be completed.

At present only about 60 per cent of the rock ordinarily delivered to the jetty is now being received due to the unusually heavy weather which holds back work at the quarry materially.

Work at the jetty is necessarily proceeding slow, the end of the jetty now being in deep water nearly opposite the foremast of the old Corona wreck.

George H. Whittemore is engineer in charge of the construction work at the jetty.

ROAD FROM CHICO TO TEHAMA COUNTY LINE NOW READY FOR TRAFFIC.

The eleven-mile unit of State Highway, part of the route between Chico and the Butte-Tehama County line, built at a cost of \$60,000, has been opened to traffic with the completion of the bridge spanning Campbell Creek, one-half mile south of the boundary line.

The bridge is forty feet in length and constructed of concrete and steel at a cost of approximately \$4,000.

County Surveyor Martin C. Polk announces six bridges on the State Highway are completed and two are under construction. The bridge across Edgar Slough, south of Chico, and the Durham bridge have been completed and are open to travel. All are constructed of concrete and steel.

SANTA BARBARA COUNTY HIGHWAY BRIDGE PLANS RAPIDLY BEING COMPLETED.

Of the 22 bridges to be built along the State Highway through this county, two are now actually under way and designs for eight others are out.

The work is going along as rapidly as bridge designers can turn out the completed plans. Work of making test holes and getting the data for contour maps for the bridges at Zaca and Nojogui canyons is in charge of U. S. Grant, topographer.

Contractor C. H. Hudson has this stretch of the State Highway to build.

W. M. Thomas has the contract for designing the overhead crossing at Bell canyon, the bridge at El Capitan and two bridges in Gaviota canyon, south of the gorge.

Mayberry, Parker & Johnson are designing the bridges in Corral canyon, Tojaquas and Quemada and at Sheep Camp.

SUTTER COUNTY GRAND JURY REPORT ON ROADS AND RECLAMATION.

The grand jury of Sutter County has filed its report in the Superior Court and was dismissed by Judge Mahon.

The report says there is much room for improvement in the county roads and urges more zeal on the part of the Board of Supervisors along this line. The grand jury wishes to go on record against taking the roads out of the hands of the Supervisors and giving them in charge of a State Engineer.

The report included the following resolutions:

"We, the Grand Jurors of Sutter County, most heartily approve and commend the action of the Board of Supervisors and other county officers in protecting the interests of the people of Sutter County against threatened injury from proposed reclamation work.

"Said reclamation work, in our opinion, if allowed to be constructed as is now proposed and as authorized by the State Reclamation Board, will seriously endanger a large portion of the property of Sutter County and make the problem of flood control vastly more difficult and ultimately will result in ruin, not only to the higher land, but also to the land sought to be reclaimed.

"Sutter County has spent thousands of dollars and many years in establishing the principle, 'So use your own property as not to injure that of another.' Let it be maintained at whatever cost."

George William Tillson, President American Road Builders' Association and consulting engineer borough of Brooklyn, inspected the highways of Southern California on his recent visit.

**EL DORADO COUNTY SUPERVISORS
SUED BY TAXPAYERS.**

The complaint states that the Supervisors were first petitioned to erect the bridge across the American River at Coloma, at the old bridge site, connecting Old Coloma with North Coloma. Engineers submitted plans, which plans were accepted. Last July the Board advertised for bids, six being received. The lowest, it is alleged, was rejected, and the higher bid of Blumaxe & Company accepted, later a contract being entered into which was not in accordance with the specifications adopted.

The Supervisors, it is alleged, after directing Blumaxe & Company to proceed with the work, agreed to pay the contractor extra remuneration for all excavations carried deeper than the bedrock line, as shown in the original plans and specifications, although this substantial benefit was not offered in the specifications.

It is alleged that after construction work was begun, it was stopped and that afterward work was recommenced at a site more than a quarter of a mile up the river from the first site. This change, says the complaint, was made at the instance of a majority of the Supervisors without a meeting, records or writing. The new site, concludes the document, is not a county road.

**OAKLAND HARBOR AND MUNICIPAL
WORKS.**

Area in square feet and berthing space, the first figures being square feet and the second berthing space:

Western waterfront (apron wharf No. 1), 62,634 square feet, 949 feet berthing space; (apron wharf No. 2), 71,082; 1677; (apron wharf No. 3), 19,866; 301.

Quay wall, 291,036; 1928.
Clay street wharf, 12,474; 342.
Rideout wharf, 35,177; 564.
Taylor wharf, 11,242; 528.
Franklin street wharf, 26,560; 690.
Webster street wharf, 18,466; 460.
Livingston street wharf, 36,550; 695.
Cost of quay wall to date, \$500,909.
Cost of Key Route basin, \$700,766.
Cost of Livingston street wharf, \$153,905.83.

Cost of Franklin street wharf, \$8,567.57.
Cost of Clay street wharf, \$3,489.06.
Harbor revenues in 1914 averaged \$1,900 a month.

Harbor revenues so far in 1915 averaged \$3,400 a month.

Government expended on inner harbor channel, to date, \$1,500,000.

Available wharf frontage on both sides of inner harbor, 48,820 feet; 35 per cent occupied.

BASSANO DAM FINISHED.

The water flowing from the Canadian Pacific's plant at Bassano, 83 miles east of Calgary, Alberta, through irrigation ditches, waters three million acres of now highly fertile land. The face of the southern half of Alberta, a great Canadian province, has been changed.

The enterprise, which was under way three years, was practically completed with the finishing of the great dam across the Bow River at Bassano in the Province of Alberta. Only one other similar undertaking in North America approaches it in extent—that is the

Roosevelt Dam and irrigation project in Arizona. Only one other work of the kind in the world is bigger—that is the great Assouan Dam in Lower Egypt.

In the Canadian work 3,000 men have been laboring constantly for three years. Steam shovels, concrete mixers, 2,000 teams, engineers and hundreds of freight cars for supplies and material have been employed.

Altogether more than \$17,000,000 has been spent to turn the territory into a

There are over 5,000 miles of ditches, rich agricultural district.

**SURVEY FOR SACRAMENTO TO SAN
FRANCISCO CANAL STARTED.**

SACRAMENTO, CAL.—Surveyors have begun preliminary work on the proposed canal between Sacramento and San Francisco. The canal will cost about \$1,000,000.

Funds for the preliminary work was provided by the last legislature. It is proposed to run it along the east side of the Sacramento river. It will be fed with tide-water.

**PAYING COMPANY DISSOLVES PART-
NERSHIP.**

MODESTO, Stanislaus Co., Cal.—The Modesto Herald says a division of the Worswick Construction Company and the formation of two paying companies with separate scenes of operation was announced recently by the members of the two concerns, the explanation being given that the arrangement was made to suit the best interests of all interested.

The change involves the withdrawal of J. C. Worswick from the Worswick Construction Company; a partnership between J. C. Worswick and Z. E. Drake in a paving company to be known as the Central Valley Paving Company, and the removal of the headquarters of the Worswick Construction Company to Los Banos, in Merced county.

The personnel of the Worswick company, with the retiring of J. C. Worswick, will be W. H. Worswick Jr., Z. E. Drake and Harold Johnston.

SANTA ROSA PAVING IN COURT.

At a short special session of the City Council held with the Mayor and all members in attendance, the certified check of the City Street Improvement Company accompanying the bid for completing the Santa Rosa avenue paving was ordered returned, as the company had submitted its contract and bonds to do the work as required by law and they had not been accepted by the Mayor.

The work is now to be held in abeyance until the courts pass upon the matter in the mandamus proceedings instituted by the paving company to compel the Mayor to sign the contract and accept the bond.

David Schenck Jacobus of New York was elected president of the American Society of Mechanical Engineers at the opening session of its 36th annual meeting held in New York City December 7th. Dr. Jacobus is a recognized authority on steam engineering.

PERSONAL.

I. B. Funk, of Los Angeles, consulting engineer for the city of Holtville, has been in that city looking after the city water works with a view of eliminating, to some extent, the hardness of the water which seems to prevail at this time of the year.

Asa G. Proctor, County Surveyor, and Oscar Dingle have organized an engineering partnership, the firm name to be "Proctor & Dingle." The firm will attempt the scientific and efficient management of all civil, hydraulic and landscape engineering problems. That the partnership will succeed is best forecasted by the reputation and record of the parties.

Proctor and Dingle both received their technical training in the Department of Civil Engineering at Stanford University, Proctor with the class of 1907 and Dingle with the 1912 class.

Dingle belongs to the Civil Engineering Society of Stanford University, and Proctor has recently been elected to associate membership in the American Society of Civil Engineers.

Proctor, who is the present County Surveyor, has been in active practice as a civil engineer since January, 1908, and has done a great deal of work in this and adjoining counties, and was city engineer of Woodland for the four years last past.

Dingle belongs to the Civil Engineering civil engineer for the last four years. He has been employed in the office of the State Architect as draftsman, and was a member of the engineering staff of the Yolo Water and Power Co. for two years, and for the last nine months has been associated with the County Surveyor.

H. M. Wood, a building contractor well known in the bay cities, attracted by the developments now in progress in this city, has decided to make Martinez his future base of operations, and has taken offices with J. H. T. Mahnecke, the realty operator, next door to the Standard office.

W. F. Brye, the man selected to fill the position as chief operator for the Patterson Water Company, made vacant by the resignation of H. L. Michael, arrived in Patterson last week, and is now familiarizing himself with the duties of his new job.

Mr. Brye has had considerable experience in engineering work, and no doubt will have no difficulty in handling the work here. He is a native of California and graduated at Cornell in 1912. Before returning to this State he was connected with United Steel Company of Chicago. For the last half year he has been in the employment of the California Hydraulic Engineering & Supply Company of San Francisco, which position he resigned to take the one offered him here.

George H. Magill, surveyor and paving contractor, died suddenly last week at his home at Santa Ana, Orange County, of heart disease, from which he had been a sufferer. Magill had just finished a \$110,000 paving contract at Pomona.

Technical Societies.

SAN FRANCISCO ASSOCIATION OF MEMBERS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.

Officers for 1915.

President—A. M. Hunt.
Vice-Presidents—H. L. Haehl, M. C. Couchot.

Secretary—E. T. Thurston, Jr.
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Weekly luncheons in College Room, Hoffbrau Cafe, Wednesdays at 12:30. Engineers welcome; informal; no program.

Regular meetings are held bi-monthly at such time and place as may be appointed by the board of directors. The established custom is to meet on the third Fridays of February, April, June, August, October and December.

Address E. T. Thurston, Secretary, 913 Mechanics' Institute Bldg., Post street, San Francisco.

SAN FRANCISCO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS. 233 Post Street.

President—W. B. Faville.
Vice-President—Edgar A. Matthews.
Sec.-Treas.—Sylvain Schnalttacher.
Trustees—James W. Reid and Henry Schulze.

Monthly meeting the third Thursday.

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LOS ANGELES AND SOUTHERN CALIFORNIA.

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President.....Chas. T. Leeds
First Vice-President.....Geo. S. Binckley
Second Vice-President.....H. Hawgood
Treasurer.....Chas. H. Lee
Meetings bi-monthly. Address all communications to W. K. Barnard, Secretary, 701 Central Bldg., Los Angeles.

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Secretary.....C. G. Pyle
Asst. Secretary.....Edward Woodbury
EXECUTIVE COMMITTEE—J. A. Lighthipe, J. E. Barker, Geo. A. Damon, A. W. Nye.

Regular meetings third Tuesday in each month. Address all communications to C. G. Pyle, Secretary, Standard Underground Cable Co., 914 Hibernian Bldg., Los Angeles.

ENGINEERS AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.

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DIRECTORS—Arthur S. Bent, J. J. Backus, A. C. Martin, Kenneth Shibley.
Regular monthly meetings as arranged by program committee. Address all communications to H. Z. Osborne, Jr., Secretary, care City Engineer's Office, Los Angeles.

AMERICAN INSTITUTE OF ARCHITECTS—SOUTHERN CALIFORNIA CHAPTER.

President.....S. Tilden Norton
Vice-President.....J. E. Allison
Secretary.....Fernand Parmentler
Treasurer.....August Wackerbarth

DIRECTORS—J. J. Blick, J. J. Backus and Robert D. Farquhar, for the 1, 2 and 3 year terms respectively.

Regular meetings second Tuesday evening each month. Address all communications to A. R. Walker, Acting Secretary, 1403 Hibernian Building.

AMER. SOC. OF MECHANICAL ENGINEERS—Los Angeles Section.

Chairman.....Walter H. Adams
Secretary.....Ford W. Harris
EXECUTIVE COMMITTEE—W. H. Adams, Ford W. Harris, O. J. Root, W. W. Smith, Paul Weeks.

Address all communications to Ford W. Harris, 1029 Higgins Bldg., Los Angeles.

STATE BOARD OF ARCHITECTURE, SOUTHERN DISTRICT.

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Address all communications to Fred'k L. Roehrig, Secretary, 721 American Bank Bldg., Los Angeles.

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Address all communications to Frank C. Ayars, Secretary, 505-6 Douglas Bldg., Los Angeles.

SAN DIEGO ARCHITECTURAL ASSOCIATION.

President.....J. E. Lyman
Vice-President.....Charles Cressy
Secretary.....Robt. Halley, Jr.
Treasurer.....G. A. Hanssen
Monthly luncheon at Rudder's first Monday each month. Address all communications to Robt. Halley, Jr., 314 Union Bldg., San Diego.

BUILDERS ASSOCIATION OF SAN DIEGO—Second Floor K. of P. Bldg., Corner Third and E Streets, San Diego.

President.....Wm. R. Weckerly
Vice-President.....Chas. Kelly
Treasurer.....Max Winter
Secretary.....D. J. Miller
DIRECTORS—Wm. R. Weckerly, Chas. Kelly, Max Winter, D. J. Miller, Robt. Houghton, H. V. Wenger, R. M. Gilson.

Address all communication to D. J. Miller, Secretary, Builders' Association, Second Floor, K. of P. Bldg. San Diego.

NOTICE OF MEETING OF SOCIETY OF CIVIL ENGINEERS.

The regular bi-monthly meeting of the Association will be held Friday evening, December 17th, 1915, at the Palace Hotel. Dinner will be served promptly at 6 o'clock in the University Room.

This will be the regular annual meeting of the Association, and it will be in order to elect a President for the ensuing year and a Vice-President to succeed Mr. H. L. Haehl, terms expired. Official reports for the past year will be presented at this meeting.

Mr. H. L. Haehl, M. Am. Soc. C. E., will address the meeting briefly on "Water-right Litigation in the Santa Clara Valley," with special reference to the decision of the Supreme Court of California in the case of Miller vs. Bay Cities Water Co., and the more recent decision of the Superior Court in the case of Hayes vs. Bay Cities Water Co., defining the rights of users of underground water as opposed to the rights of appropriators of surface waters.

Directors' Meeting.

Preliminary to the general meeting, a meeting of the Board of Directors will be held at 5 o'clock in the office of the Secretary.

Special Notice.

The constitution and list of members for 1916 will go to press shortly after the December meeting. Members will therefore please notify the Secretary promptly of any changes they desire made from the list as it stands, will therefore please notify the Secretaries.

A. M. HUNT,
President.
E. T. THURSTON,
Secretary.

ADVANCE CONSTRUCTION NEWS.

Classified According to Character of Work.

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 6 story and base, steel and brick. Cost not stated. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Theo. and Clara Rulfs. Location, northeast corner of Sutter and Jones streets, covering an area of 68 feet 9 inches by 95 feet. Will contain four stores on the first floor besides the lobby and entrance. Upper floors a total of 75 rooms arranged in two and three room apartments. Interior finish pine and hardwood with imported tapestries. Bath rooms tile. Steam heat, automatic elevator, hot water system, oil burning equipment and vacuum cleaning. Marble and tile wainscot. Complete steel frame. Exterior faced with terra cotta. Plans complete and figures being taken.

PORTLAND, ORE—Apartment house, 2 story and base, brick and hollow tile, \$25,000. Architect, E. C. Wegman, 305 Wheller street, Portland. Owner, Dr. H. F. Ong, Oregonian Bldg. Location, Clay street, Broadway and Park. Will contain 20 apartments with bath and kitchen. Interior finish pine and hardwood with some hardwood floors. Steam heat and a hot water system. Bath rooms tile. Exterior faced with pressed brick. Plans being completed.

SAN FRANCISCO—Apartment house, 3 story and base. Class C construction, \$50,000. Architect, Milton Lichtenstein, 111 Ellis street, S. F. Owner's name withheld. Location, Fifty Vara District. Will contain a number of two and three room apartments equipped with all the latest conveniences. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat, automatic elevator, hot water supply and vacuum cleaning. Bath rooms finished in tile, Marble and tile wainscot. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$12,000. Architect, D. J. Patterson, 46 Kearny street, S. F. Owner's name withheld. Location, Broadway near Fillmore. Will contain a number of two, three and four room apartments with wall beds and private baths. Interior finish pine and elm panels. Some hardwood floors. Steam heat and a hot water system. Bath rooms tile. Exterior covered with cement plaster on metal lath. Plans being prepared.

SAN FRANCISCO—Apartment house alteration, 2 story and base, frame, \$8,000. Architect, C. A. Meussdorffer, Humboldt Bank Bldg., S. F. Owner, Mrs. F. Planz, 331 1/2 22nd street, S. F. Location, 331 1/2 22nd street. Work will consist of raising the present building and constructing stores on the first floor. Upper two floors will be rearranged for suites of three and four rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places. Wall beds and mod-

ern plumbing will be required. Exterior covered with rustic and cement plaster. Plans being prepared.

OAKLAND, CAL—Apartment house, 2 story and base, frame, \$9,000. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner's name withheld. Location, 40 th and Telegraph. Will contain a total of eight suites of two and three rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile mantel. A hot water system. Bath rooms tile. Marble and tile wainscot. Exterior covered with cement plaster. Plans being prepared.

OAKLAND, CAL—Apartment house, frame, \$9,000. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner, Mr. Pinefield. Location, 4th avenue and East 15th street. Will contain a total of eight suites of two and three rooms with private baths and wall beds. Interior finish pine and white enamel with some elm panels and hardwood floors. Central heating system and hot water supply. Bath room tile. Marble and tile wainscot. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

BATH HOUSES.

SAN RAFAEL, MARIN CO., CAL—Bath house filter. Cost as follows. Architect, none. Owners, City of San Rafael. Two bids were received by the City Council for filters for the municipal baths. The California Jewell Filter Co., Merchants' Exchange Bldg., S. F., offered to deliver in San Rafael a three-unit filter for \$3,450, and a two-unit filter for \$1,924. The latter price included a chloride apparatus valued at \$550. They asked \$600 for installation. The Council could not reconcile the difference in prices for the three-unit and the two-unit filters. The other bid was from Geo. F. Day & Son, 215 Spear street, S. F., for \$1,924 for a three-unit filter, but they were unable to supply the chemical apparatus, nor could they tell the Council what it would cost to install the plant. The matter was referred to the Council as a committee of the whole.

BONDS.

SACRAMENTO, CAL—The \$1,000,000 bond issue for the construction of a state building in San Francisco will be sold about the middle of next month, according to State Treasurer Richardson.

OROVILLE, BUTTE CO., CAL—A petition for the formation of the Paradise Irrigation District has been presented to the County Supervisors. It is planned to include in the district 14,000 acres. The construction of two large reservoirs together with other improvements to cost \$150,000 are planned. Action will be taken by the supervisors shortly.

SALIDA, STANISLAUS CO., CAL.—W. S. Carpenter of Caruthers is in Salida discussing with farmers the erection of a cheese factory. He has already secured a number willing to render financial aid for the proposed structure. A meeting has been called, when the erection of the building will be considered.

FRESNO, FRESNO CO., CAL.—The City Engineer has been instructed to prepare plans and specifications for a storm sewer system and addition to the present sanitary sewer system costing about \$150,000. The question will be put to the people in the shape of a \$500,000 bond issue for this and other improvements.

BAKERSFIELD, KERN CO., CAL.—The \$68,000 bond issue for the Conley high school at Taft has been rejected by the purchaser on account of a technical error, necessitating a new election.

SANTA ANA, ORANGE CO., CAL.—The \$68,000 bond issue for the new school at Brea in the Randolph School District carried at the election December 4. The school will be commenced shortly.

HUNTINGTON BEACH, ORANGE CO., CAL.—An election will be held December 28, 1915, for the purpose of voting on a \$20,000 bond issue for a gas distributing system. It is expected the Southern Counties Gas Co. will bring a natural gas supply to the city from the Fullerton oil fields.

GLENDALE, LOS ANGELES CO., CAL.—An election will be held December 20, 1915, to vote bonds in the sum of \$82,000 for municipal improvements, which will include \$12,000 for an automobile pumping engine, new hose and other equipment; and \$17,000 for storm water protection.

CALEXICO, IMPERIAL CO., CAL.—The \$30,000 bond issue for the establishment of a public park or civic center carried at the recent election. It is expected that various civic buildings will secure sites in the new park. The Carnegie Library, the Woman's Improvement Club, and several fraternal organizations are planning to erect buildings on the property.

RED BLUFF, TEHAMA CO., CAL.—Fifteen bids were received by the County Supervisors for the \$90,000 school bonds. The purchase was awarded to the N. W. Halsey Company at a premium of \$5,913.30.

PORTERVILLE, TULARE CO., CAL.—Property owners of Porterville, against whose holdings have been issued payings bonds to the total value of approximately \$125,000, will resist the payment of the bonds on the ground that the construction was not in accordance with the plans and specifications adopted by the city. The work was done by the Federal Construction Company of San Francisco. Action was precipitated when the company filed for record the first assessments due under the terms of the bonds, which are serial, run for nine years, and if they become a valid obligation are a first lien against property contiguous to the paving.

SEATTLE, WASH.—Bonds of \$750,000 were voted last week for school improvements. Plans for the various schools to be erected will be ordered on the sale of the bonds.

BAKERSFIELD, KERN CO., CAL.—Bids are being taken by the County Supervisors for the purchase of all or any part of the \$500,000 issue of State Highway bonds out of a \$2,500,000 issue. Further information relative to the sale may be had from I. F. Miller, County Clerk.

WHITTIER, LOS ANGELES CO., CAL.—A proposition to bond the city for \$100,000 for the purpose of securing a municipal water system has been placed before the Board of Trustees.

RANDOLPH, ORANGE CO., CAL.—An election held in the Randolph School District to vote bonds of \$66,000 carried. Plans for the building will be ordered shortly.

SANTA MONICA, LOS ANGELES CO., CAL.—An election will be held on December 21st to vote \$172,500 5 per cent water bonds.

REDWOOD CITY, SAN MATEO CO., CAL.—The County Supervisors will open bids on December 20th for the purchase of bonds of \$48,000 of the Redwood City Grammar School District and \$20,000 of the San Bruno Park School District. Further information may be had from Jos. H. Nash, County Clerk.

LOS ANGELES, CAL.—The City Council has set January 18th for the election on the creation of a bond district in Hollywood and adjacent territory, to vote \$1,020,000 bonds to purchase the Union Hollywood water system and to extend the city water service throughout the territory embraced.

REEDLEY, BUTTE CO., CAL.—H. Bogigan has purchased 150 acres of land about three miles east of Reedley and will start improvements immediately. A modern residence is planned among the improvements.

BRIDGES, DAMS AND HARBOR WORK

SACRAMENTO, CAL.—Bridge, timber. Cost not stated. Engineer's name not given. Owners, Central Pacific Railway Co., Sacramento. The Central Pacific Railway Co., a corporation, has filed application with the County Supervisors asking permission to construct, maintain and operate for terminal purposes a wharf on the easterly bank of the Sacramento River, 7-10 of a mile north of Walnut Grove. Bids on this work will be taken by the railroad company when permission has been given.

FRESNO, FRESNO CO., CAL.—Culverts, reinforced concrete and iron. Cost not stated. Engineer, City Engineer E. B. Cronkite, Fresno. The City Engineer was instructed at the last meeting of the Council to have constructed two culverts, three feet by one foot, for I and Merced streets, and J and Merced streets. These culverts were recommended by E. W. Risley in a recent protest against flood damage at J and Merced streets.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridges, 13, reinforced concrete, \$150,000. Engineers, Mayberry & Parker, Pacific Electric Bldg., L. A., and McCurdy Bros. Owners, Santa Barbara County. The County Supervisors at a recent meeting ordered plans and specifications for 13 highway bridges needed on the State Highway. Further mention will be made of this work when bids have been called. Mayberry & Parker, of whom

Fred Johnson is the Santa Barbara representative, will make the plans for six reinforced concrete bridges over Zaca Creek and three between South Zaca and Los Alamos. The other four bridges in the La Cuesta Canyon will be planned by McCurdy Bros.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bridges, steel and reinforced concrete. Cost not stated. Engineer, County Surveyor, Owen H. O'Neil. Owners, Santa Barbara County. County Surveyor Owen H. O'Neil in a report to the County Supervisors states that designs for the following State Highway bridges have been submitted but have not as yet been approved by the State Highway Commission: Overhead crossing, El Capitán, Corral, Tajiquas, two Gaviota bridges and Sheep Camp. Plans and specifications have been prepared for the following jobs: Fencing through North Gogia, Rhode Island States Corp., Jerrardo de la Guest and E. S. Cordero properties. The purchase of rock for Santa Maria road and the laying of macadam on the Santa Maria-Guadalupe road. Bids on these improvements will be called for within the next month.

PORTLAND, ORE.—Viaduct, reinforced concrete, \$66,000. Engineer, City Engineer, Portland. Owners, City of Portland. Bids will be opened on December 29th for the construction of the reinforced concrete viaduct necessary to complete the Union avenue extension. Plans provide for a structure to be 219½ feet long, 53 feet wide with a 16-foot fill 700 feet in length. The cost of the fill will be \$13,000 and of the viaduct \$53,000.

HEALDSBURG, SONOMA CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, City Engineer, Healdsburg. Owners, City of Healdsburg. If the weather will permit the City Trustees will order the construction of a concrete bridge on Piper street, just outside of the city limits. Plans for the proposed structure have been prepared. The present bridge is in a dilapidated condition and must be replaced with a new structure for safety.

BAKERSFIELD, KERN CO., CAL.—Bridge, timber and concrete, \$484. Engineer, County Surveyor, Bakersfield Owners, Kern County. Bids received for the construction of a bridge on the Central branch of the Kern Island canal show Currie & Duglar, Bakersfield, low at \$484. Bids have been taken under advisement.

LONG BEACH, LOS ANGELES CO., CAL.—Bulkhead, reinforced concrete and stone, \$85,000. Engineer, City Engineer, Long Beach. Owners, City of Long Beach. The City Engineer has been instructed by the City Commission to prepare plans and specifications for the construction of a protection bulkhead along the west beach between Golden avenue and Chestnut Place.

VENICE, LOS ANGELES CO., CAL.—Pleasure piers, reinforced concrete and timber, \$150,000. Engineers, Leeds & Barnard, Central Bldg., L. A. Owners, City of Venice. Plans have been submitted for four rock jetties on South Beach, two of which will extend seaward 1,000 feet and two 500 feet. Each jetty will be covered by a pier 30 feet wide and a comfort station built on the outer end of each of the longer ones.

The Board of Trustees and the engineers will decide the pier locations in the next few days. Work is expected to commence about January 1st.

Contracts Awarded.

SACRAMENTO, CAL.—Bridge, reinforced concrete, \$2,790. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, Jenkins and Wells, 3520 Y street, Sacramento. Contract price, \$2,790.

YOLO BY-PASS, YOLO CO., CAL.—Bridge, steel and concrete, \$24,671. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Contractors, Security Construction Co., 28th and Alameda streets, L. A. Contract price, \$24,671. Engineer's estimate, \$28,061.13.

WILLOWS, GLENN CO., CAL.—Bridge, reinforced concrete, \$1,925. Engineer, County Surveyor, Willows. Owners, Glenn County. Contractors, Teal & Thompson, Orland. Contract price, \$1,925.

CHURCHES

REDDING, SHASTA CO., CAL.—Church, 1 story and base, reinforced concrete, \$25,000. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Roman Catholic Church, Father Hayes in charge. Will contain main auditorium, Sunday school rooms, study and social rooms. Interior finish pine with ornamental plaster. Steam heat. Art glass windows and marble altar. Exterior faced with cement plaster. Clay tile roof. Plans being prepared.

MONROVIA, LOS ANGELES CO., CAL.—Mausoleum, 1 story and base, reinforced concrete and granite, \$40,000. Architect's name not given. Owners, Monrovia Mausoleum Co. Contractors, Davidson Construction Co., 16th and Tennessee streets, L. A. Contract price, \$10,000. Contract does not include marble work or ornamental iron.

COURT HOUSES.

SACRAMENTO, CAL.—City jail, 4 story and base, reinforced concrete, \$197,426. Architects, Shea and Lofquist, Bankers' Investment Bldg., S. F. Owners, City of Sacramento. The lowest bid submitted for this work came from Howard S. Williams, Hearst Bldg., S. F., at \$197,426. The lowest figure for the special steel work for the jail was that of the Haldon Iron Works at \$18,621. A complete list of the bids will be found under the heading of Sacramento, Stockton and Northern California in this issue.

SAN FRANCISCO—City Hall bulletin boards. Cost as follows. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owners, City and County of San Francisco. The low bid for furnishing bulletin boards in the new City Hall was submitted by the American Art Metal Works as follows: Proposition No. 1, \$3,647, and proposition No. 2, \$3,547. No award has been made as yet. For a complete list of the bids received see San Francisco.

FACTORIES AND WAREHOUSES

MARTINEZ, CONTRA COSTA CO., CAL.—Oil tanks, steel, \$20,000. Engi-

neer, Engineering Dept. Shell Oil Co., 343 Sansome street, S. F. Owners, Shell Oil Co. Bids have been opened by the Shell Oil Company for 14 oil storage tanks each of 50,000-barrel capacity to be erected in Martinez just north of the Trumbull stills. The bids have been forwarded to Martinez for the approval and recommendation of P. A. L. Englebrecht, who is in charge of the work. It is stated that the Lacey Mfg. Co. and the Petroleum Iron Works were among the low bidders. At the Trumbull stills the entire top of the hill is being sliced off and a high fill made in the hollow to the northward, and it is upon the high plateau that the tanks are to be built. Over 120,000 yards of earth are to be moved at a cost of over \$10,000 to make room for the tank construction.

Contracts Awarded

COLTON, SAN BERNARDINO CO., CAL.—Packing plant, 1 story and base, reinforced concrete, \$25,000. Architect, none. Owners, Pacific Fruit Express Co. Contractors, Leonard & Peck, H. W. Hallman Bldg., L. A. Contract price, \$25,000.

FIRE HOUSES AND JAILS

SAN FRANCISCO—Fire house fixtures, \$155 and \$565. Architects, Ward & Blohme, Alaska Commercial Bldg., S. F. Owners, City and County of San Francisco. Ickelheimer Bros. submitted the lowest bids for furnishing the lighting fixtures for Fire Houses Nos. 3 and 4 at the Wednesday meeting of the Board of Public Works. Contracts have not been awarded. A complete list of the figures will be found under the heading of San Francisco in this issue.

FIRE REPORT

MARICOPA, KERN CO., CAL.—The building occupied by the West Side Meat Market and owned by J. M. Bush, together with a garage building owned by the Gundlack Shoe Company, were destroyed by fire last week. The loss is estimated at \$40,000, partly covered by insurance.

LOS ANGELES, CAL.—The Hauser Packing Company's plant at East Ninth and Mateo streets, has been partially destroyed by fire. The loss is \$12,000.

SACRAMENTO, CAL.—Preparations are now being made to rebuild the slaughter house and storage plant of Charles Silva & Co., which was destroyed by fire last week. A considerable amount of machinery was damaged. The loss is \$65,000, on which there was \$35,000 insurance carried.

PLACERVILLE, EL DORADO CO., CAL.—Fire starting in the drying room of the Placerville Steam Laundry, a two-story frame building, destroyed the entire building, causing a loss of \$7,000. All machinery in the building was damaged.

FLATS

SAN FRANCISCO—Flat alterations, 2 story, frame, \$2,000. Architect, none. Owner, Mrs. B. Kenney, 536 26th avenue, S. F. The work will consist of

altering a two-story frame residence into modern flats, and will include mill work, carpentry work, plastering, painting, plumbing, electric work and glass and glazing. Plans are complete and the work will be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$3,000. Architect, none. Owner, J. C. Kirby, 2152A Market street, S. F. Location, east 7th avenue south of Lake. Will contain two flats of five and six rooms. Interior finish pine and elm panels with some white enamel. Hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

LOS ANGELES, CAL.—Flats, 1 and 2 story and base, frame, \$30,000. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, W. J. Dodd and associates. Location, Sunset Boulevard near Harvard. Will contain twelve buildings of one-story, four rooms each and a two-story building of sixteen rooms also arranged for modern flats. Interiors finished in pine and hardwood with white enamel. Hardwood floors. Open fire places and tile and brick mantels. Bath rooms tile. Central heating system. Automatic water heaters. Bath rooms tile. Exteriors covered with cement plaster. Plans being prepared.

GOVERNMENT WORK & SUPPLIES

- San Francisco Circular No. 86.**
The following bids were received by the depot quartermaster, San Francisco, Cal., under office circular No. 86, opened November 22:
1. Hahenlicht & Howlett, 525 Clay street, San Francisco, Cal.
2. John Rothschild & Co., Market and Spear streets, San Francisco, Cal.
3. Paul Brant, 67 Main street, San Francisco, Cal.
4. Ralph Pugh Co., 562 Howard street, San Francisco, Cal.
5. Fuller & Goep, 34 Davis street, New York City.
6. Simonds Mfg. Co., 12 Natoma street, San Francisco, Cal.
7. W. E. Musher & Co., 410 Mission street, San Francisco, Cal.
8. California Steam & Plumbing Supply Co., 671 5th street, San Francisco, Cal.
9. Pacific Hardware and Steel Co., 7th and Townsend streets, San Francisco, Cal.
10. Howard Engineering Co., Hooker & Lunt Building, San Francisco, Cal.
11. Brunswick-Balke-Collender Co., 767 Mission street, San Francisco, Cal.
12. Marshall-Newell Supply Co., 142 Steuart street, San Francisco, Cal.
13. Dunham, Carrigan & Hayden Co., 110 Kansas street, San Francisco, Cal.
14. Gorham Fire Apparatus Co., 127 New Montgomery street, San Francisco, Cal.
15. Keuffel & Esser Co., 50 2nd street, San Francisco, Cal.
16. A. G. Spalding & Bros., 155 Geary street, San Francisco, Cal.
17. Wolverine Brass Works, 216 Natoma street, San Francisco, Cal.
18. Hulton Adding Machine Co., 37 Montgomery street, San Francisco, Cal.
19. Pacific States Electric Co., 575 Mission street, San Francisco, Cal.
20. The George Lawrence Co., Portland, Ore.
21. Wheeler Reynolds & Stauffer, 621 California street, San Francisco, Cal.
22. United Iron Works, Oakland, Cal.
23. F. S. Johnson Co., 576 Howard street, San Francisco, Cal.
24. Mark-Lally Co., 235 2nd street, San Francisco, Cal.
25. Keyston Bros., 120 2nd street, San Francisco, Cal.
26. W. P. Fuller & Co., Mission and Beale streets, San Francisco, Cal.

27. Coffin-Redington Co., 35 2nd street, San Francisco, Cal.
 28. Holbrook, Merrill & Stetson, 6th and Bloxme streets, San Francisco, Cal.
 29. Pacific Fire Extinguisher Co., 507 Montgomery street, San Francisco, Cal.
 30. A. W. Pike & Co., 711 Mission street, San Francisco, Cal.
 31. Sun Tent & Awning Co., 54 Washington street, San Francisco, Cal.
 32. American-La France Fire Engine Co., 151 New Montgomery street, San Francisco, Cal.
 33. Crane Co., 2nd and Brannan streets, San Francisco, Cal.
 34. Universal Trading Co., 171 Broadway, New York City.
 35. Vulcan Iron Works, 1849 Kearny street, San Francisco, Cal.
 36. York-California Construction Co., 832 Polson street, San Francisco, Cal.
 37. Stauffer Chemical Co., Tacoma Wash.
 38. Baker & Hamilton, 4th and Brannan streets, San Francisco, Cal.
 39. Judson Mfg. Co., 819 Polson street, San Francisco, Cal.
 40. John Clark Saddlery Co., Portland, Ore.
 41. Haines, Jones & Cadbury Co., 851 Polson street, San Francisco, Cal.
 Item 1, 500 brushes, dandruff—Bid 20, 15c ea; 23, 25c; 25, 45c; 34, 28.9c and 28.17c; 38, 21c and 40, 41c.
 2, 300 yds canvas, white cotton, 66-in—Bid 31, 94.19c yd; 34, 98.9c and \$1.034.
 3, 400 yds do, 36-in—Bid 31, 33.44c yd; 34, 35.7c and 37, 37.1c ea.
 4, 100 yds do, 60-in—Bid 31, 57.32c yd; 34, 63.73c and 65.73c.
 5, 200 yds do, 72-in—Bid 31, 70.98c yd; 34, 75.47 and 78.9c.
 6, 21 yds cloth, green baise—Bid 11, \$2.50 yd; 34, \$4.47.
 7, 6 coils, ammonia, condenser—Bid 22, \$85 ea; 35, \$96.50; 26, \$72.
 8, 56 lights, glass, plate—Bid 1, \$1.10 ea; 5, 90c; 26, 85c.
 9, 1,000 lbs taphaline, flake—Bid 2, 12 1/2c lb; 27, 16c; 34, 16.73c; 37, 18 1/2c.
 10, 3 brushes, black sable, No. 6—Bid 15, 25c ea.
 11, 3 do, No. 8—Bid 15, 36c ea.
 12, 2 do, No. 10—Bid 15, 41c ea.
 13, 3 do, No. 12—Bid 15, 52c ea.
 14, 3 do, No. 22—Bid 15, 25.5c ea.
 15, 400 lbs carbon, bisulphide—Bid 21, 9 1/2c lb; 27, 12c.
 16, 36 half pans colors, water, No. 5—Bid 15, 11c half pan; 34, 10.89c.
 17, 36 do, No. 8—Bid 15, 11c ea; 34, 10.89c.
 18, 36 do, No. 11—Bid 15, 11c ea; 34, 10.89c.
 19, 36 do, No. 22—Bid 15, 11c ea; 34, 10.89c.
 20, 36 do, No. 34—Bid 15, 11c ea; 34, 10.89c.
 21, 36 do, No. 41—Bid 15, 11c ea; 34, 10.89c.
 22, 36 do, No. 15—Bid 15, 11c ea; 34, 10.89c.
 23, 36 carmine lake—Bid 15, 20c ea; 34, 38.7c.
 24, 36 do, permanent violet—Bid 15, 25c ea; 34, 28.7c.
 25, 29 extinguishers, fire, 3-gal—Bid 3, \$8.25 ea; 4, \$7.50; 14, \$5.60; 29, \$7.75; 32, \$7.50.
 26, 100 handles, hammer, blacksmith—Bid 9, \$1.90 doz; 12, \$1.92; 34, \$1.189; 38, \$1.44.
 27, 6 sticks ink, Chinese—Bid 15, 80c ea.
 28, 4 nons, plane, double—Bid 9, 59c ea; 12, 62c; 38, 56c.
 29, 2 boxes leads, artist pencil—Bid 15, 75c box.
 30, 1 motor for balton adding machine—Bid 18, \$85.50; 24, \$109.75.
 31, 144 btls oil, for Edison battery—Bid 19, 4c btl.
 49, 1 gr pens, mapping—Bid 15, \$4.80 gr.
 50, 1,900 ft pipe, ammonia, 2-in—Bid 8, 17.7c ft; 24, 18.52c and 18.81c; 33, 18.52c and 16.81c.
 51, 2 planes, scrub—Bid 9, 80c ea; 13, 75c; 38, 75c.
 52, 21 snaffles, bridle, mouth—Bid 20, 19c ea; 23, 25c and 33c; 40, 16c.
 53, 10,000 lbs soda, sal—Bid 2, 2.12c lb; 34, 1.9c.
 56, 2 hags, punching—Bid 16, \$4.66 ea.
 57, 2 balls, basket—Bid 16, \$4.50 ea; 34, \$5.97.
 58, 2 balls, medicine—Bid 16, \$6.25 ea; 34, \$5.47.

59, 288 prs hinges, strap, 3-in—Bid 9, 2.1c pr; 12, 2.15c; 13, 2.1c; 34, 2.97c; 38, 2.1c; 50, 25c doz.
 60, 576 prs do, 4-in—Bid 9, 3.9c pr; 12, 3.8c; 13, 3.73c; 34, 3.93c; 38, 3.6c; 30, 42c doz.
 61, 288 prs do, 5-in—Bid 9, 5c pr; 12, 5.1; 15, 5c; 34, 5.73c; 38, 4.9c; 30, 58c doz.
 62, 1,800 prs do, 6-in—Bid 9, 6 1/2c pr; 12, 7c; 13, 6 1/2c; 34, 6.47; 38, 6.3c; 30, 75c doz.
 63, 72 prs do, 11-in—Bid 9, 29c pr; 12, 30.5c; 13, 28.5c; 34, 29.7c; 38, 27c; 30, \$3.50 doz.
 64, 1 attachment, ratchet, pipe stock—Bid 13, 2c; 28, \$2.50; 34, \$1.97.
 65, 2 bulbs, furnace—Bid 17, 27c ea; 28, 30c; 41, 30c.
 68, 144 caps, for Fuller bibbs, 3/4-in—Bid 17, 12c doz; 28, 15c.
 70, 144 do, 5/8-in—Bid 17, 12c doz; 28, 15c.
 71, 144 do, 3/4-in—Bid 17, 17c doz; 28, 15c.
 72, 21 cocks, ball, top supply, 3/4-in—Bid 9, 67c ea; 28, \$1.90.
 73, 16 do, 1/2-in—Bid 17, \$1.25 ea; 28, \$1.15.
 78, 8 do, 1/2-in—Bid 17, \$1.25 ea; 28, \$1.15.
 75, 21 elbows, circulating—Bid 8, 13 1/2c ea; 24, 16c; 28, 20c; 41, 20c.
 76, 20 extinguishers, fire, 3-gal—Bid 2, \$8.25 ea; 4, \$7.50; 14, \$5.60; 29, 7.75; 32, \$7.50.
 77, 18 prs glass, clear, 3-16 in—Bid 5, 94c and 74c pr.
 78, 6 prs do, 10-in diam—Bid 5, 84c and \$1.04 pr.
 79, 2 holders, tool—Bid 12, \$1.46 ea; 13, \$1.40.
 80, 1 gr screws, brass—Bid 17, \$2.87 gr.
 81, 12 spuds, brass—Bid 17, 66c ea; 28, 75c.
 82, 12 syphons, gooseneck, 1 1/4-in—Bid 17, 78c ea; 24, 40c; 28, 50c; 41, 60c.
 83, 12 do, 1 1/2-in—Bid 17, 96c ea; 24, 56c; 28, 70c; 41, 80c.
 84, 1,500 teeth, saw, inserted—Bid 6, \$2.50 per 100.
 85, 250 tiles, for Heine boiler, style T—Bid 7, 44c ea; 10, 45c.
 86, 250 do, style U—Bid 7, 43c ea; 10, 45c.
 87, 2 valves, globe, iron, 3-in—Bid 8, \$4.28 ea; 12, \$7.95; 13, \$8.60; 24, \$7.85.
 88, 1 do, 4-in—Bid 8, \$5; 12, \$12.50; 13, \$13.65; 24, \$12.40.
 89, 200 washers, bibb—Bid 8, 60c lot; 9, 35c; 12, 50c; 28, 1c ea.
 90, 1 wrench, elgin, 7-in—Bid 9, 50c; 91, 60 prs hinges, cast brass, 1x1 1/2 in—Bid 12, 12.5c pr; 30, 22c; 38, 25c.
 92, 160 prs do, 1 1/2x2 in—Bid 12, 20c pr; 30, 25c; 38, 35c.
 93, 21 prs do, refrigerator—Bid 30, \$2.50 doz prs.
 94, 38 parts for trolley track, No. 47—Bid 13, 25c ea; 34, 29.4c.
 95, 22 do, No. 48—Bid 13, 25c ea; 34, 29.4c.
 96, 22 do, No. 49—Bid 13, 25c ea; 34, 29.4c.
 97, 41 do, No. 124—Bid 13, \$1.36 ea; 34, \$1.47.
 98, 1 plane, moulding, 1-in—Bid 9, 75c.
 99, 2 scrapers, cabine, flat—Bid 9, 13c ea; 30, 30c.
 100, 51 trolley track, trolley—Bid 13, 19.5c ft; 34, 21.7c.
 101, 500 washers, bridge, 5/8-in—Bid 9, 10 1/2c lb; 38, 2.6c; 39, 2 1/2c.
 102, 6,000 do, 3/4-in—Bid 9, 2 1/2c lb; 38, 2.6c; 39, 2 1/2c.
 103, 400 do, 1-in—Bid 9, 2 1/2c lb; 38, 2.6c; 39, 2 1/2c.
 104, 12 cocks, ball, top supply—Bid 9, 67c ea; 28, \$1.90.

La Junta, Colo., Furniture.

The contract for installing furniture in the U. S. post office at La Junta, Colo, has been awarded to the Nelson Co., Brooklyn N. Y., at \$1,286.

Idaho Falls, Idaho, Post Office.

In the construction of the U. S. post office at Idaho Falls, Idaho, for which the Sound Construction and Engineering Co., Portland, Ore., has the contract, cabinet and label manufactured by the Trumbull-Vanderpool Electric Mfg. Co. will be used in lieu of the

Agutter-Griswold Co.'s previously approved.

Main Canals and Laterals.

The Secretary of the Interior has authorized the Reclamation Service to execute the following contracts for earthwork on the main canals and laterals, Grand Valley irrigation project, Colo.:

Schedules 1 to 8, main canal, Reynolds-Ely Construction Co. of Springfield, Utah, estimated cost, \$28,534.50.

Schedule 9, Henry Wilson, Carl Hicks & H. H. Wilson, Fruita, Colo., \$3,323.50.
 Schedule 10, C. S. Kirkendall and John E. Nelson, Fruita, Colo., \$2,801.80.

Schedule 11, Sam Kloczko, Loma Colo., \$1,619.90.

Schedule 12, J. M. Groesbeck, Springfield, Utah, \$2,937.50.

Schedule 13, James O'Bryan, Fruita, Colo., \$2,364.50.

Schedule 14, J. W. Collier, Grand Junction, Colo., \$1,323.

Schedule 15, Wade Collier, Grand Junction, Colo., \$1,420.

Schedule 16, Charles E. Lutz, Loma, Colo., \$1,578.

Boise, Idaho, Post Office.

All bids received by the supervising architect, Treasury Department, Washington, D. C., for remodeling the extension to the U. S. post office at Boise, Idaho, were in excess of the amount available for this work. The specifications will be revised and supplemental bids requested at an early date.

SAN FRANCISCO—Officers' quarters, 2 story and base. Class C construction. Cost not stated. Engineer, Constructing Quartermaster's Office, Fort Mason. Owners, United States Government. Word has been received from the War Department that a site for the 40 new officers' quarters to be erected in the Presidio of San Francisco will shortly be settled, and that the Constructing Quartermaster's Office will be directed to call for figures on the work. Plans prepared here and forwarded to Washington have been officially approved. The contract for the construction of roads, walks, gutters and asphaltting at the Letterman General Hospital has been awarded to the Fay Improvement Co., Phelan Bldg., on this bid of \$2,697.50.

HALLS AND SOCIETY BUILDINGS

PORTLAND, ORE.—Auditorium, 1 and 2 story and base, steel, brick and concrete, \$500,000. Architect's name not given. Owners, City of Portland. Will cover an area of 200 by 200 feet, and will contain a main auditorium 100 by 108 feet, assembly hall 40 by 140 feet, a second assembly room 34 by 86 feet and a stage 148 by 168 feet. Stairways to the upper floor will be of concrete. Interior finish pine and hardwood. Steam heat, oil burning system and vacuum cleaning. Exterior faced with pressed brick trimmed with terra cotta. Plans are being prepared.

SAN FRANCISCO—Women's gymnasium, 4 story and base. Class B construction, \$110,000. Architects, Bliss & Paville, Balboa Bldg., S. F. Owner, C. T. Ryland, leased to the San Francisco Women's Athletic Association. Loca-

tion, north Sutter between Mason and Taylor streets. Plans for the work have been out for figures and all bids are now in and under advisement. Contracts will be let shortly.

HOSPITALS

SAN FRANCISCO—Hospital work. Cost not stated. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. At last Wednesday's meeting of the Board of Public Works bids were received for the structural steel for both the north-east and southeast wings of the San Francisco Hospital, and also for the construction of a ward for diphtheria carriers at the Isolation Hospital. A complete list of these bids will be found under the heading of San Francisco in this issue.

SAN FRANCISCO—Emergency Hospital, 2 story and base. Class C construction. Cost not stated. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Plans and specifications have been completed for the Central Emergency Hospital and are awaiting the selection of a site for the building.

HOTELS

SAN FRANCISCO—Hotel completion, 6 story and base, brick and steel, \$45,000. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owners, J. K. Prior Estate. Location, southwest corner of Mason and Eddy streets. Plans for this work have been completed and segregated figures are now being taken as follows: Plumbing, heating, glass and glazing, painting and decorating, carpentry and mill work, elevators, sheet metal work, plastering, electric work.

IRRIGATION PROJECTS

MANTECA, SAN JOAQUIN CO., CAL.—Irrigation dam, reinforced concrete, \$165,000. Engineer, Chief Engineer, Manteca. Owners, South San Joaquin Irrigation District. At the last meeting of the Directors of the South San Joaquin Irrigation District all bids for the construction of the big dam project were rejected and new bids ordered advertised. New bids will be opened on January 2nd at 10 a. m. The dam will impound 35,000 acre feet of water and its construction involves the excavation of approximately 500,000 cubic yards of material. The hydraulic method will be used in excavating. The Ross Construction Co. of Sacramento submitted the lowest figure at \$180,160, which is reported as being about \$16,000 above the engineer's estimate.

GASBURG, STANISLAUS CO., CAL.—Irrigation work. Cost not stated. Engineer, Chief Engineer Hermann. Modesto. Owners, Modesto Irrigation District. At the last meeting of the Board of Directors of the Modesto Irrigation District Chief Engineer Hermann was instructed to proceed with the construction of a transition section at the lower end of the Gasburg crossing.

WILLOWS, GLENN CO., CAL.—Levee construction, \$8,000 or more. Engineer's name not given. Owners, Levee District No. 3. The State Reclamation Board has approved the plans of the trustees of Levee District No. 3 for raising the levee in the Princeton country. It will be made two feet higher than the highest water mark. Trustees are Thos. Crouch, Oscar Steele and John Brough.

POST OFFICES

OLYMPIA, WASH.—Post office alteration. Cost not stated. Architect, Supervising Architect, Washington, D. C. Owners, United States Government. Bids will be received until December 27th at 10 a. m. for enlarging the drafting room and constructing skylights in the Federal Building. Plans can be secured from either the Supervising Architect at Washington, D. C., or from the custodian at Olympia. An official proposal appears in another column of this issue.

RAILROAD CONSTRUCTION AND EQUIPMENT

SAN FRANCISCO—Railroad construction, \$120,500. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. The lowest figure for the construction of a portion of the Church Street Municipal line was presented by the Contra Costa Construction Co. at \$120,500. An award of contract has not been made. A complete list of the bids appears under the heading of San Francisco in this issue.

LOS ANGELES, CAL.—Railroad work. Cost not stated. Engineer, Engineering Dept. Pacific Electric Railway Co., L. A. Owners, Pacific Electric Railway Co. The engineering department of the Pacific Electric Railway Co. has completed plans and specifications for the elevated tracks to be erected in the rear of the Pacific Electric building. The tracks will extend from Los Angeles to San Pedro street. The plans also provide for the erection of umbrella sheds of concrete and steel construction. The Board of Public Utilities has issued an order that the contract for the work must be awarded prior to December 31st and the work completed by July 15, 1916. The tracks at the Hill street station between 4th and 5th streets will be rearranged and umbrella shed erected.

Contracts Awarded.

SAN FRANCISCO—Railroad construction, 67 miles, \$1,542,080. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractor, F. Rolandi, Bank of Italy Bldg., S. F. Contract price, \$1,542,080. Note: The contract covers the construction of the line into the Hetch-Hetchy site.

SAN FRANCISCO—Railroad construction, \$123,500. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Contra Costa Construction Co., S. F. Contract price, \$123,500. This contract covers the construction of section B of the Church Street Municipal Railroad.

RESIDENCES

SAN FRANCISCO—Residences, 3, 2 story and base, frame, \$5,000 to \$6,000 each. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner's name withheld. Location, 12th avenue and Balboa street. Each dwelling will contain eight rooms, two baths and sleeping porch. Basement garages are provided. Interior will be finished in pine, hardwood and white enamel. Hardwood floors will be used in the principal rooms. Furnace heat, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heaters. Exterior covered with cement plaster. Plans being prepared.

SAN FRANCISCO—Residences, 2, 1 story and base, frame, \$1,800 each. Architect, none. Owner, N. E. Nilsson, 355 Coleridge street, S. F. Location, south Rivera west 21st street. Each will contain five rooms and bath. Interior finish pine with some hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$5,000. Architect, C. O. Clausen, Hearst Bldg., S. F. Owner, C. O. Clausen. Location, 16th avenue and Balboa. Will contain eight rooms, bath, sleeping porch and basement garage. Interior finish pine and southern gum and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Furnace heat. Automatic water heater. Bath room tile. Exterior covered with cement plaster on metal lath. Plans being prepared.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, W. A. Anderson, 1774 Auscon avenue, Oakland. Location, west Auscon avenue south of Birch. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Bath room tile. Automatic water heater. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, C. S. Nichols, 1719 Castro street, Oakland. Location, west Baker north of Oregon. Will contain five rooms and bath. Interior finish pine and white enamel. Some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$3,000. Architect, E. W. Cannon, Central Bank Bldg., Oakland. Owners, Barry Building Co., 2527 Market street, Oakland. Location, east Montclair north of Park Boulevard. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Tile bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$1,500. Architect, none. Owner, A. Anderson, 322 41st street,

Oakland. Location, east Patterson south Kansas. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$2,500. Architect, Charles W. McCall. Central Bank Bldg., Oakland. Owner, Walter H. Packard. Location, west Thomas south of Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors, furnace heat and open fire places. Mantels tile and brick. Tile bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work by Day Labor.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$2,000. Architect, none. Owner, Walter L. May, 1702 7th street, Oakland. Location, north Loothill Boulevard west of Seminary. Will contain five rooms, bath and sleeping porch. Interior finish pine white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, Emma Coburn, 5215 Broadway, Oakland. Location, south Madeline west of Laurel. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors, open fire places and furnace heat. Mantels tile and brick. Bath room tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$5,000. Architects, Banning & Stewart, 4536 Walnut avenue, Oakland. Owner's name not given. Location, west Belgrave north of Napa. Will contain eight rooms, two baths and sleeping porch. Separate garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Bath rooms tile. Automatic water heater. Mantels tile and brick. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$1,800. Architect, none. Owner, A. Hammarberg, 3758 Piedmont avenue, Oakland. Location, west 14th avenue east of 21st. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete, and work to be done by Day Labor.

ALBANY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$1,500. Architect, none. Owner, Charles Westwood, 3819 Clarke, Albany. Location, north Albany Terrace. Will contain five rooms and bath. Interior finish pine with some hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster.

Plans complete and work to be done by Day Labor.

PALO ALTO, SANTA CLARA CO., CAL.—Residence, 2 story and base. Class C construction, \$25,000 or more. Architect, Louis Christen Mullgardt, Chronicle Bldg., S. F. Owners, Trustees Leland Stanford, Jr., University. Location, University Campus. Will contain a large number of rooms, several baths and sleeping porches. A separate garage will be erected. Interior finish pine, hardwood and white enamel. Central heating system, probably steam steam heat, open fire places and vacuum cleaning. Bath rooms finished in tile. Hot water circulating system. Exterior faced with cement plaster. Clay tile roof. Preliminary plans being prepared.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$3,500. Architect, none. Owner, W. H. Ackerman, Fresno. Location, Alta Vista Tract. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$3,000. Architect, none. Owners, Central California Land Co., 955 I street, Fresno. Location, La Sierra Tract. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room tile. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$7,000. Architect, F. Holberg Reimers, 2145 Shattuck avenue, Berkeley. Owner, E. Dunham. Location, Rose street. Will contain eight rooms, three baths, sleeping porch and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

BERKELEY, ALAMEDA CO., CAL.—Residences, 6, 1 story and base, frame, \$2,000 each. Architect, none. Owner, R. E. Hillen, 430 Haight avenue, Alameda. Location, Delaware, Francisco and Acton streets. Each house will contain five rooms, bath and sleeping porch. Interiors finished in pine and hardwood with some white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Some tile wainscot in bath rooms. Exteriors covered with shingles and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

Contracts Awarded.

SOUTH PASADENA, LOS ANGELES CO., CAL.—Residence, 2 story and base, brick and hollow tile, \$21,000. Architects, Maiston & Van Pelt, Chamber of Commerce Bldg., Pasadena. Owner, Mrs. F. H. D. Banks. Contractor, W.

A. Taylor, 966 Elizabeth street, Pasadena. Contract price, \$21,000. Note: Contract does not include plumbing, painting, heating, electric work or ornamental iron.

SCHOOLS

SAN FRANCISCO—School retaining wall, \$675. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. The lowest bid received for the construction of a concrete retaining wall at the McKinley School was presented by John Spargo at \$675. A contract has not been awarded.

SAN FRANCISCO—School, 2 story and base, concrete and frame. Cost not stated. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Location, Bernal Heights. Will contain eight class rooms, auditorium and teachers' rooms. Interior finish pine with maple floors in the class rooms. Stairways reinforced concrete. Modern school plumbing. Central heating system, probably steam heat, oil burning equipment. Exterior covered with cement plaster on metal lath. Plans complete and bids to be called for shortly.

OAKLAND, CAL.—School addition, 2 story and base, frame and concrete, \$16,430. Architect, J. J. Donovan, Dalziel Bldg., Oakland. Owners, City of Oakland. Of the six sets of figures received for the construction of this addition to the Fremont School, that presented by Anderson & Ringrose, 320 Market street, S. F., was the lowest at \$16,130. Bids were referred to the City Attorney. A complete list of the bids appears under the heading of Oakland and Alameda County in this issue.

CHATHAM SCHOOL DISTRICT, TULARE CO., CAL.—School, 1 story and base, frame. Cost not stated. Architect, J. L. Roberts, Jacobs Bldg., Visalia. Owners, Chatham School District. Bids will be received until December 18th at 1 p. m. for the construction of this building. Plans can be secured from the architect or from A. W. Keck, Clerk of the Board of School Trustees at Tulare.

FRESNO, FRESNO CO., CAL.—School completion. Class C construction, \$248,000. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. Advices from Sacramento state that the State Advisory Board, acting at the request of State Engineer McClure, directed the State Department of Engineering to take over the work of completing the Fresno Normal School and carry on the construction by Day Labor. The original contract was awarded to Wingett Construction Co. of Los Angeles for approximately \$248,000. This company abandoned the work about a week or ten days ago when it was nearly one-half complete. Construction will be rushed under the Day Labor system.

TIFTON, TULARE CO., CAL.—School heating, electric. Cost not stated. Architect's name not given. Owners, Tipton School District. Bids will be received until 1 p. m. of December 18th for furnishing and installing an electric heating system in the school building. Plans can be secured from the

office of the M. Whitney Power and Electric Co. at Tipton.

LOS ANGELES, CAL.—School, 1 story and base, brick or hollow tile, \$25,000. Architects, Train & Williams, Exchange Bldg., L. A. Owners, City of Los Angeles. Location, Adams, between 20th and 31st avenues. Will contain six class rooms and an auditorium. Interior finish pine and maple floors. Steam heat and vacuum cleaning. Exterior faced with cement plaster. Plans complete and bids to be called for at once.

LOS ANGELES, CAL.—School group, 1 and 2 story and base, brick. Cost not stated. Architects, Needham & Cline, Brockman Bldg., L. A. Owners, City of Los Angeles. Location, north Broadway and Pritchard street. Group will consist of an auditorium building 100 by 110 with a seating capacity of 1500 people, a three-story library building 32 by 88 feet and a two-story music building 51 by 110 feet. Interior finish pine with maple floors. Central heating system and modern plumbing. Tile, marble and staff ornamentation. Exteriors faced with cement plaster. Plans complete and figures being taken. Bids to be opened on December 23rd.

SEWERS, STREET WORK & WATER SYSTEMS

BERKELEY, ALAMEDA CO., CAL.—Street electroliters. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Plans for the first attempt at lighting the streets under the district plan have been adopted by the City Council. Under the new plan steel electroliters with but one arc lamp will be installed. The district it is proposed to light includes everything south of Derby and east of College avenue.

DALY CITY, SAN MATEO CO., CAL.—Street and sewer work. Cost not stated. Engineer, City Engineer, Daly City. Owners, Daly City. Bids will be received up to and including December 27th at 8 p. m. for grading to official grade, constructing concrete gutters and sidewalks, asphaltic concrete pavement with 4-inch base and 1½-inch wearing surface, vitrified brick pavement with 4-inch base, 8-inch vitrified, salt-glazed ironstone sewer; 4-inch base vitrified, salt-glazed, ironstone sewer; storm water sewers; reconstructing manholes and building new manholes in various streets.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Street and sewer work. Cost not stated. Engineer, City Engineer, South San Francisco. Owners, City of South San Francisco. Bids will be received up to and including December 20th at 8 p. m. for grading to official grade, constructing concrete curbs, gutters and sidewalks, and oil macadam pavement on 1st, 2nd and 3rd streets, and portions of A, B and C streets.

SONORA, TULUMNE CO., CAL.—Filtration system. Cost not stated. Engineer, Engineering Dept. Sierra and San Francisco Water Co. Sonora. Owners, San Francisco and Sierra Water Co. Plans are being made for the improvement of the water system of the Sierra and San Francisco Power Co., which supplies water for the city

of Sonora and vicinity. Though the company has been furnishing good water it is unavoidable that at times during the rainy season that the water is muddy and it is to overcome this that a filtration system will be installed. When a site has been secured work on the system will be started.

REDDING, SHASTA CO., CAL.—Lighting system. Cost not stated. Engineer, Ernest Rollison, Redding. Owners, Town of Redding. Redding will build its own electric lighting system, according to a decision reached by the City Trustees at their last meeting. The first unit of the system as planned by the Trustees will cost in the neighborhood of \$2,000. Other units will be added as finances permit. Further mention will be made of this work.

STOCKTON, SAN JOAQUIN CO., CAL.—Sanitary sewer system. Cost not stated. Engineer, City Engineer, Stockton. Owners, City of Stockton. At the last meeting of the City Council plans and specifications for the construction of a sanitary sewer on Fair Oaks avenue from Marsh to East street, along East street to Oak street, on Oak street to West street, along West street to Smith's canal, with a branch on Union street from Acacia to Oak street, were approved and bids were ordered received up to December 24th. Further information together with plans and specifications may be had from the City Clerk at Stockton.

FRESNO, FRESNO CO., CAL.—Sewer system extension. Cost not stated. Engineer, City Engineer B. E. Crankite, Fresno. Owners, City of Fresno. The City Engineer was instructed at the last meeting of the City Council to start the preparation of the plans and specifications for the proposed enlargement of the sewer system and a system of storm sewers. Floods resulting from the last storm prompted the action of the Council, owing to the large amount of damage done. The funds to finance construction will be raised by a bond issue of a half million dollars.

BAKERSFIELD, KERN CO., CAL.—Road paving. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. At the last meeting of the County Supervisors the Clerk was instructed to advertise for bids for concrete paving of a section of Brundage Lane from H to Union avenue. Bids on the work close December 17th at 10 a. m. Further information together with plans and specifications may be had from the County Clerk at Bakersfield.

DIXIELAND, IMPERIAL CO., CAL.—State Highway construction, \$72,088. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids opened at the last meeting of the State Highway Commission show C. L. Hyde Construction Co., San Diego, low for the construction of approximately 12 miles of Portland cement concrete highway in Imperial County. The engineer's estimate for this work was \$100,108. A complete list of the bids appears under the heading of Los Angeles and Southern California in this issue.

SACRAMENTO, CAL.—Centrifugal pump, \$17,000. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. All negotiations with the

C. F. Braun Pump Co. for the substitution of another pump at the city water works for the one which failed to come up to specifications were abandoned when the City Commission adopted specifications for a new pump. Acting Commissioner of Public Works E. J. Carragher asked that plans and specifications be adopted. The specifications call for bids to be opened December 23rd at 11 o'clock for a new centrifugal pump of 15,000,000 gallons capacity. The city set aside \$17,000 for the rejected pump and this money will be used for the new pump. Of this amount \$12,000 has been paid on account. The city will demand its return.

REDWOOD CITY, SAN MATEO CO., CAL.—Storm water sewers. Cost not stated. Engineer, City Engineer, Redwood City. Owners, Redwood City. At the last meeting of the City Trustees the matter of the drainage of storm water at the intersection of Broadway and the state highway was brought to the attention of the Board by E. T. McGittigan, representing the Highlands Improvement Club. Plans, specifications and estimates for a concrete gutterway across Broadway at this point were ordered by the City Engineer.

RICHMOND, CONTRA COSTA CO., CAL.—Roadway construction. Cost not stated. Engineer, City Engineer Chapman, Richmond. Owners, City of Richmond. City Engineer H. D. Chapman has presented plans and specifications to the City Council, together with estimates for the excavating of a roadway from the southern terminus of the Municipal highway to the Santa Fe wharves at Ferry Point. The connecting roadway to be built is estimated at about 500 feet in length. The road will encircle the waterfront portion of the hill west of the highway. Bids will be called for on the approval of the plans.

REDWOOD CITY, SAN MATEO CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Redwood City. Owners, Redwood City. At the last meeting of the City Trustees the matter of street work on Stanford and Winslow streets was referred to the City Engineer. Plans and specifications were ordered prepared for the improvement of Broadway between railroad crossing and the state highway.

SAN RAFAEL TO NAPA, CAL.—Highway construction. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. The State Highway Commission has decided to build a state highway lateral from San Rafael to Napa. Marin, Sonoma and Napa Counties have agreed to pay \$175,000 of the cost and the State Highway Commission \$25,000. Bids for this stretch of highway will be called in the near future. Further mention will be made of this work.

MARTINEZ, CONTRA COSTA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Martinez. Owners, City of Martinez. M. F. Sullivan, representing the firm of Wright, Anderson & Yost, First National Bank Bldg., Redwood City, reports that the signature of every property owner along Main street has been secured and work on the paving of

that thoroughfare with an oil macadam pavement will be started in the early spring.

MODESTO, STANISLAUS CO., CAL.—Street paving and sewer work. Cost not stated. Engineer, City Engineer, Modesto. Owners, City of Modesto. In response to a petition presented, the City Council has passed a resolution of intention providing for the paving of the alley in block 85. Sewer construction was ordered in the block bounded by Fifth, Sixth, F and G streets at the same meeting.

TURLOCK, STANISLAUS CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Turlock. Owners, City of Turlock. The City Council has ordered bids received for the improvement of Diablo street in this city. Plans and specifications for the work may be had from the City Clerk.

VISALIA, TULARE CO., CAL.—Paving. Cost not stated. Engineer, City Engineer, Visalia. Owners, City of Visalia. To correct a mistake in advertising for bids for the paving of South Bridge street and from the west line of the west Main street paving to the state highway was nullified by the City Trustees, and bids have been ordered readvertised. Plans for the paving work may be had from the City Engineer or City Clerk at Visalia.

BRAWLEY, IMPERIAL CO., CAL.—Sewer pipe. Cost not stated. Engineer, City Engineer, Brawley. Owners, City of Brawley. Bids will be received by the City Clerk up to 5 p. m. of December 22nd for furnishing the city with 2,620 feet of 10-inch vitrified, salt-glazed, A No. 1 sewer pipe. Certified check for 19 per cent is required. J. H. Stevenson is the Clerk.

SANTA ANA, ORANGE CO., CAL.—Street lighting system. Cost not stated. Engineer, City Engineer, Santa Ana. Owners, City of Santa Ana. The City Trustees have decided to start construction of the proposed lighting system to be installed. Bids will be taken immediately for the underground work and for furnishing the electroliers and lights. Plans will be started at once and competitive bids will be called for. Further mention will be made of this work when the plans are complete.

SAN DIEGO, CAL.—Sewer construction, \$47,000. Engineer, City Engineer, San Diego. Owners, City of San Diego. Doran & Armstrong, San Diego, who were awarded the sewer system contract at \$47,000, have declined to carry out the work owing to possible legal complications. It is probable a district will be created and bonds issued.

LOS ANGELES, CAL.—Road improvement, \$19,945. Engineer, City Engineer, Los Angeles. Owners, City of Los Angeles. Jas. L. Frazer of Long Beach was the lowest bidder at \$19,945 for improving 2.4 miles of Merced avenue southwest of Covina in Road District No. 39. The work will consist of grading, macadamizing and constructing bridges and culverts.

Contracts Awarded.

SAN FRANCISCO—Paving, basalt block. Cost not stated. Engineer, Engineering Dept., Southern Pacific Co., Flood Bldg., S. F. Owners, Southern Pacific Co. Contractors, Fay Improve-

ment Co., 1801 Harrison street, S. F. Contract price not stated.

OAKLAND, CAL.—Storm sewer. Cost not stated. Engineer, County Surveyor, Oakland. Owners, Alameda County. Contractor, T. B. Russell, Oakland. Contract price not stated.

SALINAS, MONTEREY CO., CAL.—Road improvements. Cost as follows. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractor, Lou G. Hare, Salinas, grading on Coast road near Oliver ranch. Contract price, \$750. Granite Rock Co., Salinas, 3½ miles of water bound macadam, \$3,399.75; also 16 miles of oil bound macadam from Del Monte to Castroville to the same contractors. Cost not stated. Bids for one-half mile of road work in San Miguel Canyon were rejected and the work will be done by Day Labor.

WOODLAND, YOLO CO., CAL.—Paving bridge. Cost not stated. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Contractors, Graff Construction Co., Woodland. Contract price not stated.

STOCKTON, SAN JOAQUIN CO., CAL.—Sewer construction, \$2,676.47. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, Tibbitts-Pacific Co., 16 California street, S. F. Contract price, \$2,676.47.

PASO ROBLES, SAN LUIS OBISPO CO., CAL.—Sewer construction. Cost as follows. Engineer, Town Engineer, Paso Robles. Owners, Town of Paso Robles. Contractor, W. J. Tobin, 735 Filbert street, Oakland. Contract price, 76c per foot for sewer. Manholes \$50 each.

OAKLAND, CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Oakland. Owners, City of Oakland. Contractor, D. U. Toffelmier, Oakland. Improvement of 64th avenue and Harmon avenue. Contract price not stated.

SACRAMENTO, CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractor, A. L. Rosa, 1500 T street, Sacramento. Contract for 16th from P to X. Contract price not stated.

RED BLUFF, TEHAMA CO., CAL.—Trenching road. Cost as follows. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors, Wood & Supan, Red Bluff. Contract price 45c per foot for 930 feet.

LOS ANGELES, CAL.—Street improvement, \$43,178.97. Engineer, City Engineer, Los Angeles. Owners, City of Los Angeles. Contractors, Benj. F. Ford and Fred H. Stout, L. A. Contract price, \$43,178.97.

MANHATTAN BEACH, LOS ANGELES CO., CAL.—Street improvement, \$11,594.03. Engineer, City Engineer, Manhattan Beach. Owners, City of Manhattan Beach. Contractors, Municipal Improvement Co., 803 Macdonald avenue, Richmond. Contract price, \$11,594.03.

RIVERSIDE, RIVERSIDE CO., CAL.—Ornamental electroliers, \$12,915.94. Engineer, City Engineer, Riverside. Owners, City of Riverside. Contractors, Electric Supply Co., Riverside. Contract price, \$12,915.94.

STORES AND OFFICES

SAN FRANCISCO—Stores and lofts, 2 story and base, brick and steel. Cost not stated. Architect, Herbert Maggs, 125 Alpine streets, S. F. Owner, Mrs. Helen Otto, leased to Hermann Safe Co. Location, west Fremont street 137 south of Howard, covering an area of 92 by 137½ feet. Will contain show rooms, office and factory. Interior of the office and show rooms finished in pine and hardwood. Freight elevator, steam heat and special machinery. Patent store fronts and marble bases. Construction extra heavy type. Exterior faced with pressed brick. Plans complete and figures being taken.

FRESNO, FRESNO CO., CAL.—Store and loft alteration, 2 story and base, brick, \$2,000. Architect, R. F. Felchlin, Rowell Bldg., Fresno. Owner, Mary E. Berry. Location, Fulton Bldg. Work will consist of a rearrangement of the upper floor. Will require new interior partitions, plastering, electric work and plumbing. Plans are complete and work will be done by Day Labor.

Contracts Awarded.

LOS ANGELES, CAL.—Office building addition, 5 story and base, Class A construction, \$92,000. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, Pacific Mutual Life Insurance Co. Contractors, C. J. Kubach Co., Merchants' National Bank Bldg., L. A. Contract price, \$92,000.

THEATRES

SAN FRANCISCO—Theatre alteration. Class A construction. Cost not stated. Architect, Bernard J. Joseph, New Call Bldg., S. F. Owner, A. Goldberg. Location, 719 Market street. Work will consist of rearranging the present store and motion picture theatre so that the theatre will occupy all of the building, giving a seating capacity of 334 people. Work will require interior partitions, electric work, plastering, painting and decorating. Plans are complete and bids will be called for at once.

EXPERIMENTS WITH HOLLOW TILING.

The hollow-tile floor slabs have been erected by the United States Bureau of Standards, to be tested to destruction at the end of 30 days. This is a commercial test for one of the large manufacturers of hollow tile. For the same manufacturer, four hollow-tile walls were tested transversely. They were 5 feet long, 10 feet high, and 8 inches thick.

E. R. Hoerchner

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Phone Garfield 2856

Phelan Bldg.

San Francisco

OFFICIAL PROPOSALS.

NOTICE INVITING SEALED BIDS FOR KITCHEN EQUIPMENT FOR THE NORWALK STATE HOSPITAL.

PURSUANT to resolution directing this notice, the Board of Managers of the Norwalk State Hospital hereby invite bids for said Hospital Kitchen equipment, said sealed bids to be delivered to W. G. McMillin, State Purchasing Agent, at Room 87, Capitol Building, Sacramento, California, on or before **twelve o'clock noon on Monday, December 27th, 1915.**

Specifications may be procured from the said Purchasing Agent, Room 87, Capitol Building, upon application.

All bids must be accompanied by a certified check payable to the State of California, for an amount which shall not be less than ten per cent of the aggregate of the bid, which amount shall be forfeited to the State of California, in case the bidder depositing the same does not within ten days after written notice that the contract has been awarded to him, enter into a contract with said State Purchasing Agent for the furnishing of said equipment, the faithful performance of which shall be secured by an undertaking in such penal sum as the State Purchasing Agent shall require, with sureties satisfactory to the said Purchasing Agent and subject to the approval of the State Board of Control.

W. G. McMILLIN,
State Purchasing Agent.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 995—Proposals for Steel Angles and I-Beams, Steel Boiler Tubes, Steel Cable, Copper Wire, Steel Locomotive Pilots, Manganese Steel Car Wheels, Metallic Life Boats, Cast Iron Pipe, Pipe Fittings, Valves, Cocks, Wash Tray Plugs, Closet Chain Pulls, Suction Hose Strainers, Lead Bends, Force Cups, Floor Drains, Brass Ferrules, Shower Heads, Pipe Hangers, Flush Pipe, Twist Drills, Water Gauges, Conduits, Electric Switches, Manila Tags, Pencils and Hypochlorite of Lime.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. December 22, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Plans and general information relating to this circular (No. 995) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

PROPOSALS FOR TELEGRAPH SUPPLIES.

TELEGRAPH SUPPLIES, ETC.—Office of the Quartermaster, Fort Winfield Scott, Cal.—Sealed proposals will be received here until **11 a. m. December 22, 1915**, for furnishing 12 telescope brackets, 120 galvanized crossarm braces, 60 crossarms, 100 guy wire clamps, 500 porcelain insulators, 200 lag screws, 200 machine bolts, 55 white cedar poles, 1,000 pole steps, 50 gallons wood preservative, 200 oak pins, 12 sockets, 20 pounds solder, 10 pounds okonite tape, 15 pounds Amazon friction tape, 30 turnbuckles, 100 steel wire thimbles, 14,000-foot No. 6 solid core duster wire, 2,000 feet No. 10 do and 2,000 feet guy wire. For further information address JOHN T. GRAY, captain, coast artillery corps, acting quartermaster.

PROPOSALS.

BUILDING REPAIRS.—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be received at this office until **10 a. m. December 27, 1915**, and then opened, for enlarging drafting room and new skylight in the U. S. post office at Olympia, Wash., in accordance with drawings Nos. 76 and 77 and the specification, copies of which may be had at this office or from the custodian of the Olympia Building. JAMES A. WETMORE, acting supervising architect.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock noon, Tuesday, December 28, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of a building to be known as "Yard Toilet," Industrial Home for Adult Blind, Oakland, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Ten (\$10.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Yard Toilet," Industrial Home for Adult Blind, Oakland, California.

(Signed) W. F. McCLURE,
State Engineer.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock noon, Friday, December 31st, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of buildings to be known as Domestic Science and Temporary "Class Room Buildings," San Jose State Normal School, San Jose, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering.

Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.
A deposit of Fifteen \$15.00 Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department

ment of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Domestic Science and Temporary Class Room Buildings," San Jose State Normal School, San Jose, California.

(Signed) W. F. McCLURE,
State Engineer.

PROPOSALS FOR BUILDING.

BUILDING.—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be opened at this office at **3 p. m. December 29, 1915**, for the extension, remodeling, etc., of the United States post office and court house at Missoula, Mont. Extension is of four stories and basement, stone faced, fireproof construction and composition roof and includes the addition of a fourth story to present building. Drawings and specifications may be obtained from the custodian at Missoula, Mont., or at this office, in the discretion of the supervising architect, JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR SKYLIGHT.

SKYLIGHT.—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be received at this office until **10 a. m. December 27, 1915**, and then opened, for enlarging drafting room and new skylight in the U. S. post office at Olympia, Wash., in accordance with drawings Nos. 76 and 77 and the specification, copies of which may be had at this office or from the custodian of the Olympia building. JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR ELEVATOR.

ELEVATOR.—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be opened in this office at **3 p. m. December 23, 1915**, for the installation, complete, of an electric passenger elevator in each of the following buildings: The United States post office and court house at Pendleton, Ore.; the United States post office and court house at Brattleboro, Vt., and the United States post office and court house at Ardmore, Okla., in accordance with the drawings and specification, copies of which may be had at this office, in the discretion of the supervising architect, JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 993—Proposals for Motor-Driven Centrifugal Pumps, Cast Iron Bollards, Pinions, Steel Cable, Cold Shuts, Aluminum Pipe, Stocks and Dies, Reamers, Twist Drills, Wrenches, Raps, Whistle Valves, Steam Whistles, Brass Hub, Potatoes, Mashers, Red Fiber Packing, Alcohol, Muric Acid, Lubricants, Japan Drier, Lard Oil, Fish Oil, Turpentine, Red Lead, White Lead, Orange Shellac, Varnish and Paints.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. December 13, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Plans and general information relating to this circular (No. 993) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.;

also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

INVITATION FOR PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., November 22, 1915—SEALED PROPOSALS will be received at this office until 10 A. M., December 27, 1915, and then opened for enlarging Drafting Room, and new skylight in the U. S. Post Office at Olympia, Washington, in accordance with drawings Nos. 76 and 77, and the specifications, copies of which may be had at this office, or from the Custodian of the Olympia building, JAS. A. WETMORE, Acting Supervising Architect. (*)

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including 12 o'clock, Noon, Monday, December 27, 1915, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction of paved roads, walks, combined walks, and roads and for drains in the State Normal School Grounds, Los Angeles, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Five (\$5.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope: "Proposal for Paved Roads, Walks, etc., State Normal School Grounds, Los Angeles, California," (SIGNED) W. F. McClure, State Engineer. (*)

PROPOSALS FOR BUILDING.

BUILDING—Sealed proposals in closed "Proposals for Five Buildings" will be received at the bureau of yards and docks, Navy Department, Washington, D. C., until 11 o'clock a. m., January 1, 1916, and then and there publicly opened, for a power house and an operating building of reinforced concrete

and steel construction and three quarters of wood construction for commanding officer, married operators and bachelor operators at the naval station, Cavite, P. I. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named. Proposals will also be received at the naval station, Cavite, P. I., until 4:30 o'clock p. m., January 4, 1916, and opened at 10 o'clock a. m., January 5, 1916. H. R. STANFORD, chief of bureau.

DEPARTMENT OF ENGINEERING.

CALIFORNIA HIGHWAY COMMISSION

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the California Highway Commission, 315 Forum Building, Sacramento, Cal., until 2 o'clock P. M., on December 27, 1915, at which time they will be publicly opened and read for construction in accordance with the specifications therefor, to which special reference is made, portion of State highway as follows:

Placer County, from Roseville to Penryn (III-Pla-17-A), about 7.5 miles in length, to be paved with Portland cement concrete.

Placer County, from Penryn to Auburn (III-Pla-17-B), about 6.5 miles in length, to be paved with Portland cement concrete.

Tehama County, from Corning to Proberta (II-Teh-7-A and 3-B), about 10.2 miles in length, to be paved with Portland cement concrete.

Sonoma and Marin Counties, across Petaluma Creek at Green Point (IV-Son-Mrn-8-A), a bridge comprising a steel bascule span 148 feet long, two concrete and steel approach spans each about 86 feet long, and about 1122 feet of cross-tied pile trestle.

Plans may be seen, and forms of proposals, bonds, contract, and specifications may be obtained, at the said office, and they may be seen at the offices of the Division Engineers at Los Angeles and San Francisco, and at the office of the Division Engineer of the division in which the work is situated.

The Division Engineers offices are located at Willets, Dunsmuir, Sacramento, San Francisco, San Luis Obispo, Fresno, and Los Angeles.

No bid will be received unless it is made on a blank form furnished by the Commission. The special attention of prospective bidders is called to the "Notice to Contractors" annexed to the blank form of proposal, for full directions as to bidding, quantities of work to be done, etc.

The Department of Engineering reserves the right to reject any or all bids or to accept the bid deemed for the best interests of the State.

CHARLES D. BLANEY,
NEWELL D. DARLINGTON,
CHARLES F. STERN,
California Highway Commission.
AUSTIN B. FLETCHER,
Highway Engineer.
WILSON R. ELLIS,
Secretary. (*)

Dated: Nov. 23, 1915.

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ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

APARTMENT HOUSE—6 story and base, steel and brick. Cost not stated. San Francisco. Architects, Rousseau & Rousseau, 110 Sutter street, S. F. Owners, Theo and Clara Rulfs. Location, northeast corner of Sutter and Jones streets, covering an area of 68 feet 9 inches by 35 feet. Will contain four stories on the first floor besides the lobby and entrance. Upper floors a total of 75 rooms arranged in two and three room apartments. Interior finish pine and hardwood with imported tapestries. Both rooms tile. Steam heat, automatic elevator, hot water system, oil burning equipment and vacuum cleaning. Marble and tile wainscot. Complete steel frame. Exterior faced with terra cotta. Plans complete and figures being taken.

FLAT ALTERATION—2 story, frame, \$2,000. San Francisco. Architect, none. Owner, Mrs. B. Kenney, 536 26th avenue, S. F. The work will consist of altering a two-story frame residence into modern flats, and will include mill work, carpentry work, plastering, painting, plumbing, electric work and glass and glazing. Plans are complete and the work will be done by Day Labor.

FLATS—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, J. C. Kirby, 2152A Market street, San Francisco. Location, east 7th avenue south of Lake. Will contain two flats of five and six rooms. Interior finish pine and elm panels with some white enamel. Hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OFFICERS' QUARTERS—2 story and base, Class C construction. Cost not stated. San Francisco. Engineer, Constructing Quartermaster's Office, Fort Mason. Owners, United States Government. Word has been received from the War Department that a site for the 10 new officers' quarters to be erected in the Presidio of San Francisco will shortly be settled and that the Constructing Quartermaster's Office will be directed to call for figures on the work. Plans prepared here and forwarded to Washington have been officially approved. The contract for the construction of roads, walks, gutters and asphalt at the Letterman General Hospital has been awarded to the Fay Improvement Co., Phelan Bldg., on their bid of \$2,697.50.

HOTEL, COMPLETION—6 story and base, brick and steel, \$15,000. San Francisco. Architect, Earl B. Scott, Humboldt Bank Bldg., S. F. Owners, J. K. Prior Estate. Location, southwest corner Mason and Eddy streets. Plans for this work have been completed and segregated figures are now being taken

as follows: Plumbing, heating, glass and glazing, painting and decorating, carpentry and mill work, elevators, sheet metal work, plastering, electric work.

HOSPITAL WORK—Cost not stated. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. At last Wednesday's meeting of the Board of Public Works bids were received for the structural steel for both the north-east and southeast wings of the San Francisco Hospital, and also for the construction of a ward for diptheria carriers at the Isolation Hospital. A complete list of these bids will be found under the heading of San Francisco in this issue.

EMERGENCY HOSPITAL—2 story and base, Class C construction. Cost not stated. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Plans and specifications have been completed for the Central Emergency Hospital and are awaiting the selection of a site for the building.

RAILROAD CONSTRUCTION — \$120,500. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. The lowest figure for the construction of a portion of the Church Street Municipal line was presented by the Contra Costa Construction Co. at \$120,500. An award of contract has not been made. A complete list of the bids appears under the heading of San Francisco in this issue.

APARTMENT HOUSE—3 story and base, Class C construction, \$50,000. San Francisco. Architect, Milton Lichtenstein, 111 Ellis street, S. F. Owner's name withheld. Location, Fifty Vara District. Will contain a number of two and three room apartments equipped with all the latest conveniences. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat, automatic elevator, hot water supply and vacuum cleaning. Bath rooms finished in tile. Marble and tile wainscot. Exterior faced with pressed brick trimmed with terra cotta. Plans being prepared.

APARTMENT HOUSE—3 story and base, frame, \$12,000. San Francisco. Architect, D. J. Patterson, 16 Kearny street, S. F. Owner's name withheld. Location, Broadway near Fillmore. Will contain a number of two, three and four room apartments with wall beds and private baths. Interior finish pine and elm panels. Some hardwood floors. Steam heat and a hot water system. Bath rooms tile. Exterior covered with cement plaster on metal lath. Plans being prepared.

APARTMENT HOUSE ALTERATION—2 story and base, frame, \$6,000. San Francisco. Architect, C. A. Meussdorff-

fer, Humboldt Bank Bldg., S. F. Owner, Mrs. F. Pholz, 3318 22nd street, S. F. Location, 3318 22nd street. Work will consist of raising the present building and constructing stores on the first floor. Upper two floors will be rearranged for suites of three and four rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places. Wall beds and modern plumbing will be required. Exterior covered with rustic and cement plaster. Plans being prepared.

WOMEN'S GYMNASIUM—1 story and base, Class B construction, \$110,000. San Francisco. Architects, Bliss & Faville, Balboa Bldg., S. F. Owner, C. T. Ryland, leased to the San Francisco Women's Athletic Association. Location, north Sutter between Mason and Taylor streets. Plans for the work have been out for figures and all bids are now in and under advisement. Contracts will be let shortly.

SCHOOL RETAINING WALL—\$675. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. The lowest bid received for the construction of a concrete retaining wall at the McKinley School was presented by John Spargo at \$675. A contract has not been awarded.

SCHOOL—2 story and base, concrete and frame. Cost not stated. San Francisco. Architect, City Department of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Location, Bernal Heights. Will contain eight class rooms, auditorium and teachers' rooms. Interior finish pine with maple floors in the class rooms. Stairways reinforced concrete. Modern school plumbing. Central heating system, probably steam heat, oil burning equipment. Exterior covered with cement plaster on metal lath. Plans complete and bids to be called for shortly.

FIRE HOUSE FIXTURES—\$445 and \$565. San Francisco. Architects, Ward & Holme, Alaska Commercial Bldg., S. F. Owners, City and County of San Francisco. Ickelheimer Bros. submitted the lowest bids for furnishing the lighting fixtures for Fire Houses Nos. 3 and 4 at the Wednesday meeting of the Board of Public Works. Contracts have not been awarded. A complete list of the figures will be found under the heading of San Francisco in this issue.

CITY HALL PULLETTIN BOARDS—Cost as follows. San Francisco. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owners, City and County of San Francisco. The low bid for furnishing bulletin boards in the new City Hall was submitted by the American Art Metal Works as follows: Proposition No. 1, \$2,645; proposition No. 2, \$3,417. No award has been made as yet. For a complete list of the bids received see San Francisco

STORES AND LOFTS—2 story and base, brick and steel. Cost not stated. San Francisco. Architect, Herbert Maggs, 125 Alpine street, S. F. Owner, Mrs. Helen Otto, leased to Hermann Safe Co. Location, west Fremont street, 137 south of Howard, covering an area of 92 by 137½ feet. Will contain show rooms, office and factory. Interior of the office and show rooms finished in pine and hardwood. Freight elevator, steam heat and special machinery. Patent store fronts and marble bases. Construction extra heavy type. Exterior faced with pressed brick. Plans complete and figures being taken.

THEATRE ALTERATION—Class A construction. Cost not stated. San Francisco. Architect, Bernard J. Joseph, New Call Bldg., S. F. Owner, A. Goldberg. Location, 719 Market street. Work will consist of rearranging the present store and motion picture theatre so that the theatre will occupy all of the building, giving a seating capacity of 324 people. Work will require interior partitions, electric work, plastering, painting and decorating. Plans are complete and bids will be called for at once.

Contracts Awarded

PAVING—Pavement block. Cost not stated. San Francisco. Engineer, Engineering Dept. Flood Bldg., S. F. Owners, Southern Pacific Co., Contractors, Pay Improvement Co., 1801 Harrison street, S. F. Contract price not stated.

RAILROAD CONSTRUCTION—67 miles, \$1,543,080. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractor, F. Rolandi, Bank of Italy Bldg., S. F. Contract price, \$1,543,080. Note: The contract covers the construction of the line into the Hetch-Hetchy site.

RAILROAD CONSTRUCTION—\$123,500. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Contra Costa Construction Co., S. F. Contract price, \$123,500. This contract covers the construction of section B of the Church Street Municipal Railroad.

City Bids Opened

Board of Public Works Receives Many Figures for City and County Work and Approves New Plans.

An unusually large number of bids were opened at the Wednesday meeting of the San Francisco Board of Public Works for City and County construction. Included in the work figured was construction of a portion of the Church Street Railroad, a frame ward at the Isolation Hospital for Diphtheria carriers; steel work for the southeast and northeast wings of the San Francisco Hospital; lighting fixtures for Fire Houses Nos. 3 and 4; construction of retaining wall at the McKinley School, and furnishing bulletin boards for the New City Hall.

Following is a complete list of the bids received:

Church Street Railroad.

J. P. Holland.....\$122,260.00

T. J. Shea.....	129,000.00
Karl Ehrhart.....	125,294.50
Eaton & Smith.....	123,485.00
Contra Costa Constr. Co.....	120,500.00
F. Ritchie.....	129,248.00
Clinton Constr. Co.....	134,900.00
Grace & Bernieri.....	124,028.00
Healey-Tibbitts Co.....	133,740.00

Diphtheria Carrier Ward.

Prop. A Prop. B Prop. C

D. Wagner.....	\$10,200	\$9,300	\$7,500
D. Graham.....	10,800	9,260	7,930
L. G. Bergren & Son.....	9,872	8,822	7,546
Monson Bros.....	11,171	8,765	7,626
Constr. & Eng. Co.....	10,300	8,900	7,890

Anderson & Ringrose..... 9,480 8,200 7,200

W. A. Newsom..... 10,623 9,667 8,364

Steel work, Southeasterly Wing, S. F. Hospital.

Central Iron Works.....	\$63,000
Iyer Bros.....	60,400
Pacific Rolling Mill.....	65,232

Steel Work, Northerly Wing, S. F. Hospital.

Vulcan Iron Works.....	\$41,459
Iyer Bros.....	40,973
Ralston Iron Works.....	41,973
Central Iron Works.....	43,200
Western Iron Works.....	42,988
Pacific Rolling Mill.....	45,362

Light Fixtures, Fire House No. 3.

Ickelheimer Bros.....	\$445
Thos. Day.....	495
Roberts Mfg. Co.....	475

Light Fixtures, Fire House No. 4.

Ickelheimer Bros.....	\$565
Thos. Day.....	595
Roberts Mfg. Co.....	675

Retaining Wall, McKinley School.

W. D. Henderson.....	\$ 886
A. O. Fields.....	695
T. W. McClenahan.....	783
H. Hilp.....	782
D. Graham.....	1,020
John Spargo.....	675
J. B. McSheehy.....	792
G. A. Bos.....	848
N. Zelinski.....	814
Jos. McHugh.....	995
Monson Bros.....	777
Poster & Vogt.....	787
C. W. Payne.....	948
Flinn & Treacy.....	1,230

Bulletin Boards, New City Hall.

Prop. 1 Prop. 2

Cal. Art Metal Wks.....	\$5,150.00	\$5,112.00
American Art Mtl Wks.....	3,647.00	3,547.00
Burnside Directory Co.....	7,998.75	7,948.23
Rudgegar Merle Co.....	3,972.00	3,920.00
Monarch Iron Wks.....	5,450.00	

At the same meeting of the Board of Public Works plans and specifications for the construction of the foundation work for the southeast wing of the San Francisco Hospital were approved and the Secretary was instructed to receive bids for the work up to December 15th.

Plans were also approved for the structural steel for the Redding School. Bids were also ordered on this work to be opened on December 15th.

OAKLAND AND ALAMEDA COUNTY

STREET ELECTROLIERS—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Plans for the first attempt at lighting the streets under the district plan have been adopted by the City Council. Under the new plan steel electrolifers with but one lamp will be installed. The dis-

trict it is proposed to light includes everything south of Derby street and east of College avenue.

APARTMENT HOUSE—2 story and base, frame, \$9,000. Oakland, Cal. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner's name withheld. Location, 40th and Telegraph. Will contain a total of eight suites of two and three rooms. Interior finish pine and elm panels with some hardwood floors. Open fire places and tile mantels. A hot water system. Bath rooms tile. Marble and tile wainscot. Exterior covered with cement plaster. Plans being prepared.

APARTMENT HOUSE—2 story and base, frame, \$9,000. Oakland, Cal. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner, Mr. Brinefield. Location, 4th avenue and East 15th street. Will contain a total of eight suites of two and three rooms with private baths and wall beds. Interior finish pine and white enamel with some elm panels and hardwood floors. Central heating system and hot water supply. Bath room tile. Marble and tile wainscot. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

RESIDENCE—2 story and base, frame, \$7,000. Berkeley, Alameda Co., Cal. Architect, F. Holberg Reimers, 2145 Shattuck avenue, Berkeley. Owner, E. Dunham. Location, Rose street. Will contain eight rooms, three baths, sleeping porch and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat, open fire places and tile or brick mantels. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and figures being taken.

RESIDENCES—6, 1 story and base, frame, \$2,000 each. Berkeley, Alameda Co., Cal. Architect, none. Owner, R. E. Hillen, 420 Haight avenue, Alameda. Location, Delaware, Francisco and Acton streets. Each house will contain five rooms, bath and sleeping porch. Interiors finished in pine and hardwood with some white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Some tile wainscot in bath rooms. Exteriors covered with shingles and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SCHOOL ADDITION—2 story and base, frame and concrete, \$16,430. Oakland, Cal. Architect, John J. Donovan, Dalziel Bldg., Oakland. Owners, City of Oakland. Of the six sets of figures received for the construction of this addition to the Fremont School, that presented by Anderson & Ringrose, 320 Market street, S. F., was the lowest at \$16,430. Bids were referred to the City Attorney. A complete list of the bids appears under the heading of Oakland and Alameda County in this issue.

Contracts Awarded

STORM SEWER—Cost not stated. Oakland, Cal. Engineer, County Surveyor, Oakland. Owners, Alameda County. Contractor, T. B. Russell, Oakland. Contract price not stated.

STREET IMPROVEMENT—Cost not stated. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. Contractor, D. U. Toffelmier, Oakland. Improvement of 64th avenue

and Thurmon avenue. Contract price not stated.

Bids Received For School Addition

Anderson & Ringrose Low Bidders For Two-story Addition to Fremont School. No Award Made.

Six sets of bids were received by the Oakland Board of Education for the construction of a two-story addition to the Fremont School. Anderson & Ringrose, 320 Market street, San Francisco, submitted the low figure at \$16,430. Plans were prepared by Architect J. J. Donovan, Dalziel Bldg., Oakland. Bids were referred to the City Attorney. Following is a list of the bids received:

Addition to Fremont School.

Robert Glaze	\$16,989
P. N. Schmidt	17,498
J. C. Nielsen	17,150
R. W. Littlefield	16,975
W. G. Thormalley	15,950
Anderson & Ringrose	16,430

SAN JOSE AND THE SANTA CLARA VALLEY

RESIDENCE—2 Story and base. Class C construction, \$25,000. Palo Alto, Santa Clara Co., Cal. Architect, Louis Christen Mullgardt, Chronicle Bldg., S. F. Owners, Trustees of Leland Stanford, Jr., University. Location, University Campus. Will contain a large number of rooms, several baths and sleeping porches. A separate garage will be erected. Interior finish pine, hardwood and white enamel. Central heating system, probably steam heat, open fire places and vacuum cleaning. Bath rooms finished in tile. Hot water circulating system. Exterior faced with cement plaster. Clay tile roof. Preliminary plans being prepared.

STREET AND SEWER WORK—Cost not stated. Daly City, San Mateo Co., Cal. Engineer, City Engineer, Daly City. Owners, Daly City. Bids will be received up to and including December 25th at 8 p. m. for grading to official grade, constructing concrete gutters and sidewalks, asphaltic concrete pavement with 4-inch base and 1½-inch wearing surface, vitrified brick pavement with 4-inch base, 8-inch vitrified, salt-glazed, ironstone sewer, 4-inch base vitrified, salt-glazed, ironstone sewer, storm water sewers, reconstructing manholes and building new manholes in various streets.

STREET AND SEWER WORK—Cost not stated. South San Francisco, San Mateo Co., Cal. Engineer, City Engineer, South San Francisco. Owners, City of South San Francisco. Bids will be received up to and including December 20th at 8 p. m. for grading to official grade, constructing concrete curbs, gutters and sidewalks, and oil macadam pavement on 1st, 2nd and 3rd streets, and portions of A, B and C.

ROAD IMPROVEMENTS—Cost as follows. Salinas, Monterey Co., Cal. Engineer, County Surveyor, Salinas. Owners, Monterey County. Contractor, Lou G. Hare, Salinas, grading on Coast road near Oliver ranch. Contract price, \$750. Granite Rock Co., Salinas, 2½

miles of water bound macadam, \$3, 999.55, also 16 miles of oil macadam from Del Monte to Castrovilla to the same contractors. Cost not stated. Bids for one-half mile of road work in San Miguel Canyon were rejected and the work will be done by Day Labor.

STORM WATER SEWERS—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, City Engineer, Redwood City. Owners, Redwood City. At the last meeting of the City Trustees the matter of the drainage of storm water at the intersection of Broadway and the State Highway was brought to the attention of the Board by E. T. McGettigan, representing the Highlands Improvement Club. Plans, specifications and estimates for a concrete gutterway across Broadway at this point were ordered prepared by the City Engineer.

STREET IMPROVEMENT—Cost not stated. Redwood City, San Mateo Co., Cal. Engineer, City Engineer, Redwood City. Owners, Redwood City. At the last meeting of the City Trustees the matter of street work on Stanford and Winslow streets was referred to the City Engineer. Plans and specifications were ordered prepared for the improvement of Broadway between railroad crossing and the State Highway.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

OIL TANKS—Steel, \$200,000. Martinez, Contra Costa Co., Cal. Engineer, Engineering Dept. Shell Oil Co., 342 Sansome street, S. F. Owners, Shell Oil Co. Bids have been opened by the Shell Company for 14 oil storage tanks each of 50,000 barrels capacity to be erected in Martinez just north of the Trumbull stills. The bids have been forwarded to Martinez for the approval and recommendation of P. A. I. Englebrecht, who is in charge of the work. It is stated that the Lacey Mfg. Co. and the Petroleum Iron Works were among the low bidders. At the Trumbull stills the entire top of the hill is being sliced off and a high fill made in the hollow to the northward, and it is upon the high plateau that the tanks are to be built. Over 120,000 yards of earth are to be moved at a cost of over \$40,000 to make room for the tank construction.

BATH HOUSE FILTER—Cost as follows. San Rafael, Marin Co., Cal. Architect, none. Owners, City of San Rafael. Two bids were received by the City Council for filters for the municipal baths. The California Jewell Filter Co., Merchants' Exchange Bldg., S. F., offered to deliver in San Rafael a three-unit filter for \$2,450, and a two-unit filter for \$1,924. The latter price included a chloride apparatus valued at \$750. They ask \$600 for installation. The Council could not reconcile the difference in prices for the three-unit and the two-unit filters. The other bid was from Geo. F. Day & Son, 215 Spear street, S. F., for \$1,924 for a three-unit filter, but they were unable to supply the chemical apparatus nor could they tell the Council what it would cost to install the plant. The matter was referred to the Council as a committee of the whole.

BRIDGE—Reinforced concrete. Cost not stated. Healdsburg, Sonoma Co., Cal. Engineer, City Engineer, Healdsburg. Owners, City of Healdsburg. If the weather will permit the City Trustees will order the construction of a concrete bridge on Piper street, just outside of the city limits. Plans for the proposed structure have been prepared. The present bridge is in a dilapidated condition and must be replaced with a new structure for safety.

HIGHWAY CONSTRUCTION—Cost not stated. San Rafael to Napa, Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. The State Highway Commission has decided to build a State Highway lateral from San Rafael to Napa, Marin, Sonoma and Napa Counties have agreed to pay \$175,000 of the cost and the State Highway Commission \$25,000. Bids for this stretch of highway will be called in the near future. Further mention will be made of this work.

STREET IMPROVEMENT—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer, City Engineer, Martinez. Owners, City of Martinez. M. F. Sullivan, representing the firm of Wright, Anderson & Yost, First National Bank Bldg., Redwood City, reports that the signature of every property owner along Main street has been secured and work on the paving of that thoroughfare with an oil macadam pavement will be started in the early spring.

ROADWAY CONSTRUCTION—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, City Engineer, Chapman. Richmond. Owners, City of Richmond. City Engineer H. D. Chapman has presented plans and specifications to the City Council, together with estimates for the excavation of a roadway from the southern terminus of the Municipal highway to the Santa Fe wharves at Ferry Point. The connecting roadway to be built is estimated at about 500 feet in length. The road will encircle the waterfront portion of the hill west of the highway. Bids will be called for on the approval of the plans.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

RESIDENCE—2 story and base, frame, \$3,800. Fresno, Fresno Co., Cal. Architect, none. Owner, W. H. Ackerman. Fresno. Location, Alta Vista Tract. Will contain seven rooms, bath and sleeping porch. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,000. Fresno, Fresno Co., Cal. Architect, none. Owners, Central California Land Co., 955 I street, Fresno. Location, La Sierra Tract. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room tile. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans com-

put and work to be done by Day Labor.

CLIFFERTS—Reinforced concrete and iron. Cost not stated. Fresno, Fresno Co., Cal. Engineer, City Engineer E. B. Cronkite, Fresno. Owners, City of Fresno. City Engineer E. B. Cronkite was instructed at the last meeting of the Council to have constructed two culverts, three feet by 1 foot, for I and Merced streets and J and Merced streets. These culverts were recommended by E. W. Risley in a recent protest against flood damage at J and Merced streets.

SEWER SYSTEM EXTENSION—Cost not stated. Fresno, Fresno Co., Cal. Engineer, City Engineer E. B. Cronkite, Fresno. Owners, City of Fresno. The City Engineer was instructed at the last meeting of the City Council to start the preparation of the plans and specifications for the proposed enlargement of the sewer system and a system of storm sewers. Floods resulting from the last storm prompted the action of the Council, owing to the large amount of damage done. The funds to finance construction will be raised by a bond issue of half a million dollars.

ROAD PAVING—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. At the last meeting of the County Supervisors the Clerk was instructed to advertise for bids for the concrete paving of the section of Brundage lane from H street to Union avenue. Bids on the work close December 17th at 10 a. m. Further information together with plans and specifications may be had from the County Clerk at Bakersfield.

IRRIGATION WORK—Cost not stated. Gasburg, Stanislaus Co., Cal. Engineer, Chief Engineer Herrmann, Modesto. Owners, Modesto Irrigation District. At the last meeting of the Board of Directors of the Modesto Irrigation District Chief Engineer Herrmann was instructed to proceed with the construction of a transition section at the lower end of the Gasburg crossing.

BRIDGE—Timber and concrete, \$181. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids received for the construction of a bridge on Central branch of the Kern Island canal show Currie & Duglar, Bakersfield, low at \$181. Bids have been taken under advisement.

SCHOOL—1 story and base, frame. Cost not stated. Chatham School District, Tulare Co., Cal. Architect, J. L. Roberts, Jacobs Bldg., Visalia. Owners, Chatham School District. Bids will be received until December 18th at 1 p. m. for the construction of this building. Plans can be secured from the architect or from A. W. Keck, Clerk of the Board of School Trustees at Tulare.

SCHOOL COMPLETION—Class C construction, \$248,000. Fresno, Fresno Co., Cal. Architect, State Architect George P. McEloughlin, Sacramento. Owners, State of California. Advice from Sacramento state that the State Advisory Board, acting at the request of State Engineer McClure, directed the State Department of Engineering to take over the work of completing the Pres-

no Normal School and carry on the construction by Day Labor. The original contract was awarded to Wingett Construction Co. of Los Angeles for approximately \$248,000. This company abandoned the work about a week or ten days ago when it was nearly one-half complete. Construction will be rushed under the Day Labor system.

SCHOOL HEATING, ELECTRIC—Cost not stated. Tipton, Tulare Co., Cal. Architect's name not given. Owners, Tipton School District. Bids will be received until 1 p. m. of December 18th for furnishing and installing an electric heating system in the school building. Plans can be secured from the office of the Mt. Whitney Power and Electric Co. at Tipton.

STORE AND LOFT ALTERATION—2 story and base, brick, \$2,000. Fresno, Fresno Co., Cal. Architect, K. F. Felchlin, Howell Bldg., Fresno. Owner, Mary E. Berry. Location, Fulton Bldg. Work will consist of a rearrangement of the upper floor, and will require new interior partitions, plastering, electric work and plumbing. Plans are complete and work will be done by Day Labor.

STREET PAVING AND SEWER WORK—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, City Engineer, Modesto. Owners, City of Modesto. In response to a petition presented, the City Council has passed a resolution of intention providing for the paving of the alley in block 65. Sewer construction was ordered in the block bounded by Fifth, Sixth, F and G streets at the same meeting.

STREET IMPROVEMENT—Cost not stated. Turlock, Stanislaus Co., Cal. Engineer, City Engineer, Turlock. Owners, City of Turlock. The City Council has ordered bids received for the improvement of Diablo street in this city. Plans and specifications for the work may be had from the City Clerk.

PAVING—Cost not stated. Visalia, Tulare Co., Cal. Engineer, City Engineer, Visalia. Owners, City of Visalia. To correct a mistake in advertising for bids for the paving of South Bridge street and from the west line of the west Main street paving to the state highway, was nullified by the City Trustees and bids have been ordered readvertised. Plans for the paving work may be had from the City Engineer or City Clerk at Visalia.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

WHARF TIMBER—Cost not stated. Sacramento, Cal. Engineer's name not given. Owners, Central Pacific Railway Co., Sacramento. The Central Pacific Railway Co., a corporation, has filed application with the County Supervisors asking permission to construct, maintain and operate for terminal purposes a wharf on the easterly bank of the Sacramento River, 7-10 of a mile north of Walnut Grove. Bids on this work will be taken by the railroad company when permission has been given.

FILTRATION SYSTEM—Cost not stated. Sonora, Tuolumne Co., Cal. Engineer, Engineering Dept. Sierra and San Francisco Water Co., Sonora. Owners, San Francisco and Sierra Water

Co. Plans are being made for the improvement of the water system of the Sierra and San Francisco Power Co., which supplies water for the city of Sonora and vicinity. Though the company has been furnishing good water, it is unavoidable that at times during the rainy season that the water is muddy, and it is to overcome this that a filtration system will be installed. When a site has been secured work on the system will be started.

LIGHTING SYSTEM—Cost not stated. Redding, Shasta Co., Cal. Engineer, Ernest Rolison, Redding. Owners, Town of Redding. Redding will build its own electric lighting system, according to a decision reached by the City Trustees at their last meeting. The first unit of the system as planned by the Trustees will cost in the neighborhood of \$2,000. Other units will be added as finances permit. Further mention will be made of this work.

SANITARY SEWER SYSTEM—Cost not stated. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. At the last meeting of the City Council plans and specifications for the construction of a sanitary sewer on Fair Oaks avenue from Marsh to East street, along East street to Oak street, on Oak street to West street, along West street to Smith's Canal, with a branch on Union street from Acacia to Oak street, were approved and bids were ordered received up to December 24th. Further information together with plans and specifications may be had from the City Clerk at Stockton.

CHURCH—1 story and base, reinforced concrete, \$25,000. Redding, Shasta Co., Cal. Architect, John J. Foley, 46 Kearny street, S. F. Owners, Roman Catholic Church, Father Hayes in charge. Will contain main auditorium, Sunday school rooms, study and social rooms. Interior finish pine with ornamental plaster. Steam heat. Art glass windows and marble altar. Exterior faced with cement plaster. Clay tile roof. Plans being prepared.

CITY HALL AND JAIL—4 story and base, reinforced concrete, \$197,426. Sacramento, Cal. Architects, Shea & Lofquist, Bankers' Investment Bldg., S. F. Owners, City of Sacramento. The lowest bid submitted for this work came from Howard S. Williams, Hearst Bldg., S. F. at \$197,426. The lowest figure for the special steel work for the jail was that of the Balfston Iron Works at \$18,624. A complete list of the bids will be found under the heading of Sacramento, Stockton and Northern California in this issue.

IRRIGATION DAM—Reinforced concrete, \$165,000. Manteca, San Joaquin Co., Cal. Engineer, Chief Engineer, Manteca. Owners, South San Joaquin Irrigation District. At the last meeting of the directors of the South San Joaquin Irrigation District all bids for the construction of the big dam project were rejected and new bids ordered advertised. New bids will be opened on January 3rd at 10 a. m. The dam will impound 35,000 acre feet of water, and its construction involves the excavation of approximately 500,000 cubic yards of material. The hydraulic method will be used in excavating. The Ross Construction Co. of Sacramento submitted the lowest figure at \$180,160,

which is reported as being about \$16,000 above the engineer's estimate.

CENTRIFUGAL PUMP—\$17,000, Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. All negotiations with the C. F. Braun Pump Co. for the substitution of another pump at the city water works for the one which failed to come up to specifications were abandoned when the City Commission adopted specifications for a new pump. Acting Commissioner of Public Works E. J. Carragher asked that plans and specifications be adopted. The specifications call for bids to be opened December 23rd at 11 o'clock for a new centrifugal pump of 15,000,000 gallons capacity. The city set aside \$17,000 for the rejected pump, and this money will be used for the new pump. Of this amount \$12,000 has been paid on account. The city will demand its return.

LEEVE CONSTRUCTION—\$8,000 or more. Willows, Glenn Co., Cal. Engineer's name not given. Owners, Levee District No. 3. The State Reclamation Board has approved the plans of the trustees of Levee District No. 3 for raising the levee in the Princeton country. It will be made two feet higher than the highest water mark. The trustees are Thos. Crouch, Oscar Steele and John Brough.

Contracts Awarded.

BRIDGE—Reinforced concrete, \$2,750. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractors, Jenkins & Wells, 3530 Y street, Sacramento. Contract price, \$2,750.

BRIDGE—Steel and concrete, \$24,671. Yolo By-Pass, Yolo Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Contractors, Security Construction Co., 28th and Alameda streets, L. A. Contract price, \$24,671. Engineer's estimate, \$28,061.13.

PAVING BRIDGE—Cost not stated. Woodland, Yolo Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Contractors, Graff Construction Co., Woodland. Contract price not stated.

SEWER CONSTRUCTION—\$2,676.47. Stockton, San Joaquin Co., Cal. Engineer, City Engineer, Stockton. Owners, City of Stockton. Contractors, Tibbitts-Pacific Co., 16 California street, S. F. Contract price, \$2,676.47.

BRIDGE—Reinforced concrete, \$1,925. Willows, Glenn Co., Cal. Engineer, County Surveyor, Willows. Owners, Glenn County. Contractors, Teal & Thompson, Orland. Contract price, \$1,925.

STREET IMPROVEMENT—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractor, A. L. Rosa, 1200 T street, Sacramento. Contract for 16th from P to X. Contract price not stated.

TRENCHING ROAD—Cost as follows. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractors, Wood & Supan, Red Bluff. Contract price 45c per foot for 930 feet.

Receive Figures For State Highway.

Highway Commission Open Figures For Twelve Miles of Highway in Imperial County.

The following bids were received by the State Highway Commission in Sacramento for the construction of about 2 miles of highway in Imperial County between El Centro and Dixieland. Construction will be of Portland cement concrete. Fred Hoffman of Long Beach presented the low bid at \$72,089. No contract has been awarded. Following is a complete list of the bids:

State Highway, Imperial County.	
C. L. Hyde Constr. Co., San Diego	\$ 83,872.50
Leigh G. Garney, L. A.	88,895.12
W. A. Dantonville, Salinas	95,369.60
Lee Moore Constr. Co., Los Angeles	89,674.00
Bent Bros., Los Angeles	109,875.88
Ioran, Armstrong & Daley San Diego	83,039.90
Fred Hoffman, Long Beach	72,089.00
Manual Jacinto, Sacramento	106,814.00
Mesmer & Tice, Los Angeles	85,572.20
J. A. Marshall, Berkeley	94,590.90
Lan S. Atkinson, L. A.	92,193.00
Engineer's Estimate, \$100,480	

An official award of contract has been made by the Highway Commission for the construction of the Yolo By-Pass. The Security Construction Company, 38th and Alameda Streets, Los Angeles, was awarded the contract at \$24,671. The Engineer's estimate was \$28,061.13.

Bids Received For Sacramento Jail.

Howard S. Williams of San Francisco Submitted Low Figure. Twenty- four Items Bid on Work.

(By Special Wire.)

SACRAMENTO, CAL., Dec. 9th, 1915. —Howard S. Williams, Hearst Bldg., San Francisco, today presented the lowest of twenty figures for the general construction of the new City Hall and Jail Building, designed by Architects Shea & Lofquist. Williams' bid was \$197,426 or more than \$2,000 lower than the next bidder, Ralston Iron Works, also of San Francisco, submitted the lowest bid for the special jail work at \$18,621. Following is a complete list of the bids as opened:

Sacramento City Hall Building.	
James L. McLaughlin	\$218,000
Western Bldg. & Eng. Co.	206,642
J. D. Hannah	206,900
Collman & Collman Co.	205,900
Lange & Bergstrom	205,979
Larsen & Sampson	202,500
Caldwell & Son	206,940
Grand Fee	205,000
P. F. Reilly	244,000
Williams Bros. & Henderson	204,900
Teichert & Ambrose	199,700
Ward & Goodwin	218,700
Carrahan & Mulford	202,763
Sound Conatr. & Eng. Co.	217,132
H. S. Williams	197,426

William A. Newcomb	215,888
McGillivray Constr. Co.	247,485
P. A. Palmer	206,500
Melan & Peterson	199,990
William C. Keating	213,000

Special Jail Work.

Ralston Iron Works	\$18,621
Philly Jail Co.	19,412
M. G. West Co.	21,600
Herman Safe Co.	22,407

LOS ANGELES AND SOUTHERN CALIFORNIA

BRIDGES—12, reinforced concrete, \$50,000. Santa Barbara, Santa Barbara Co., Cal. Engineers, Mayberry & Parker, Pacific Electric Bldg., L. A. and McCurdy Bros., Owners, Santa Barbara County. The County Supervisors at a recent meeting ordered plans and specifications for 12 highway bridges needed on the State Highway. Further mention will be made of this work when bids have been called. Mayberry & Parker, of whom Fred Johnson is the Santa Barbara representative, will make the plans for six reinforced concrete bridges over Zaca creek, and three between South Zaca and Los Alamos. The other four bridges in the De La Cuesta canyon will be planned by McCurdy Bros.

BRIDGES—Steel and reinforced concrete. Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, County Surveyor Owen H. O'Neill, Owners, Santa Barbara County. County Surveyor Owen H. O'Neill in a report to the County Supervisors states that designs for the following State Highway bridges have been submitted but have not as yet been approved by the State Highway Commission, overhead crossing, El Capitan, Corral, Tajiquas, two Gaviota bridges and Sheep Camp. Plans and specifications have been prepared for the following jobs: Fencing through north Golia, Rhode Island, States Corp. Jerardo de la Guest, and E. S. Gordero properties. The purchase of rock for Santa Maria road and the laying of macadam on the Santa Maria-Guadalupe road. Bids on these improvements will be called for within the next month.

STATE HIGHWAY CONSTRUCTION—\$72,089. Dixieland, Imperial Co., Cal. Engineer, State Highway Commission, Forum Bldg., Sacramento. Owners, State of California. Bids opened at the last meeting of the State Highway Commission show C. L. Hyde Construction Co., San Diego, low for the construction of approximately 12 miles of Portland cement concrete highway in Imperial County. The engineer's estimate for this work was \$100,480. A complete list of the bids appears under the heading of Los Angeles and Southern California in this issue.

SEWER CONSTRUCTION—Cost as follows. Paso Robles, San Luis Obispo Co., Cal. Engineer, Town Engineer, Paso Robles. Owners, Town of Paso Robles. Contractor, W. J. Tobin, 735 Filbert street, Oakland. Contract price, 75c per foot for sewer. Manholes, \$50 each.

MAUSOLEUM—1 story and base, reinforced concrete and granite, \$10,000. Monrovia, Los Angeles Co., Cal. Architect's name not given. Owners, Monrovia Mausoleum Co. Contractors, Davidson Construction Co., 16th and

Tennessee streets, L. A. Contract price, \$10,000. Contract does not include marble work or ornamental iron.

FLATS—1 and 2 story and base, frame, \$30,000. Los Angeles, Cal. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, W. J. Dodd and associates. Location, Sunset Boulevard near Harvard. Will contain twelve buildings of one-story four rooms each and a two-story building of sixteen rooms, also arranged for modern flats. Interiors finished in pine and hardwood with white enamel. Hardwood floors. Open fire places and tile and brick mantels. Bath rooms tile. Central heating system. Automatic water heaters. Bath rooms tile. Exteriors covered with cement plaster. Plans being prepared.

RAILROAD WORK—Cost not stated. Los Angeles, Cal. Engineer, Engineering Dept. Pacific Electric Railway Co., L. A. Owners, Pacific Electric Railway Co. The engineering department of Pacific Electric Railway Co. has completed plans and specifications for the elevated tracks to be erected in the rear of the Pacific Electric building. The tracks will extend from Los Angeles to San Pedro streets. The plans also provide for the erection of umbrella sheds of concrete and steel construction. The Board of Public Utilities has issued an order that the contract for the work must be awarded prior to December 31st and the work completed by July 15, 1916. The tracks at the Hill street station between 4th and 5th streets will be rearranged and umbrella sheds erected.

SCHOOL—1 story and base, brick or hollow tile, \$25,000. Los Angeles, Cal. Architects, Train & Williams, Exchange Bldg., L. A. Owners, City of Los Angeles. Location, Adams, between 20th and 31st avenues. Will contain six class rooms and an auditorium. Interior finish pine and maple floors. Steam heat and vacuum cleaning. Exterior faced with cement plaster. Plans complete and bids to be called for at once.

SCHOOL GROUP—1 and 2 story and base, brick. Cost not stated. Los Angeles, Cal. Architects, Needham & Cline, Brockman Bldg., L. A. Owners, City of Los Angeles. Location, north Broadway and Pritchard streets. Group will consist of an auditorium building 100 by 110 feet with a seating capacity of 1500 people, a three-story library building 93 by 88 feet and a two-story music building 51 by 110 feet. Interior finish pine with maple floors. Central heating system and modern plumbing. Tile, marble and staff ornamentation. Exteriors faced with cement plaster. Plans complete and figures being taken. Bids to be opened on December 23rd.

SEWER PIPE—Cost not stated. Brawley, Imperial Co., Cal. Engineer, City Engineer, Brawley. Owners, City of Brawley. Bids will be received by the City Clerk up to 5 p. m. of December 22nd, for furnishing the city with 2,620 feet of 10-inch vitrified, salt-glazed, A. No. 1 sewer pipe. Certified check for 10 per cent is required. J. H. Stevenson is the clerk.

STREET LIGHTING SYSTEM—Cost not stated. Santa Ana, Orange Co.,

Cal. Engineer, City Engineer, Santa Ana. Owners, City of Santa Ana. The City Trustees have decided to start construction of the proposed lighting system to be installed. Bids will be taken immediately for the underground work and for furnishing the electroliers and lights. Plans will be started at once, and, on completion, bids will be called for. Further mention will be made of this work when the plans are complete.

SEWER CONSTRUCTION—\$47,000. San Diego, Cal. Engineer, City Engineer, San Diego. Owners, City of San Diego. Doran & Armstrong, San Diego, who were awarded the sewer system contract at \$17,000, have declined to carry out the work, owing to possible legal complications. It is probable a district will be created and bonds issued.

ROAD IMPROVEMENT—\$19,945. Los Angeles, Cal. Engineer, City Engineer, Los Angeles. Owners, City of Los Angeles. Jas. L. Frazer of Long Beach was the lowest bidder at \$19,945 for improving 2.4 miles of Merced avenue, southwest of Covina, in Road Improvement District No. 39. The work will consist of grading, macadamizing and constructing bridges and culverts.

PLEASURE PIERS—Reinforced concrete and timber, \$150,000. Venice, Los Angeles Co., Cal. Engineers, Leeds & Barnard, Central Bldg., L. A. Owners, City of Venice. Plans have been submitted for four rock jetties on South Beach, two of which will extend seaward 1,000 feet and two 500 feet. Each jetty will be covered by a pier 30 feet wide and a comfort station built on the outer end of each of the longer ones. The Board of Trustees and the engineers will decide the pier locations in the next few days. Work is expected to commence about January 1st.

Contracts Awarded

PACKING PLANT—1 story and base, reinforced concrete, \$25,000. Colton, San Bernardino Co., Cal. Architect, none. Owners, Pacific Fruit Express Co. Contractors, Leonard & Peck, H. W. Hellman Bldg., L. A. Contract price, \$25,000.

RESIDENCE—2 story and base, brick and hollow tile, \$21,000. South Pasadena, Los Angeles Co., Cal. Architects, Marston & Van Pelt, Chamber of Commerce Bldg., Pasadena. Owner, Mrs. F. H. D. Banks. Contractor, W. A. Taylor, 966 Elizabeth street, Pasadena. Contract price, \$21,000. Note: Contract does not include plumbing, painting, heating, electric work or ornamental iron.

OFFICE BUILDING ADDITION—5 story and base. Class A construction, \$92,000. Los Angeles, Cal. Architect, W. J. Dodd, Marsh-Strong Bldg., L. A. Owners, Pacific Mutual Life Insurance Co. Contractors, C. J. Kubach Co., Merchants' National Bank Bldg., L. A. Contract price, \$92,000.

STREET IMPROVEMENT—\$43,178.97. Los Angeles, Cal. Engineer, City Engineer, Los Angeles. Owners, City of Los Angeles. Contractors, Benj. F. Ford and Fred H. Stout, L. A. Contract price, \$43,178.97.

STREET IMPROVEMENT—\$11,594.03. Manhattan Beach, Los Angeles Co., Cal. Engineer, City Engineer, Manhattan Beach. Owners, City of Manhattan Beach. Contractors, Municipal Improvement Co., 803 Macdonald avenue, Richmond. Contract price, \$11,594.03.

ORNAMENTAL ELECTROLIERS—\$12,915.91. Riverside, Riverside Co., Cal. Engineer, City Engineer, Riverside. Owners, City of Riverside. Contractors, Electric Supply Co., Riverside. Contract price, \$12,915.91.

BULKHEAD—Reinforced concrete and stone, \$65,000. Long Beach, Los Angeles Co., Cal. Engineer, City Engineer, Long Beach. Owners, City of Long Beach. The City Engineer has been instructed by the City Commission to prepare plans and specifications for the construction of a protection bulkhead along the west beach between Golden avenue and Chestnut Place.

PORTLAND AND OREGON

VIADUCT—Reinforced concrete, \$66,000. Portland, Ore. Engineer, City Engineer, Portland. Owners, City of Portland. Bids will be opened on December 29th for the construction of the reinforced concrete viaduct necessary to complete the Union avenue extension. Plans provide for a structure 219½ feet long, 58 feet wide with a 16-foot fill 700 feet in length. The cost of the fill will be \$13,000 and of the viaduct \$53,000.

APARTMENT HOUSE—2 story and base, brick and hollow tile, \$25,000. Portland, Ore. Architect, E. C. Wegman, 305 Wheller street, Portland. Owner, Dr. H. F. Ong, Oregonian Bldg. Location, Clay street, Broadway and Park. Will contain 20 apartments with bath and kitchen. Interior finish pine and hardwood with some hardwood floors. Steam heat and a hot water system. Bath rooms tile. Exterior faced with pressed brick. Plans being completed.

AUDITORIUM—1 and 2 story and base, steel, brick and concrete, \$500,000. Portland, Ore. Architect's name not given. Owners, City of Portland. Will cover an area of 200 by 200 feet, and will contain a main auditorium, 100 by 108 feet, assembly hall, 40 by 140 feet, a second assembly room, 34 by 86 feet and stage, 108 by 168 feet. Stairways to the upper floor will be of concrete. Interior finish pine and hardwood. Steam heat, oil burning system and vacuum cleaning. Exterior faced with pressed brick trimmed with terra cotta. Plans are being prepared.

SEATTLE AND WASHINGTON

POST OFFICE ALTERATION—Cost not stated. Olympia, Wash. Architect, Supervising Architect, Washington, D. C. Owners, United States Government. Bids will be received until December 27th at 10 a. m. for enlarging the drafting room and constructing skylights in the Federal building. Plans can be secured from either the Supervising Architect at Washington, D. C., or from the custodian of the building at Olympia. An official proposal appears in another column of this issue.

Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

SAN FRANCISCO COUNTY.

No.	Owner	Contractor	Am't.
3470	Livermore	.....Marcussen	2500
3471	Reite	.....Reite	92400
3472	Cale Invs	.....Cale Invs	750
3473	Payne	.....Bldrs Supply	—
3474	Same	.....S. F. Lumber	—
3475	Same	.....Price	—
3476	Same	.....Bennett	—
3477	Same	.....Huck	—
3478	Same	.....Marconi	—
3479	Same	.....Brouillet	—
3480	Same	.....Bartholme	—
3481	Same	.....Atlas Htg	—
3482	Same	.....Pinkerton	—
3483	Same	.....Hillard	—
3484	Sylvia	.....Sylvia	2000
3485	Stiefel	.....Stiefel	5000
3486	de Urioste	.....Pacific Mfg	8550
3487	Grueningel	.....Mager	10315
3488	Barci	.....Petrucci	1000
3489	Bludworth	.....Sharnan	3000
3490	Sporn	.....McLellan	9400
3491	Shrader	.....Klahn	9130
3492	Yager	.....Yager	4000
3493	Yager	.....Yager	4000
3494	Ericksen	.....Ericksen	3000
3495	Murphy	.....Holloway	750
3496	Kyne	.....Kyne	4300
3497	Neil	.....Nell	1800
3498	Burns	.....Booker	800
3499	McMullin	.....McMullin	5000
3500	Brown	.....McIntosh	5000
3501	Allen	.....Higginson	4654
3502	Rhoif	.....Flecher	500
3503	Nilsson	.....Nilsson	1800
3504	Same	.....Same	1800
3505	Banchau	.....Banchau	400
3506	Kirby	.....Kirby	5000
3507	Kenney	.....Kenney	2090
3508	Ward	.....Brounell	500
3509	Zeidler	.....Mudrick	500
3510	Spahn	.....Mudrick	400
3511	Harrington	.....Collins	400
3512	Graeber	.....Graeber	400
3513	Douly	.....Segrand	400
3514	Cal. Fish	.....Guisti	100
3515	Lamont	.....Johnson	1000
3516	Watson	.....Watson	1850
3517	Bollen	.....Lange	133500
3518	Tyler	.....Peterson	6695
3519	Same	.....Davison	821
3520	Evans	.....Evans	1000
3521	Peterson	.....Peterson	4600
3522	Pool	.....Backlund	1150
3523	Friedman	.....Friedman	10600
3524	Rverett	.....Everett	500
3525	McCarthy	.....Wilkie	500
3526	Merritt	.....Merritt	400
3527	Hexman	.....Mudrick	900
3528	McGrath	.....Johnson	3970
3529	Chazel	.....Cavaglieri	1850
3530	Moller	.....Leich	2000
3531	Leich	.....Schultz	2000
3532	Sheanon	.....Props	4500
3533	Podesta	.....Trevia	16300
3534	O'Donnell	.....Segursion	3500
3535	Chambers	.....Chambers	450
3536	Dunn	.....Dunn	1900
3537	Luchutoff	.....Rudometkins	1000
3538	Olsen	.....Stern	14000
3539	Cogswell	.....Am Marble	3100
3540	Same	.....Weber	650
3541	Shea	.....Reynolds	2225
3542	Pantelides	.....Hamill	2065
3543	de Urioste	.....Atlas Htg	2488
3544	Atkins	.....Atkins	3000
3545	Demming	.....Demming	600
3546	Buck	.....Palmer	800
3547	O'Brien	.....Victor	600
3548	Same	.....Riddle	2150
3549	Same	.....Morrison	2200
3550	Same	.....Gas & Elec	1900
3551	Hollman	.....Sibby	7250
3552	Windrow	.....Johnson	5028

ALTERATIONS

(3470) W FLORENCE 90 S. Vallejo.
Raise so as to make two-story flats;
plumbing, exterior plaster, etc.
Owner.....H. P. Livermore, 1231 Val-
lejo, San Francisco.

Architect...Chas. McCall, Central Bk.
Bldg., Oakland.
Contractor...Marcus Marcussen, 806
Royal Ins. Bldg., S. F.
COST, \$2500

CONCRETE APARTMENTS

(3474) S MISSION 116 W Mary. Five-
story and basement and mezzanine
reinforced concrete (116) apartments.
Owner.....J. B. Reite, 110 Jessie, S. F.
Architect...Smith & Stewart, 244
Kearny, San Francisco.
Day's work. COST, \$92,400

SMOKEHOUSE

(3472) NO. 1019 MARKET. Construct
smokehouse.
Owner.....Cale Invt. Co., Premises.
Architect...None.
Day's work. COST, \$750

BRICK APARTMENTS

(3475) S BUSH 71-8 W Hyde. Mill
work for three-story and basement
brick (25) apartments.
Owner.....Clyde S. Payne, 46 Kearny,
San Francisco.
Architect...W. G. Hind, 46 Kearny,
San Francisco.
Contractor...Builders' Supply Depot, 42
8th, San Francisco.
COST, \$—

NOTE:—Entire Cost, \$20,000.

(3471) LUMBER ON ABOVE.

Contractor...San Francisco Lumber Co.,
Foot of Mason, S. F.
COST \$—

(3475) ROOFING ON ABOVE.

Contractor...Thos. H. Price Co., Monad-
nock Bldg., S. F.
COST, \$—

(3476) HARDWARE ON ABOVE.

Contractor...Bennett Bros., 514 Market,
San Francisco.
COST, \$—

(3477) PAINTING ON ABOVE.

Contractor...A. Huck, 59 Capp, S. F.
COST, \$—

(3478) PLASTERING ON ABOVE.

Contractor...J. Marconi, 737 Greenwich,
San Francisco.
COST, \$—

(3479) ELECTRIC WORK ON ABOVE.

Contractor...Brouillet Electric Co., 492
Castro, San Francisco.
COST, \$—

(3480) METAL WORK AND FLUES on above.

Contractor...Bartholme & Hartman-
shenn.
COST, \$—

(3481) HEATING ON ABOVE.

Contractor...Atlas Heating & Ventil-
ating Co., 4th and Frelton,
San Francisco.
COST, \$—

(3482) PLUMBING ON ABOVE.

Contractor...Jas. H. Pinkerton, 2266
Fulton, San Francisco.
COST, \$—

(3483) IRON WORK ON ABOVE.

Contractor...C. J. Hillard & Co., 19th &
Minnesota, San Francisco.
COST, \$—

FRAME FLATS

(3484) W NINETEENTH AVE 75 S
California. Two-story and basement
frame (2) flats.
Owner.....A. M. Sylvia, 274 20th Ave.,
San Francisco.
Architect...None.
Day's work. COST, \$3000

FRAME FLATS

(3485) S LAKE 32-6 W 19th Ave. Two-
story and basement frame (2) flats.
Owner.....John V. Stiefel, 181 23rd
Ave., San Francisco.
Architect...None.
Day's work. COST, \$5000

CLASS "C" APARTMENTS

(3486) NE VAN NESS AVE AND
McAlister 120x109. Mill work, ex-
cept store fronts for four-story and
basement Class "C" apartments.
Owner.....Mrs. Hannah de Urioste.
Architect...J. C. Hladik, Monadnock
Bldg., San Francisco.
Contractor...Pacific Manufacturing Co.,
177 Stevenson, S. F.

Filed Dec. 4, '15. Dated Dec. 2, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$5550

Bond, none. Limit, as fast as possible.
Forfeit, \$20. Plans and specifications
filed.

FRAME APARTMENTS

(3487) SE CASTRO AND CLIFTER.
All work for three-story frame apart-
ments.

Owner....Paul and Helena Gruen-
inger, 158 Guerrero, S. F.
Architect...None.
Contractor...Mager Bros., 110 Jessie,
San Francisco.

Filed Dec. 1, '15. Dated Nov. 27, '15.
Frame up \$2500
Brown coated 2575
Accepted 2575
Usual 35 days..... 2575
TOTAL COST, \$10,315

Bond, none. Limit, 120 days. Forfeit,
none. Plans and specifications filed.

FRAME DWELLING

(3488) LOT 43 BLK 56 Reis Tract.
All work for one-story and basement
5-room and bath frame dwelling.
Owner.....Adriano Barci.
Architect...None.
Contractor...James Petrucci

Filed Dec. 1, '15. Dated April 6, '15.
Owner agrees to pay contractor
\$.50 per day and to pay for all
material and labor for erection
of building

TOTAL COST not to exceed, \$1000
Bond, none. Limit, 90 days from April
15. Forfeit, \$7.50. Plans and specifications, none.

FRAME COTTAGE

(3489) NE OAKDALE AVE (15th Ave South) 225 SE Mendall (M South) SE 75 NE 100 Lot 12 Blk 289 South San Francisco Hld. and R. R. Ass'n. All work for two one-story and basements frame cottages.

Owner.....Maria T. Bludworth, 1653 Palou, San Francisco.
Architect...None.

Contractor...T. L. Sharman, 1440 Shafter Ave., San Francisco.

Filed Dec. 4, '15. Dated Dec. 1, '15.
Frames completed\$750
Both houses rough plastered..... 750
Buildings completed 750
Usual 35 days..... 750

TOTAL COST, \$3000

Bond, \$1500. Sureties, J. E. Donoghue and J. R. Hermitte. Limit, 60 days
Forfeit, none. Plans and specifications
filed.

NOTE—1st report Nov. 26th. No. 3379.

FRAME FLATS

(3490) NW TWENTY-FOURTH AND Poplar Alley W 30 N 80-1 NE 30-2 3/4 m or l S 84-7 1/4 m or l. All work for three-story and basement frame (6) flats.

Owner.....Frank Saporiti and Theresa Benetti, 1296 Valencia, S. F.
Architect...C. O. Clausen, Hearst Bldg., San Francisco.

Contractor...J. S. McLelland, 530 12th Ave., San Francisco.

Filed Dec. 4, '15. Dated Dec. 2, '15.
Frame up\$2350
Brown coated 2350
Completed and accepted..... 2350
Usual 35 days..... 2350

TOTAL COST, \$9400

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME FLATS

(3491) S WALLER 85 E Shrader E 25 XS 100. All work for three-story frame (6) flats.

Owner.....The Schrader Estate Co., 154 15th Ave., S. F.

Architect...A. Klahn (Uncertificated).
Contractor...A. Klahn & Son, 27 Chenery, San Francisco.

Filed Dec. 4, '15. Dated Oct. 22, '15.
Frame up\$1710
Brown coated 1710
White coat on and front finished 1710
Completed 1710
Usual 35 days..... 2290

TOTAL COST, \$9130

Bond, none. Limit, 100 days from recording. Forfeit, \$10. Plans and specifications filed.

FRAME FLATS

(3492) N CALIFORNIA 32-6 W 16th Ave. Two-story and basement frame (2) flats.

Owner.....Grace Yager, 1539 Clay, San Francisco.

Architect...None.
Contractor...W. W. Yager, 1239 Polk, San Francisco.

COST, \$4000

FRAME FLATS

(3493) W SEVENTEENTH AVE 146 S California. Two-story and basement frame (2) flats.

Owner.....Grace Yager, 1539 Clay, San Francisco.

Architect...None.
Contractor...W. W. Yager, 1239 Polk, San Francisco.

COST, \$4000

FRAME DWELLING

(3494) S Caselli 578 W Douglass, Two story and basement frame dwelling.

Owner.....Ernest Erickson, 972 Plymouth, San Francisco.

Architect...Koenig & Christiansen, 914 Humboldt Bank Bldg., San Francisco.

Contractor...Ernest Erickson, 972 Plymouth, San Francisco.

COST, \$3000

REPAIRS

(3495) NO. 982 GOLDEN GATE AVE. Repair fire damage.

Owner.....Mr. Murphy, 322 50th Ave., San Francisco.

Architect...None.
Contractor...E. V. Holloway, 330 31st Ave., San Francisco.

COST, \$750

BRICK STORES

(3496) S MISSION 125 W Sixth. One-story and basement brick store.

Owner.....Wm. Kyne, 244 Kearny, San Francisco.

Architect...None.
Day's work.....

COST, \$4300

FRAME DWELLING

(3497) W FORTY-FIFTH AVE 175 N Judah. Two-story and basement frame dwelling.

Owner.....Neil Bros.
Architect...None.

Contractor...Neil Bros., 4221 Moraga, San Francisco.

COST, \$1800

ALTERATIONS

(3498) NO. 718 LARCH. Alter for laundry.

Owner.....O. W. Burns, 1319 Eddy, San Francisco.

Architect...None.
Contractor...J. Booker, 12 Wolfe, S. F.

COST, \$500

FRAME RESIDENCE

(3499) LOT 26 AND 20 FEET LOT 27 Blk 2983, Claremont Court. Two-story and basement frame residence.

Owner.....McMullin-von Voorhies Co., 110 Jessie, San Francisco.

Architect...E. E. Young, 251 Kearny, San Francisco.

Day's work.....

COST, \$5000

FRAME RESIDENCE

(3500) LOT 12 BLK 29 Map Blks 27 to 34, Forest Hill Extension. All work for two-story and basement frame residence.

Owner.....O. A. Brown Bldg. Co., St. Francis Hotel, S. F.

Architect...E. E. Young, 251 Kearny, San Francisco.

Contractor...Wm. McIntosh, 289 Cumberherland, San Francisco.

Filed Dec. 6, '15. Dated Nov. 30, '15.
Frame up\$1250
Brown coated 1250
Completed and accepted..... 1250
Usual 35 days..... 1250

TOTAL COST, \$5000

Bond, none. Limit, 75 days. Forfeit,

none. Plans and specifications filed.
FRAME RESIDENCE

(3501) LOTS 32 AND 33 BLK 23 Forest Hill. All work for one-story and basement and attic frame residence.

Owner.....Jane B., wife Horace H. Allen, 150 Post, S. F.

Architect...Falch & Knoll, Hearst Bldg., San Francisco.

Contractor...Higginson Co., Inc., Humboldt Bank Bldg., S. F.

Filed Dec. 6, '15. Dated Nov. 29, '15.
Frame up and roof boards on...\$1166
Brown coated 1166
Completed and accepted..... 1166
Usual 35 days..... 1166

TOTAL COST, \$4664

Bond, \$2332. Surety, J. H. McCallum and E. O. Benner. Limit, 60 days from filing. Forfeit, \$5. Plans and specifications filed.

REPAIRS

(3502) SW GOLDEN GATE AND FILLMORE. Repair foundation and terrazzo work.

Owner.....A. V. Rohlf.
Architect...None.

Contractor...J. P. Fletcher, 302 Russ Bldg., San Francisco.

COST, \$500

FRAME DWELLING

(3503) S RIVERA 90 W 21st Ave. One-story and basement frame dwlg.

Owner.....N. F. Nilsson, 355 Coleridge San Francisco.

Architect...None.
Day's work.....

COST, \$1800

FRAME DWELLING

(3504) S RIVERA 120 W 21st Ave. One-story and basement frame dwlg.

Owner.....N. F. Nilsson, 355 Coleridge San Francisco.

Architect...None.
Day's work.....

COST, \$1800

FRAME STABLE

(3505) NO. 1152 EGBERT. One-story frame stable.

Owner.....R. Banchau, Premises.
Architect...None.

Day's work.....

COST, \$400

FRAME FLATS

(3506) E SEVENTH AVE 250 S Lake. Two-story and basement frame (2) flats.

Owner.....J. C. Kirby, 2152-A Market, San Francisco.

Architect...None.
Day's work.....

COST, \$5000

ALTERATIONS

(3507) NO. 538 TWENTY-SIXTH AVE. Alter seven-room frame residence into two flats of five and six rooms each.

Owner.....Mrs. B. Kenny, Premises.
Architect...None.

Day's work.....

COST, \$2000

FRAME DWELLING

(3508) N SAN JOSE AVE 180 W Niagara. One-story and basement frame dwelling.

Owner.....Chas. Ward, 2559 San Jose Ave., San Francisco.

Architect...None.
Contractor...E. Grant Brownell, 822 Lake, San Francisco.

COST, \$500

ALTERATIONS

(3509) E TWENTY-FIRST AVE 100 S Clement. Alter, repair and raise dwelling.

Owner.....Louis Zeidler, 318 21st Ave. San Francisco.

Architect...None.

Contractor...L. Mudrick, 520 Charter Oak, San Francisco.

COST, \$500

CONCRETE FOUNDATION

(3510) NO. 329 BALBOA. Concrete foundations and cement floor.

Owner.....Reinhold Spahs, Premises.

Architect...None.

Contractor...J. Collins, 581 Waller, S. F.

COST, \$400

FRAME FLATS

(3511) SW LAKE & EIGHTEENTH AVE. Three-story and basement frame (9) flats.

Owner.....A. Harrington, 5th Ave and Judah, San Francisco.

Architect...Koenig & Christiansen, 914 Humboldt Bank Bldg., S. F.

Day's work. COST, \$14,000

BRICK FOUNDATION

(3512) SE CLEMENT & FOURTH AVE Brick foundation.

Owner.....C. C. Graeber, 329 5th Ave., San Francisco.

Architect...None.

Day's work. COST, \$400

ALTERATIONS

(3513) NO. 4524 GEARY. Ratproofing and minor alterations.

Owner.....M. F. Douly, Premises.

Architect...None.

Contractor...Chas. Segrand, 11 Chenery, San Francisco.

COST, \$400

ALTERATIONS

(3514) NO. 556 CLAY. Alter fish market.

Owner.....California Fish Co., Prem.

Architect...A. W. Cornelius, Merchants National Bank Bldg San Francisco.

Contractor...S. A. Guisti, 617 Sansome, San Francisco.

COST, \$400

ALTERATIONS

(3515) S SACRAMENTO 50 E Presidio Ave. Alter front.

Owner.....A. A. Lamont.

Architect...C. O. Clausen, Hearst Bldg., San Francisco.

Contractor...J. Harold Johnson, 740 9th Ave., San Francisco.

COST, \$400

FRAME DWELLING

(3516) W TWENTIETH AVE 150 S Moraga. One-story and basement frame dwelling.

Owner.....Jas. W. Watson, 1254 6th Ave., San Francisco.

Architect...None.

Day's work. COST, \$1000

CONCRETE FACTORY

(3517) SE FOURTH AND BRANNAN 137-6 on Brannan by 275 on Fourth. All work for three-story and basement reinforced concrete factory building.

Owner.....The John Bollman Co., Battery & Commercial, S. F.

Architect...Chas. P. Weeks, Mutual Bank Bldg., S. F.

Contractor...Lange & Bergstrom, Shar on Bldg., San Francisco.

Filed Dec. 7, '15. Dated Dec. 3, '15.

On 10th of each month..... 75%

Usual 35 days, 25%, including contractor's \$5000

TOTAL COST not to exceed \$132,500 plus \$5000 to Contractor.

Bond, \$70,000. Surety, The Aetna Accident & Liability Co. Limit, none.

Forfeit, \$50. Plans and specifications filed.

BRICK BUILDING

(3518) N CALIFORNIA 56-3 W Polk W 37-6XN 57-6. All work except plumbing, gas fitting and sewerage for two-story brick building (Physical Culture College).

Owner.....Frances T. Tyler (w/ J. F. Tyler), Hayward, Cal.

Architect...Albert W. Burgren, 50 Woodland Ave., S. F.

Contractor...Peterson & Persson, 62 Post, San Francisco.

Filed Dec. 7, '15. Dated Dec. 6, '15.

Roof rafters in place.....\$1500

Brown coated

Completed and accepted..... 2260

Usual 35 days..... 1675

TOTAL COST, \$6695

Bond, \$3350. Surety, Southwestern Surety Insurance Co. Limit, 50 days from filing. Forfeit, \$5. Plans and specifications filed.

(3519) SEWERING, PLUMBING AND

gas fitting on above.

Contractor...Frank Davison, 80 Shipley, San Francisco.

Filed Dec. 7, '15. Dated Dec. 6, '15.

Roughed in

Completed and accepted..... 300

Usual 35 days..... 206

TOTAL COST, \$821

Bond, \$415. Sureties, B. A. Hawkins and Geo. W. Coefield. Limit, as fast as possible. Forfeit, \$5. Plans and specifications filed.

FRAME DWELLING

(3520) W NAPLES 130 S Seville. One story and basement frame dwelling.

Owner.....O. E. and Jennie Evans, 1181 Naples, S. F.

Architect...O. E. Evans, 2567 Mission, San Francisco.

Day's work. COST, \$1000

FRAME FLATS

(3521) E TENTH AVE 225 N Cabrillo. Two-story and basement frame (2) flats.

Owner.....Elizabeth Peterson, 157 7th Ave., San Francisco.

Architect...None.

Contractor...Gustav Peterson, 157 7th Ave., San Francisco.

COST, \$1600

FRAME DWELLING

(3522) N CHENERY 121 E Surrey. One-story and basement frame dwlg.

Owner.....John Pool, 11 Surrey, S. F.

Architect...None.

Contractor...John Backlund, 1172 De Haro, San Francisco.

COST, \$1150

FRAME APARTMENTS

(3523) W GERRIERO 65-6 N 20th. Three-story and basement frame (12) apartments.

Owner.....Friedmann Bros., 467 Valencia, San Francisco.

Architect...D. C. Coleman, Merchants'

National Bank Bldg., S. F.

Day's work. COST, \$10,500

FRAME DWELLING

(3524) N ARMY 75 E Florida. One-story and basement frame dwelling.

Owner.....Harold L. Everett, 2563 Mission, San Francisco.

Architect...None.

Contractor...P. W. Montrouill, 270 Anderson, San Francisco.

COST, \$2190

REPAIRS

(3525) NOS. 2175-77-79-81 PACIFIC. Repair fire damages.

Owner.....Mr. McCarthy, Premises.

Architect...Albert Farr, Foxcroft Bldg San Francisco.

Contractor...F. A. Winkle Bldg. Co., Clunie Bldg., S. F.

COST, \$500

FRAME OFFICE

(3526) NW ALLSTON & CLAREMONT Blvd. One-story frame office.

Owner.....G. M. Merritt, Care 526 Crocker Bldg., S. F.

Architect...None.

Day's work. COST, \$400

FRAME DWELLING

(3527) W CHARTER OAK 103 S Thornton. One-story and basement frame dwelling.

Owner.....Oscar Heyman, 742 Market, San Francisco.

Architect...None.

Contractor...C. Mudrick, 520 Charter Oak, San Francisco.

COST, \$900

FRAME FLATS

(3528) W BAKER 137-6 N Union N 25x W 137-6 W A 574. All work for two-story and basement frame flats.

Owner.....Catherine McGrath.

Architect...C. O. Clausen, Hearst Bldg., San Francisco.

Contractor...J. Harold Johnson, 740 9th Ave., San Francisco.

Filed Dec. 8, '15. Dated Dec. 2, '15.

Brown up

Frame coated

Completed and accepted..... 1492.50

Usual 35 days..... 1492.50

TOTAL COST, \$5970.00

Bond, \$3000. Sureties, L. Seghiera and Phillip Wesendorf. Limit, 70 days after Dec. 7. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(3529) E SHOTWELL 95 S 21st. All work except electric fixtures and wiring for alterations and additions to two-story building.

Owner.....A. Chazel, 2023 Folsom, San Francisco.

Architect...None.

Contractor...G. Cavaglieri, 593 Potrero Ave., San Francisco.

Filed Dec. 8, '15. Dated Dec. 7, '15.

Old house moved in place and new additional frame up..... \$370

Brown coated

White coated and mill work on job

Completed and accepted..... 370

Usual 35 days..... 370

TOTAL COST, \$1860

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME DWELLING

(3520) E TWENTY-FIFTH AVE 25 N California. Two-story and basement frame dwelling.
Owner.....G. Moller, 2252 Clement, San Francisco.
Architect...None.
Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.
COST, \$2000

FRAME DWELLING

(3521) E TWENTY-FIFTH AVE 50 N California. Two-story and basement frame dwelling.
Owner.....Leigh & Schultz, 419 21st Ave., San Francisco.
Architect...None.
Contractor...Leigh & Schultz, 419 21st Ave., San Francisco.
COST, \$2000

FRAME FLATS

(3522) N NATOMA 225 W Seventh. Two-story and basement frame (4) flats.
Owner.....James Sheanon, 309 Clementina, San Francisco.
Architect...None.
Contractor...W. Props, 1301 Gough, San Francisco.
COST, \$4500

CONCRETE GARAGE

(3523) N PACIFIC 82-6 E Powell. One story reinforced concrete public garage.
Owner.....G. B. and Edw. Podesta, 1236 Powell, San Francisco.
Architect...P. Righetti, 1168 Phelan Bldg., San Francisco.
Contractor...Trevis & Pasqualetti, 32 Harwood Alley, S. F.
COST, \$16,300

FRAME FLATS

(3524) N TWENTY-FIFTH 25 W Hampshire. Two-story and basement frame (4) flats.
Owner.....Emma R. O'Donnell, 1272 Fulton, San Francisco.
Architect...None.
Contractor...Sergunson Bros., 308 Guerrero, San Francisco.
COST, \$3500

ALTERATIONS

(3525) NE BANKS AND TOMPKINS. Alter dwelling.
Owner.....Jos. Chambers, 427 Banks, San Francisco.
Architect...None.
Contractor...R. H. Chambers, 2283 Folsom, San Francisco.
COST, \$450

FRAME DWELLING

(3526) E TWENTY-SEVENTH AVE 225 S Anza. One-story and basement frame dwelling.
Owner.....Ernest E. Dunn, 329 23rd Ave., San Francisco.
Architect...None.
Day's work. COST, \$1900

ALTERATIONS

(3527) NO. 2002 TWENTY-SECOND. Alter dwelling.
Owner.....Alex Tuchutoff, Premises.
Architect...None.
Contractor...John Rudometkins, 871 Rhode Island, S. F.
COST, \$1000

FRAME APARTMENTS

(3528) SE BERNARD AND LEAVEN-worth. Three-story and basement frame (12) apartments.
Owner.....Stern & Olson, 374 6th Ave., San Francisco.
Architect...None.
Contractor...S. J. Stern, 374 6th Ave., San Francisco.
COST, \$14,000

MARBLE WORK

(3529) SW FOLSOM AND TWENTY-sixth W 170 S 150-94 m or 1 S 86 deg 35 min E 175 m or 1 N 173. Marble work for three-story and basement "Class A" College.
Owner.....Board of Trustees of Cogswell Polytechnical College by Lange & Bergstrom, Sharon Bldg., S. F.
Architect...Frederick H. Meyer, Bankers' Investment Bldg., S. F.
Contractor...American Marble & Mosaic Co., 25 Columbia Sq. S. F.
Filed Dec. 9, '15. Dated Nov. 6, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$3100
Bond, limit, forfeit, none. Plans and specifications, none.

(3540) SLATE BLACK BOARDS EX-cept furnishing and installing felt on above.

Contractor...C. F. Weher & Co., 367 Market, San Francisco.
Filed Dec. 9, '15. Dated Nov. 23, '15.
Payments same as above.....
TOTAL COST, \$650
Bond, limit, forfeit, none. Plans and specifications, none.

(3541) E LYON 137-6 S Sutter 55x110. Alterations and additions to two-story frame (4) flats.
Owner.....Mrs. Georgiana Shea, 1412 1/2 Lyon, San Francisco.
Architect...None.

Contractor...E. A. Reynolds.
Building raised and new underpinning in \$581.25
Brown coated 581.25
Completed and accepted..... 581.25
Usual 35 days..... 581.25
TOTAL COST, \$2325.00
Bond, \$2325. Sureties, C. S. Bryant and Frank S. Norman. Limit, 60 days after Nov. 29. Forfeit, none. Plans and specifications filed.

FRAME STORE BUILDING

(3542) SE CLARA 150 NE Fourth NE 20xSE 85. All work for one-story frame store building.
Owner.....Nichola Pantelios & Geo. Vavasilis.
Architect...None.
Contractor...Thos. Hamill, 5533 Geary San Francisco.

Filed Dec. 9, '15. Dated Dec. 6, '15.
Rough frame up and roof boards on \$500
Brown coated 500
Completed and accepted..... 500
Usual 35 days..... 565
TOTAL COST, \$2065

Bond, \$1050. Surety, The Aetna Accident & Liability Co. Limit, 60 days. Forfeit, none. Plans and specifications filed.

STEAM HEATING

(3543) NE VAN NESS AVE AND McAllister 120x109. Steam heating, hot

water tank and heater for four-story and basement Class "C" apartments.
Owner.....Mrs. Hannah de Urioste.
Architect...J. C. Hladik, Monadnock Bldg., San Francisco.
Contractor...Atlas Heating & Ventilating Co., 4th & Freelon, S. F.
Filed Dec. 9, '15. Dated Dec. 8, '15.
Piping roughed in..... \$622
Boilers set 622
Finished and accepted..... 622
Usual 35 days..... 622
TOTAL COST, \$2488

Bond, \$1244. Surety, Pacific Coast Casualty Co. Limit, as expeditiously as other work will permit. Forfeit, \$20. Plans and specifications filed.

ALTERATIONS

(3544) NO. 1055 GREEN. Alterations and additions for dwelling.
Owner.....David Atkins.
Architect...Julia Morgan, Merchants' Exchange Bldg., S. F.
Day's work. COST, \$3000
NOTE:—Work nearly finished.

ALTERATIONS

(3545) NO. 329 HILL. Alter and repair dwelling.
Owner.....Geo. F. Demming, 756 Valencia, San Francisco.
Architect...None.
Day's work. COST, \$600

FRAME GARAGE

(3546) E LOCUST 85 S Washington. One-story frame garage.
Owner.....J. A. Buck Jr., 1618 Washington, San Francisco.
Architect...G. A. Applegarth, Claus Spreckels Bldg., S. F.
Contractor...P. A. Palmer, Monadnock Bldg., San Francisco.
COST, \$600

CLASS "C" APARTMENTS

(3547) S BUSH 187-6 W Mason W 42 xS 137-6. Steam heating and hot water system for four-story and basement Class "C" apartments.
Owner.....O'Brien Bros., Inc., 240 Montgomery, S. F.
Architect...O'Brien Bros., Inc., 240 Montgomery, S. F.
Contractor...Victor Engineering Co., 325 Guerrero, San Francisco.
Filed Dec. 10, '15. Dated Nov. 16, '15.
On 1st of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$800
Bond, none. Limit, 60 days. Forfeit, none. Plans and specifications filed.

(3548) WOOD AND METAL LATHING, plastering, ornamental staff work on above.

Contractor...L. V. Riddle.
Filed Dec. 10, '15. Dated Nov. 16, '15.
Payments same as above.....
TOTAL COST, \$2150
Bond, none. Limit, 40 days after notified. Forfeit, none. Plans and specifications filed.

(3549) GALVANIZED IRON WORK, cornices, metal lining, garbage pails, coolers, and ice pans on above.

Contractor...Morrison & Co., 769 McAllister, San Francisco.
Filed Dec. 10, '15. Dated Nov. 16, '15.
Payments same as above.....
TOTAL COST, \$2200
Bond, none. Limit, 40 days. Forfeit, none. Plans and specifications filed.

(3550) ELECTRIC WIRING, TELE-
phones, bells, etc., on above.
Contractor...Gas & Elec. Appliance Co.,
441 Sutter, San Francisco.
Filed Dec. 10, '15. Dated Nov. 16, '15.
Payments same as above.....

TOTAL COST, \$1200
Bond, none. Limit, 60 days. Forfeit,
none. Plans and specifications filed.

EXCAVATING, ETC.

(3551) SE FOURTH AND BRANNAN
137-6 on Brannan and 275 on Fourth.
Excavating, etc., for four-story and
basement reinforced concrete ware-
house.

Owner.....The John Bollman Co., Bat-
tery and Commercial, S. F.
by Lange & Bergstrom,
Sharon Bldg., S. F.

Architect...Chas. P. Weeks, Mutual
Bank Bldg., San Francisco.
Contractor...Sibley Grading & Teaming
Co., 180 Jessie, S. F.

Filed Dec. 10, '15. Dated Dec. 10, '15.
On 10th of each month..... 75%
Usual 35 days..... 25%

TOTAL COST, \$7250
Bond, limit, forfeit, none. Plans and
specifications, none.

FILAME FLATS

(3552) W ELEVENTH AVE 275 N Ful-
ton N 25xW 120. All work except
electric light fixtures, window
shades, wall beds and finish hard-
ware for two-story and basement
frame flats.

Owner.....Bert Windrow, 532 Val-
encia, San Francisco.

Architect...Rhodes & Marisch, 3372
16th, San Francisco.

Contractor...J. Johnson, 150 17th Ave.,
San Francisco.

Filed Dec. 10, '15. Dated Dec. 9, '15.
Ready for roof.....\$1257
Rough coat plaster on.....1257
Completed and accepted.....1257
Usual 35 days.....1257

TOTAL COST, \$5023
Bond, \$2514. Surety, Guardian Casu-
alty & Guaranty Co. Limit, 70 days
after Dec. 8. Forfeit, none. Plans and
specifications filed.

LEASE.

Dec. 8, 1915—SW POLK & WASHING-
ton; No. 1747 Polk. Edwin F. Walter
E and Irene A McCann to Mathias
Schweifer. 3 years. \$1800.

Dec. 8, 1915—COMG. AT INTERSEC-
tion of W line of Juniper Serra Blvd
and County line, contg 149.39 acres.
Spring Valley Water Co to S F Golf
& Country Club. \$15 years.

Dec. 9, 1915—PTN LOT 5 BLK 22, Mar-
ket Street Hld. Ass'n. Herbert W
and Mary L Smith to John and Mrs
John Ireland. 5 years. \$1 per year.

Dec. 9, 1915—NO. 1602 GEARY N line
bet. Buchanan and Webster. Mrs. M.
Heilmuller to Young Kee. 5 years.
\$40 per month.

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED

Dec. 6, 1915—E SANSON 89 S Califor-
nia. J C Zellerbach to Macdonald
& Kahn.....Nov. 29, 1915

Dec. 7, 1915—S CLAY 57-6 W Stock-
ton W 50 S 67-6 E 40 N 10 E 40 N
57-6. S & G Gump Co to Mac-
donald & Kahn.....Nov. 27, 1915

Dec. 7, 1915—S CHESTNUT 40 W
Grant Ave. G Cerelli and John
Cerelli to F Demartini & L Segall
.....Dec. 2, 1915

Dec. 7, 1915—SW BUSH & JONES
W 77-6xS 77-6. Gerard Invst Co to
whom it may concern.....Dec. 8, 1915

Dec. 8, 1915—E LEAVENWORTH 44
S Geary S 41x E 83-6. Gerard Invst
Co to whom it may concern.....
.....Dec. 8, 1915

Dec. 8, 1915—E SIXTH AND MISSION
NE 75xSE 50. Caroline Schmoll,
Mary Sweigert, Caroline Sullivan,
W J Sweigert and Chas A Sweigert
to Petterson & Persson, Ernst &
Sons and Schrader Iron Works...
.....Nov. 30, 1915

Dec. 8, 1915—N CABRILLO 70 W 7th
Ave W 25xN 95. H C Christiansen
to whom it may concern.....Dec. 8, 1915

Dec. 8, 1915—SE VAN NESS AVE &
Post—109 S 120 W 109 N 120. The
Concordia Club to F L Hansen...
.....Nov. 29, 1915

Dec. 8, 1915—NO. 629 VAN NESS AVE
Chas D Farquharson to Collman &
Collman Co.....Dec. 3, 1915

Dec. 8, 1915—E SIXTEENTH AVE 125
N Balboa N 25x E 127-6. John Fred
Boehm to whom it may concern...
.....Dec. 5, 1915

Dec. 8, 1915—N GEARY 32-6 E Sixth
Ave E 25xN 100. A W or Albert W
Nielsen to E J Spence and W H
Walshall.....Dec. 6, 1915

Dec. 9, 1915—S PAGE 114 E Central
Ave E 23-2xS 140. Frank Lind-
blad to Leigh & Schultz, Aug. 31, '15

Dec. 9, 1915—S NATOMA 100 E 9th
E 25xS 75. George W Springer to
A H Wilhelm.....Dec. 8, 1915

Dec. 9, 1915—SW DIVISION AND
Kansas S 260 to pt. on W Kansas
160 N Alameda W 200 N 191 NE
parallel with right of way of S.
P. Company to S Division E 57.
Jno G Rapp to J C Hurley Co.....
.....Dec. 4, 1915

Dec. 9, 1915—NW VALLEJO & DI-
visadero 68x137-6. Marie A Musto
to Wm C Gilmour.....Dec. 7, 1915

Dec. 9, 1915—NW VAN NESS AVE &
McAllister N 60xW 109.9. E C Den-
igan to A M Wallin.....Dec. 9, 1915

Dec. 19, 1915—SE CLEMENT AND
24th Ave S 100x E 30. Anna R Wiss-
mann to Fred C Jones, Ahlback &
Mayer, Flick Bros and Wm A Fegan
.....Dec. 9, 1915

Dec. 10, 1915—S JACKSON 127-6 E
Buchanan E 37-6 S 127-8 1/2 W 27-6
N 7-8 1/2 W 10 N 120. Lucia H K
Sherman to Stranahan & Son, Dec.
2; Collman & Collman.....Nov. 20, 1915

Dec. 10, 1915—E EIGHTEENTH AVE
350 S Geary S 25x E 120. Gustave
Moeller to Leigh & Schultz.....
.....Dec. 1, 1915

Dec. 10, 1915—W TAYLOR 137-6 N
Sutter N 38-9xW 137-6. Biltmore
Realty Co to G Tomagini & Co, R
D Felt and Foster-Vogt Co.....

.....Dec. 7, 1915
Dec. 10, 1915—E THIRTY-SEVENTH
Ave 200 S Lincoln Way S 100x E 120.
Sterling Realty Co to whom it may
concern.....Dec. 7, 1915
Dec. 10, 1915—N WASHINGTON 127-6
E Laguna E 137-6xN 255-4 1/2. Mary
Louise Phelan to Joseph Musto
Sims-Keenan Co.....Dec. 6, 1915
Dec. 10, 1915—SW TURK AND VAN
Ness Ave S 60xW 109. Alice A
Myers to O W Britt.....Dec. 9, 1915

LIENS FILED

San Francisco

Dec. 4, 1915—E SEVENTEENTH AVE
57-4 1/2 S Rivera S 25x E 100. A
Seghieri & Bro vs Bessie G and E
R Hayden.....\$142
Dec. 6, 1915—W FORTY-SIXTH AVE
145 N Cabrillo N 25xW 120. Har-
bert I Lauder vs David Cordon.....\$200
Dec. 7, 1915—S HOLLISTER AVE &
Jennings; No. 1297 Hollister Ave.
A Barbera vs Ferruccio Lombard
and Lintell, Pastorini & Co.....\$125
Dec. 8, 1915—NW WASHINGTON &
Webster N 92-1 1/2xW 27-6. A
Seghieri & Bro, Inc vs John H
Schröder and L C Woodridge.....\$106.35
Dec. 10, 1915—BLK 51 Salt Marsh &
Tide Lands. Scott & Turner vs J H
Coryell.....\$6743.95

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

RECORDED AMOUNT

Dec. 1, 1915—N TWENTY-ETH 25 E
Collingwood E 25xN 75. Harold
W McCausland, G W Shroyer, C L
Borse, James Brown, M W Farrell,
J Piconi, H Baier, Richmond Elec
Co, Julius E Back, M H Gnecco, E
A Howard & Co, Eureka Sash, Door
& Moulding Mills, W P Fuller,
Reinhart Lumber & Planing Mill
Co, Kar Hassell, Wm Heldenreich,
C W Higgins, Marshall & Stearns
Co, Columbia Lumber Co to J H and
Caroline F Palmer and McCaus-
land Bros.....
Dec. 1, 1915—S TURK 57-6 E Polk E
30xS 55. L A Hufschmidt Mfg Co
to J M Boscut and Jesse D Hanna
Nov. 30, 1915—E MISSION (as widen-
ed) 25 N Reichland Ave N 25x E 100.
G L Woerner to Mutual Amusement
& Investment Co.....
Dec. 9, 1915—SW SUTTER AND VAN
Ness Ave W 109-9xS 120. National
Mill & Lumber Co to Automobile
Club of S F.....
Dec. 9, 1915—N SUTTER 100 W Powell
W 37-6xN 137-6. Joseph Deasy &
M Sulsalt, Co to M D Grosh, Eliza-
beth G Larzelere, Louise M Sage
and Wm Wade.....
Dec. 6, 1915—N ARMY 93-2 1/2 E Mis-
sion E 57-7 1/2 N 72-5 1/2 N 97-7 SE
45-5 1/2. W P Goss to Mary A and
John McConaghy, George Peck and
Arthur W Draper (as Peck &
Draper).....

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Am't.
2600	Brazon	Rodgers	400
2601	Pfarr	Pfarr	2250
2603	Anderson	Anderson	1500

NOTICE OF NON-RESPONSIBILITY.

SAN FRANCISCO COUNTY.

Dec. 9, 1915—NO. 17 MANILA, fmlly
Union Square. A Brizzolara as to
improvements on leased property.

2605	Rothen	.....Roust	1000
2606	Packard	.....Packard	2500
2607	Dusterberry	.....Haar	3715
2611	Davis	.....Griffin	400
2612	Simonton	.....Simonton	500
2613	May	.....May	1700
2614	Cohen	.....Johnson	1500
2615	Cohen	.....Johnson	1500
2616	Westwood	.....Westwood	1300
2617	Taylor	.....Taylor	1750
2618	Banning	.....Stewart	2000
2619	Coburn	.....Coburn	2000
2620	Frank	.....Cederborg	1640
2621	Gwerden	.....Holden	1212
2622	Horne	.....Tullock	1800
2623	Hammarberg	.....Owner	460
2628	Pacific Co.	.....Owner	2000
2629	Mountain	.....Robbins	1950
2630	Anderson	.....Anderson	2750
2631	Barry	.....Barry	2300
2632	Eva	.....Dingwell	500
2633	Lang	.....Doss	2000
2634	Pierce	.....Smith	1500
2647	Sheriff	.....Rossi	1200
2648	Rodgers	.....Rodgers	1500

(Corrected in Owner's Name)

(2597) NW SE FIFTEENTH & CLAY, Oakland. Structural steel and cast iron work for alterations and additions to three-story Class "C" store and loft building to Class "A" theatre and store building.

Owner.....Louise Jatho and Charles J. Heeseman, Plaza Bldg., Oakland.

Architect...Carl Werner, Phelan Bldg., San Francisco.

Contractor, Central Iron Works, Inc., 651 Florida, San Francisco.

Filed Dec. 3, '15. Dated Dec. 2, '15. 1st and 15th of each month.... 75%

Usual 35 days..... 25%

TOTAL COST, \$17,120

Bond, none. Limit, 90 days. Forfeit, \$10. Plans and specifications filed.

ADDITION

(2598) ALL WORK EXCEPT STRUCTURAL steel and cast iron work on above.

Contractor, Van Sant-Houghton Co., 503 Market, San Francisco.

Filed Dec. 3, '15. Dated Dec. 2, '15. Payments same as above.....

TOTAL COST, \$45,600

Bond, \$22,800. Surety, New England Equitable Insurance Co. Limit, 150 days. Forfeit, \$10. Plans and specifications filed.

REPAIRS

(2600) NE FOURTH & BROADWAY, Oakland. Fire repairs.

Owner.....L. Brozoni, Premises.

Architect...None.

Contractor, J. L. Rodgers, 1734 Grove, Oakland.

COS, \$400

DWELLING

(2601) N FORTY-NINTH 100 E Lawton Ave., Oakland. One-story 5-room dwelling.

Owner.....C. J. Pfingst, 5437 Claremont Ave., Oakland.

Architect...None.

Day's work. COST, \$8250

DWELLING

(2603) E PATTERSON 135 S Kansas, Oakland. One-story 5-room dwelling.

Owner.....A. Anderson, 922 41st, Okd.

Architect...None.

Day's work. COST, \$1500

ADDITION

(2605) NO. 2625 BENVENUE AVE., Oakland. Addition.

Owner.....Chas. Rothed, Premises.

Architect...None.

Contractor...A. Roust, 6508 Raymond, Oakland.

COST, \$1000

DWELLING

(2606) W THOMAS 140 S Prospect, Oakland. One and one-half-story 7-room dwelling.

Owner.....Walter H. Packard, 701 Syndicate Bldg., Oakland.

Architect...Chas. W. McCall, Central Bank Bldg., Oakland.

Day's work. COST, \$2500

DWELLING

(2607) MAP DUSTERBERRY RANCH, Centerville. All work except electric wiring and plumbing for one-story dwelling.

Owner.....E. T. Dusterberry, Centerville.

Architect...A. F. Heide, Russ Bldg., San Francisco.

Contractor, John D. Haar, Hayward.

Filed Dec. 6, '15. Dated Dec. 2, '15. Every 2 weeks..... 80%

Usual 35 days..... 20%

TOTAL COST, \$3715.50

Bond, \$2000. Sureties, Carrie and Rosie Pestdorf. Limit, 90 days. Forfeit, none. Plans and specifications filed.

STORE AND DWELLING

ADDITION

(2611) NW FOURTEENTH & LINDEN, Oakland. Addition.

Owner.....H. Davis, Premises.

Architect...None.

Contractor, C. M. Griffin, 746 5th Ave., Oakland.

COST, \$400

DWELLING

(2612) NO. 502 MIRA VISTA AVE., Oakland. One-story 4-room dwelling

Owner.....C. P. Simonton, Premises.

Architect...None.

Day's work. COST, \$500

DWELLING

(2613) N FOOTHILL BLVD. 490 W Seminary, Oakland. One-story five-room dwelling.

Owner.....Walter L. May, 1702 7th, Oakland.

Architect...None.

Day's work. COST, \$700

DWELLING

(2614) N THIRTY-SECOND 150 E Linden, Oakland. One-story 5-room dwelling.

Owner.....Mrs. R. Cohen, 3203 Filbert, Oakland.

Architect...None.

Contractor, Walter Johnson, 3201 Filbert, Oakland.

COST, \$1500

DWELLING

(2615) N THIRTY-SECOND 125 E Linden, Oakland. One-story 5-room dwelling.

Owner.....Mrs. R. Cohen, 3203 Filbert, Oakland.

Architect...None.

Contractor, Walter Johnson, 3201 Filbert, Oakland.

COST, \$1500

DWELLING

(2616) N ALBANY TERRACE 60 E Neilson, Albany. One-story 5-room dwelling.

Owner.....Chas. Westwood, 3819 Clarke, Albany.

Architect...None.

Day's work. COST, \$1300

DWELLING

(2617) W VENTURA 120 N Sonoma, Albany. One-story 5-room dwelling.

Owner.....W. N. Taylor.

Architect...None.

Day's work. COST, \$1750

DWELLING

(2618) W BELGRAVE 120 N Napa, Oakland. Two-story 7-room dwlg.

Owner.....Banning & Stewart, 5215 Broadway, Oakland.

Architect...None.

Day's work. COST, \$5000

DWELLING

(2619) S MADELINE 50 W Laurel Ave., Oakland. One-story 6-room dwelling.

Owner.....Emma Coburn, 4536 Walnut Ave., Oakland.

Architect...None.

Day's work. COST, \$2000

FRAME DWELLING

(2620) E 10 LOT 29 AND W 30.22 Lot 30 Blk 6, East Piedmont Heights Extension, Oakland. All work for two-story frame dwelling.

Owner.....Edwin Frank, 5447 Lawton Ave., Oakland.

Architect...None.

Contractor...A. Cederborg and A. H. Anderson, 1033 Poplar, Oakland.

Filed Dec. 7, '15. Dated Dec. 1, '15. One of the partners to get \$5 a day as laborer on job. 5% of job; 3 3/4% of labor.

Bond, none. Limit, April 1, 1916. Forfeit, none. Plans and specifications filed.

DWELLING

(2621) W SEVENTY-THIRD AVE 200 S Hamilton, Oakland. One-story 5-room dwelling.

Owner.....Zeno Gwerden, 1630 17th, San Francisco.

Architect...None.

Contractor...F. A. Holdener, 3715 Mission, San Francisco.

COST, \$1640

DWELLING

(2622) S E-THIRTY-THIRD 180 E 14th Ave., Oakland. One-story four-room dwelling.

Owner.....E. W. Horne, Box 62, R. F. D. No. 2, San Jose.

Architect...None.

Contractor...H. Tullock, 2445 24th Ave., Oakland.

COST, \$1212

DWELLING

(2623) W FOURTEENTH AVE 80 S E-21st, Oakland. One-story 5-room dwelling.

Owner.....A. Hammarberg, 3758 Piedmont Ave., Oakland.

Architect...None.

Day's work. COST, \$1800

DWELLING

(2628) S TWELFTH 100 W Pine, Oakland. Shed.

Owner.....Pacific Coast Canning Co., 1816 12th, Oakland.

Architect...None.

Day's work. COST, \$460

DWELLING
(2629) N VESTA 290 W 57th Ave., Oakland. One-story 5-room dwelling.
Owner.....F. J. Mountain, Security Bank Bldg., Oakland.
Architect...None.
Contractor...F. D. Robbins, Athens Hotel, Oakland.

COST, \$2000

DWELLING
(2630) W AUSEON AVE 85 S Birch, Oakland. One-story 5-room dwlg.
Owner.....W. A. Anderson, 1774 Auseon Ave., Oakland.
Architect...None.
Day's work.

COST, \$1950

DWELLING
(2631) E MONTCLAIR 200 N Park Blvd., Oakland. Two-story 6-room dwelling.
Owner.....Barry Bldg. Co., 2527 Market, Oak., Oakland.
Architect...E. W. Cannon, Central Bk. Bldg., Oakland.
Day's work.

COST, \$2750

ALTERATIONS
(2632) NO. 1005 BROADWAY, Oakland. Alter nickelodeon.
Owner.....James Eva Estate, 224 Spear, San Francisco.
Architect...Mau & Dingwell, Macdonough, Oakland.
Contractor...J. H. Dingwell, 2006 West, Oakland.

COST, \$2300

ALTERATIONS
(2633) NW THIRTEENTH AND JEFFERSON, Oakland. Alterations.
Owner.....W. C. Lang.
Architect...None.
Contractor...C. A. Doss, 2028 E-15th St., Oakland.

COST, \$500

DWELLING
(2634) S SCOTT 209 W Marlin, Oakland. One-story 6-room dwelling.
Owner.....R. E. Pierce.
Architect...None.
Contractor...O. G. Smith, 4102 Brookdale Ave., Oakland.

COST, \$2000

ALTERATIONS
(2613) NO. 251 ATHOL AVE., Oakland. Alterations.
Owner.....J. T. and Mrs. H. T. Sheriff, 1812 6th Ave., Oakland.
Architect...None.
Contractor...Adolph Rossi, 1118 12th, Oakland.

COST, \$1200

DWELLING
(2614) W THIRTY-EIGHTH AVE 67 1/2 S Kapsas, Oakland. One-story 6-room dwelling.
Owner.....F. O. Rodgers, 3672 38th Ave., Oakland.
Architect...None.
Day's work.

COST, \$1500

2627 HigginsKollmer 2000
2635 HillenHillen 2000
2636 SameSame 2000
2637 SameSame 2000
2638 SameSame 2000
2639 SameSame 2000
2640 SameSame 2000
2641 MorseBroad 1000
2642 JirkowskyFranklin 2000

FRAME DWELLING
(2602) LOT 27 BLK 17 Thousand Oaks being San Juan Ave E Alameda, Berkeley. All work except heating for two-story frame dwelling.
Owner.....Frederick Richards Jones and Margaret F. Jones, 1512 La Loma Ave., Berkeley.
Architect...Chester H. Miller, Dalziel Bldg., Oakland.
Contractor...Edwin C. Graff, Syndicate Bldg., Oakland.

Filed Dec. 4, '15. Dated Nov. 27, '15.
Frame up\$937.50
Brown coated337.50
Completed and accepted.....337.50
Usual 35 days.....337.50
Balance of \$750 paid by note secured by Deed of Trust.....
TOTAL COST, \$1500.00

Bond, none. Limit, 30 days after Nov. 30. Forfeit, none. Plans and specifications filed.

DWELLING
(2604) S WARD 275 W California, Berkeley. One-story 3-room dwlg.
Owner.....C. H. Kinney, 5758 Vicente, Oakland.
Architect...None.
Day's work.

COST, \$1000

(2605) NE COLBY AND PRINCE N 78 at r a 14, Berkeley. All work for one-story store and dwelling.
Owner.....A. T. Eggleston, 2939 Telegraph Ave., Berkeley.
Architect...None.
Contractor...L. W. Anderson, 821 16th, Oakland.

Filed Dec. 6, '15. Dated Nov. 1.
Frame up1/4
Plastered1/4
Completed1/4
Usual 35 days.....1/4
TOTAL COST, \$1000

Bond, none. Limit, 30 days. Forfeit, none. Plans and specifications filed.
NOTE.—1st report Nov. 24th. No. 2522

REPAIRS
(2609) NO. 2125 BLAKE, Berkeley. Repairs.
Owner.....W. F. Young, 2126 Blake, Berkeley.
Architect...None.
Day's work.

COST, \$100

REPAIRS
(2610) NO. 2127 BLAKE, Berkeley. Repairs.
Owner.....W. F. Young, 2126 Blake, Berkeley.
Architect...None.
Day's work.

COST, \$150

DWELLING
(2621) E SPAULDING AVE 303.04 N Dwight Way, Berkeley. One-story 4-room dwelling.
Owner.....M. H. Blumquist, Ward & California, Berkeley.
Architect...None.
Contractor...John A. Kuivala, 2431 9th, Berkeley.
COST, \$1300

DWELLING
(2625) W BAKER IN N OREGON, Berkeley. One-story 5-room dwelling.
Owner.....C. S. Nichols, 1719 Castro, Oakland.
Architect...None.
Day's work.

COST, \$1500

DWELLING
(2626) W GRANT 28 S Bancroft Way, Berkeley. One-story 3-room dwlg.
Owner.....Johanna Sheehan, 1811 Francisco, Berkeley.
Architect...None.
Contractor...L. H. Bossell, 1716 Francisco, Berkeley.

COST, \$1000

ALTERATIONS
(2627) NO. 1701 EUCLID AVE., Berkeley. Alter two-story dwelling into apartments.
Owner.....Mrs. J. W. Higgins, Prom.
Architect...Eugene K. Martin, 2192 Shattuck Ave., Berkeley.
Contractor...Jacob Kolhner, 2812 Stuart Berkeley.

COST, \$2000

DWELLING
(2628) S FRANCISCO 155 W Short, Berkeley. One-story 5-room dwlg.
Owner.....R. C. Hillen, 430 Haight Ave., Alameda.
Architect...None.
Day's work.

COST, \$2000

DWELLING
(2636) N DELAWARE 155 W Short, Berkeley. One-story 5-room dwlg.
Owner.....R. C. Hillen, 430 Haight Ave., Alameda.
Architect...None.
Day's work.

COST, \$2000

DWELLING
(2637) S FRANCISCO 80 W Short, Berkeley. One-story 5-room dwlg.
Owner.....R. C. Hillen, 430 Haight Ave., Alameda.
Architect...None.
Day's work.

COST, \$2000

DWELLING
(2638) NE DELAWARE AND AUTON, Berkeley. One-story 5-room dwlg.
Owner.....R. C. Hillen, 430 Haight Ave., Alameda.
Architect...None.
Day's work.

COST, \$2000

DWELLING
(2639) S FRANCISCO 125 W Short, Berkeley. One-story 5-room dwlg.
Owner.....R. C. Hillen, 430 Haight Ave., Alameda.
Architect...None.
Day's work.

COST, \$2000

DWELLING
(2640) N DELAWARE 40 W Short, Berkeley. One-story 5-room dwlg.
Owner.....R. C. Hillen, 430 Haight Ave., Alameda.
Architect...None.
Day's work.

COST, \$2000

ALTERATIONS
(2641) S SHATTUCK 100 N Bancroft, Berkeley. Alterations.
Owner.....Mrs. R. A. Morse, Bancroft below Shattuck, Bkly.
Architect...None.
Contractor...A. H. Fread, 104 Kido Tide, Berkeley.

COST, \$1000

Building Contracts Awarded Berkeley.

No.	Owner	Contractor	Amt.
2602	Jones	Graff	4500
2604	Kinney	Kinney	1600
2608	Eggleston	Anderson	1000
2609	Young	Young	400
2610	Sam	Same	150
2624	Blumquist	Kuivala	1200
2625	Nichols	Nichols	1500
2626	Sheehan	Bossell	1000

BUILDING

100 ELLING
 1217 N ADDISON 100 W Grant, Berkeley. One-story 6-room dwelling.
 Owner.....M. Jirkowsky, 1125 26th Ave., Oakland.
 Architect...None.
 Contractor...John Franklin, 2324 Roosevelt Ave., Berkeley

COST, \$2000

NOTICE OF NON-RESPONSIBILITY.

ALAMEDA COUNTY.

Dec. 6, 1915—S SANTA CLARA AVE 289-5 E line dividing Chipman west 111 acre Tract and Aughlinbaugh 223 acre Tract E 48-6 S 150, being No. 620 Santa Clara Ave., Ala. Anna W Hayes as to improvements on leased property.....
 Dec. 8, 1915—LOT 27 AND S 10 LOT 28 and N 5 Lot 26 Blk "F" Map Broadway Terrace, Okd. Country Club Heights Co as to improvements on leased property.....
 Dec. 3, 1915—LOT 35 BLK "C" Map Toler Heights, Okd. Citizens Bldg & Loan Association of San Francisco as to improvements on leased property

COMPLETION NOTICES.

ALAMEDA COUNTY.

RECORDED **AMOUNT**
 Dec. 4, 1915—PTN PLOT 6 Map accompanying report of referee in case McMahon vs Fryal, Okd. H S Patton to whom it may concern.....Nov. 6, 1915
 Dec. 4, 1915—E WEST 30 S 35th, Okd. John Michel to Victor Jonke.....Nov. 27, 1915
 Dec. 6, 1915—LOT 16 BLK "E" Map No. 2, San Pablo Park, Bkly. Myer Hyman to Gustaf Johanson.....Nov. 28, 1915
 Dec. 6, 1915—N BROOKDALE AVE 82 from Lilac, being Lot 16 Blk 3, Brookdale Terrace, Okd. C W Jones to O G Smith.....Dec. 6, 1915
 Dec. 6, 1915—PTN BLK "Y" Map Vernon Park 42.50x100, Okd. R R Armas to Manuel Lima.....Dec. 6, 1915
 Dec. 6, 1915—NO. 1024 THIRTY-second, being N 32nd 75 E Linden E 25xN 100, Okd. Rachel Cohen to Pompeo Parlato.....Dec. 6, 1915
 Dec. 6, 1915—W THOMAS 95 N Napa Okd. C E Carlson to whom it may concern.....Nov. 20, 1915
 Dec. 7, 1915—LOT 9 Claremont Home Tract, being W Ayala 80 S Rose, Okd. F R Jordan to whom it may concern.....Dec. 6, 1915
 Dec. 7, 1915—BAY OF SAN FRANCISCO, westward of shore line of City of Oakland, San Francisco & Oakland Terminal Railways to Daniel Contracting Co.....Dec. 1, 1915
 Dec. 7, 1915—N ALAMEDA AVE 78 E Union E 35xN 110, Alameda. Jeff Smith to whom it may concern.....Dec. 3, 1915
 Dec. 8, 1915—NO. 875 FORTY-FIRST, Okd. Addie Carlile to Harry C Knight.....Dec. 1, 1915
 Dec. 8, 1915—W 40 OF 80 frontage on 42nd St., th SW Cor. of which is distant 47.82 from E line Shafter Ave, Okd. Sabina A Erickson to John Kringle.....Dec. 8, 1915

Dec. 8, 1915—NW THIRTY-EIGHTH Ave and Santa Rita N 60xW 110, Okd. J F Pattillo by C S Nichols to C S Nichols.....Dec. 2, 1915
 Dec. 10, 1915—N JULIA 208 W California W 166.40 N 108.43 E 166.40 S 110.68, Okd. John D Garretson and Mae Fuvine Garretson to whom it may concern.....Nov. 26, 1915
 Dec. 10, 1915—E CLAY from 14th to 15th, Okd. H C Capwell Co to J Llewellyn Co.....Dec. 7, 1915

LIENS FILED

ALAMEDA COUNTY.

Dec. 4, 1915—LOT 17 Map Kelton Terrace, Okd. John P Maxwell (Maxwell Hardware Co) vs A L Young and R M Barton.....\$97.24
 Dec. 4, 1915—PTN LOT 3 BLK "E" Map Meek Orchard Tract, Eden Tp. F J Russell vs Wm Halliday and M I Silveira.....\$145.55
 Dec. 6, 1915—LOT 84 AND N 25 LOT 83 Amended Map Rhoda Tract, Okd. F M Dreisbach (Zenith Mill & Lumber Co) vs Mrs C M Nichols A Hebel.....\$131.26
 Dec. 7, 1915—N E-FOURTEENTH 140 E 29th Ave E 132xN 200, Okd. Jas H Cobbledick vs Mrs E M Heim, First Doe and Second Doe.....\$402.12
 Dec. 7, 1915—N THIRTY-EIGHTH 206.12 E Market E 32xN 139.50, Okd. W P Fuller & Co vs Wm J Conrad.....\$42.76
 Dec. 8, 1915—N MONTANA 300 E Peralta Ave, being Lot 9 Blk "B" Map Oakland Highland, Oakland. O B Lawrence vs A B Chase.....\$176
 Dec. 9, 1915—SW ¼ LOT 23 BLK "C" Map Buena Ventura Tract, Oakland. F M Dreisbach (Zenith Mill & Lumber Co) vs E F Ferrel.....\$78.84
 Dec. 9, 1915—NE ½ LOT 23 BLK "C" Map Buena Ventura Tract, Okd. F M Dreisbach (Zenith Mill & Lumber Co) vs H M Ferrel and R N Ferrel.....\$83.89
 Dec. 9, 1915—E SEMINARY AVE 270 SW Harrington 120x363, Okd. E L Lehan vs A L Young.....\$93.80
 Dec. 10, 1915—LOT 20 High Court Tract Sbdn Blk "A" and Lots 7, 8 and 9 Blk "E" Tuohy's 2nd Addition to Town of Berkeley, Berkeley. J J Sullivan vs Jackson and Jane Doe Gregory.....\$146

BUILDING CONTRACTS

SAN MATEO COUNTY.

PIPING, ETC.
 ATHERTON, CAL. Piping, asbestos covering, radiators and boiler, etc., for two-story frame and shingled residence.
 Owner.....Dr. James G. Sharp, Atherton, Cal.
 Architect...W. Garden Mitchell and Charles Ed. Hodges, Bankers' Invest. Bldg., S. F.
 Contractor...Wm. T. Casey, Menlo Park Filed Nov. 22, '15. Dated Nov. —, '15.
 All piping roughed in.....\$160
 Plant installed.....160
 Usual 35 days.....110
TOTAL COST, \$430
 Bond, limit, forfeit, none. Plans and specifications filed.

LOT 1 BREWER PTY SUB. NO. 1, Hillsborough, San Mateo. All work for two-story frame residence with concrete foundations.
 Owner.....Edith S. Chesebrough, San Mateo.
 Architect...Thomas M. Edwards, San Mateo.
 Contractor...Chas Hutchings San Mateo Filed Nov. 26, '15. Dated Nov. 20, '15.
 Frame completed & roof on.....\$1350
 Brown plastered.....1350
 When completed.....1350
 Usual 35 days.....1350
TOTAL COST, \$5405
 Bond, \$2703. Sureties, Edwin O. Hessler and Walter Sealy. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

FRAME BUNGALOW

MT. DIABLO AND C STS., San Mateo. All work for one-story frame bungalow.
 Owner.....A. F. Hahn, San Mateo.
 Architect...Will H. Toepeke, 46 Kearny St., San Francisco.
 Contractor...Croop & Keegan, San Mateo
 Frame up.....\$200
 1st coat plaster on.....300
 When plastered.....300
 When completed.....300
 Usual 35 days.....400
TOTAL COST, \$1600
 Bond, \$800. Sureties, M. F. Boland and W. T. Croop. Limit, 60 days. Forfeit, \$5 per day. Plans and specifications filed.

FRAME DWELLING

LOT 27 BLK 9 SUB NO. 2 to Burlingame Park. Carpenter work, plumbing, painting, plastering, electric wiring, etc., for one-story frame dwlg
 Owner.....William Schinkel, 209 Crescent Ave., S. F.
 Architect...None.
 Contractor...John B. Woolfrey, 3168 21st, San Francisco.
 Filed Nov. 15, '15. Dated Oct. 21, '15.
 Frame up and roof on.....\$700
 When finished.....750
 Usual 35 days.....750
 Balance in monthly installments 600
TOTAL COST, \$2800
 Bond, \$1400. Surety, Massachusetts Bonding & Insurance Co. Limit, 90 days. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

LOT 1 Map Brewer Ppty, Hillsborough. Plumbing, drainage, tin and sheet metal work, gas fitting, excavating for sewer, gas and water pipes, tiling in bath room, pantry and kitchen for two-story frame residence in course of construction.
 Owner.....Miss Edith S. Chesebrough, San Mateo.
 Architect...Thos. M. Edwards, Bank Bldg., Burlingame.
 Contractor...Frederick W. Snook Co., 596 Clay, San Francisco.
 Filed Dec. 9, '15. Dated Dec. 7, '15.
 Work roughed in.....\$350
 Work completed.....457
 Usual 35 days.....270
TOTAL COST, \$1077
 Bond, \$540. Sureties, W. J. Foster and H. Mark Evans. Limit, 90 days. Forfeit, \$5. Plans and specifications filed.

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED **ACCEPTED**
Dec. 1, 1915—BLK 5 LOT 40, Crocker Estate Tract, Daly City. John Gill to G J Doering.....Nov. 29, 1915
Dec. 3, 1915—LOTS 26, 27, 30, 31 BLK "N" Mission Land Co, Daly City. Homestead Realty Co to William H. Grahn.....Dec. 1, 1915
Dec. 6, 1915—LOT 9 BLK 8, Redwood Highlands, Redwood City. Redwood Highlands Co to whom it may concern.....Dec. 4, 1915
Dec. 6, 1915—LOT 9 BLK 8, Redwood Highlands, Redwood City. Redwood Highlands Co to whom it may concern.....Dec. 4, 1915
Dec. 8, 1915—LOTS 4, 5, 6 BLK 2, Metropolis Homestead Tract, Daly City. Arthur G Duncan and L. Abraham to T H Parry.....Dec. 7, 1915

BUILDING CONTRACTS.

MAHIN COUNTY.

BUILDING

SAN ANSELMO. All work for one building known as the Manse.
Owner.....Board of Trustees of the First Presbyterian Church, San Anselmo.
Architect.....C. R. Johnson, Ross, Cal.
Contractor.....H. J. Hanson.
Filed Dec. 1, '15. Dated Nov. 30, '15.
Roof on 25%
When plastered 25%
When accepted 25%
Usual 25 days..... 25%
TOTAL COST, \$2720
Bond, \$1400. Surety, Pacific Coast Casualty Co. Limit, forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS

CONTRA COSTA COUNTY.

PLUMBING

LOTS 9 TO 20, INCL. and 30 to 39, incl Blk 150, Wall's Addition to City of Richmond. Plumbing for school.
Owner.....Board of Education of the Richmond School District, Richmond.
Architect.....J. L. Nabrett, 701 MacDonald Ave., Richmond.
Contractor.....John L. Collins, 252 17th St., Richmond.
Filed Dec. 1, '15. Dated Nov. 29, '15.
On or about 5th day of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$1011
Bond, \$550. Surety, Maryland Casualty Co. Limit, within 100 working days. Forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS

FRESNO COUNTY.

DWELLING

LOTS 11, 12 BLK 2, La Sierra Tract, Fresno. Dwelling.
Owner.....Central California Land Improvement Co., 955 I St., Fresno.
Architect.....None.
Day's work, **COST, \$2975**

ADDITION

NO LOCATION GIVEN. Add partition on 2nd floor of Fulton Building.
Owner.....Mary E. Berry.
Architect.....R. F. Felchlin, Rowell Bldg., Fresno.
Day's work, **COST, \$2000**

DWELLING

LOTS 22 TO 26 Olive Park, Fresno. Dwelling.
Owner.....Mrs. E. S. White.
Architect.....None.
Contractor.....C. Samuelson, 367 Jensen St., Fresno.
COST, \$1800

DWELLING

LOT 8 BLK 18, Alta Vista, Fresno. Dwelling.
Owner.....W. H. Ackerman.
Architect.....None.
Day's work, **COST, \$3800**

DWELLING

LOTS 13 AND 14 BLK 2 Alhambra Tct, Fresno. Dwelling.
Owner.....John Miller, 1031 Belmont St., Fresno.
Architect.....None.
Contractor.....R. E. Stump, 3125 Inyo St., Fresno. **COST, \$3000**

DWELLING

LOT 31 BLK 12, Kleinhurst, Fresno. Dwelling.
Owner.....Mrs. Brown.
Architect.....None.
Contractor.....E. Gustafsen.
COST, \$1000

COMPLETION NOTICES

FRESNO COUNTY.

RECORDED **ACCEPTED**
Dec. 7, 1915—NE 62½ FEET LOTS 13 to 16 Blk 110, Fresno. Freda V and J Ralph Wofford to whom it may concern.....Dec. 7, 1915
Dec. 6, 1915—LOTS 1 AND 2 BLK 1, Donahoo Add'n, Fresno. A D Trwely to whom it may concern.....Dec. 2, 1915

BUILDING CONTRACTS

SACRAMENTO COUNTY.

ALTERATIONS

N 10 FEET LOT 8, L, M, 15th and 16th Sts., Sacramento. Alterations and additions.
Owner.....George Stack, 1217 15th St., Sacramento.
Architect.....None.
Contractor.....William L. and Chas. H. Chatterton (as Chatterton Bros.), 3126 T St., Sacramento.
COST, \$3350

FRAME DWELLING

LOT 11 BLK 1 SUB NO. 9, North Sacramento. Frame dwelling.
Owner.....H. R. Brown.
Architect.....None.
Contractor.....Harrison & Berg, North Sacramento.
COST, \$2250

FRAME GARAGE

CARMELITA and STANFORD AVE., on Lot 5, Boyle Tract, Sacramento. One-story frame garage.

Owner.....E. L. Boyle, 3027 Carmello St., Sacramento.
Architect.....None.
Contractor.....O. H. Moore, 2929 35th St., Sacramento.
COST, \$3000

REPAIR STORE

NO. 1015 NINTH ST., on S ½ Lot 1 Blk J, K, 9th and 10th Sts., Sacramento. Repair store.
Owner.....J. M. Johnson, Lessee.
Architect.....None.
Day's work, **COST, \$500**

FRAME FLATS

NO. 1609 TWENTY-EIGHTH ST., on N ½ of S ½ Lot 1 Blk P, Q, 28th & 29th Sts., Sacramento. Two-story frame (2) flats.
Owner.....Wm. Klueser, 2130 T St., Sacramento.
Architect.....None.
Contractor.....W. R. Saunders, 2810 I St., Sacramento.
COST, \$3500

FRAME RESIDENCE

CALIFORNIA BLVD. on Lot 1115 Blmhurst, Sacramento. Two-story and basement 7-room residence.
Owner.....L. E. Morrill, Trustee, 1009 U St., Sacramento.
Architect.....None.
Contractor.....J. M. Morrill, 1009 U St., Sacramento. **COST, \$2100**

NOTICE OF NON-RESPONSIBILITY.

SACRAMENTO COUNTY.

Dec. 1, 1915—LOTS 31, 1, 31, 30, 102, Son as to improvements on leased property
41, 12, Lockport. Geo W Lucke &

COMPLETION NOTICES.

SAN JOAQUIN COUNTY.

RECORDED **ACCEPTED**
Dec. 1, 1915—YOSEMITE TERRACE, Stockton. J E Madden to Johnson & Salfeld.....Nov. 27, 1915

LONDON COMPANY GETS COTTON LAND.

Ten thousand acres of land in the northern end of Imperial Valley near Niland and Calipatria has been leased for approximately \$800,000, with the privilege of purchase, by Balfour Guthrie & Co. of London. The acreage is to be cleared and planted to cotton, which, it is said, is bringing the Imperial growers from 17 to 23 cents a pound.

According to the announcement the Walker Construction Company of El Centro and a large San Francisco concern have been retained to clear and plant the acreage and erect the necessary buildings. Work, it is said, begins immediately. The deal was handled by Manager Lawson of the San Francisco office of Balfour, Guthrie & Co., and Carl Schader and W. T. McDevitt of Los Angeles.

It was stated that the Imperial cotton proposed to be planted by Balfour, Guthrie & Co., is being made a specialty by the cotton growers of Imperial Valley.

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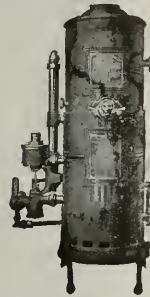
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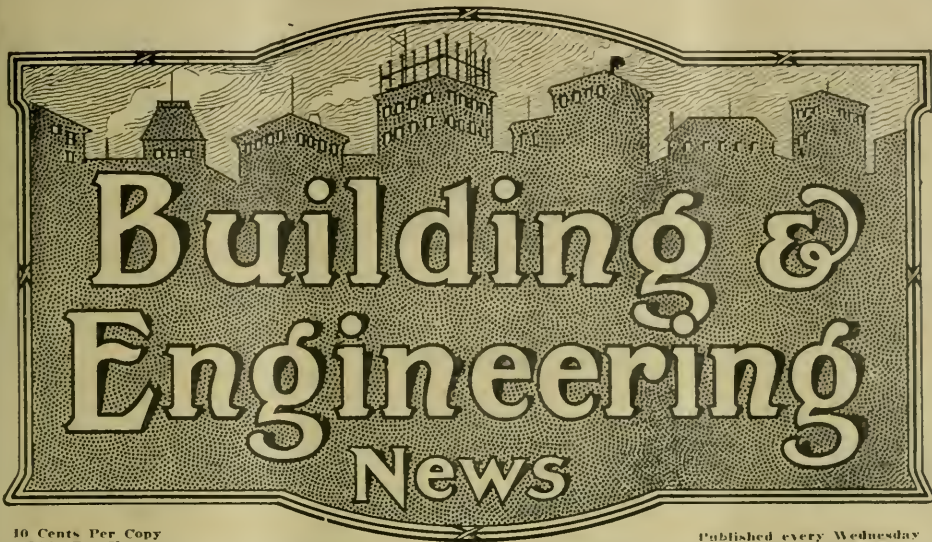
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Building & Engineering News

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\$3.00 Per Year

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Fifteenth Year No. 51

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San Francisco Cal., December 22, 1915

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George Nelson, C. E., Editor.

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W. D. Manville, News Editor.

December 22, 1915

Leading Articles in this Issue:

Motion Study and Time Study Instruments of Precision

By Frank B. Gilbreth, Mem. A. S. M. E., and Lillian Moller Gilbreth, Ph. D.,
Providence, R. I.

Railroad Commission News

"Beneficial Use," The Newest Principle in Water Appropriation

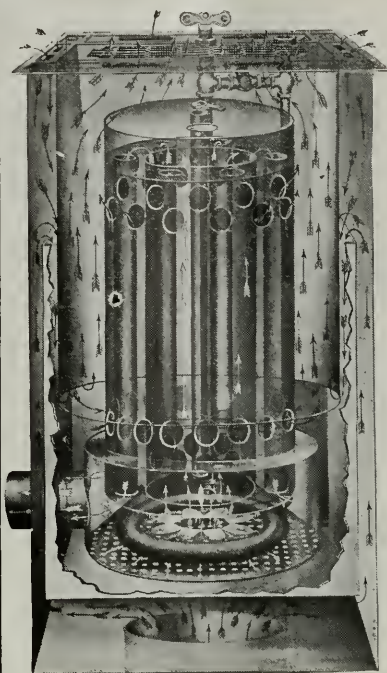
By George E. McLeod, Special Agent of the California State Water Commission.

Items Of Interest

By George Nelson, C. E.

Our "STREET WORK and PAVING ISSUE" will appear on December 29th. It will be of "Special Interest" to you and will contain many important items on Street Work and Paving.

" Watch For It. "



FLOOR FURNACE STYLE B
Size 14½ in. square by 2 ft. high
Has 8-in. Fresh Air Intake with Damper.
Has 3-in. Outlet Vent
Fits in space between floor joists
Hangs from Register which lays flush with floor.

Style

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- C. Wall Furnace with fresh air intake at bottom. For artificial gas only.
- D. Wall Furnace with fresh air intake at back. For artificial gas only.

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NOTE—Style C and D are built alike except for position of fresh air intake.

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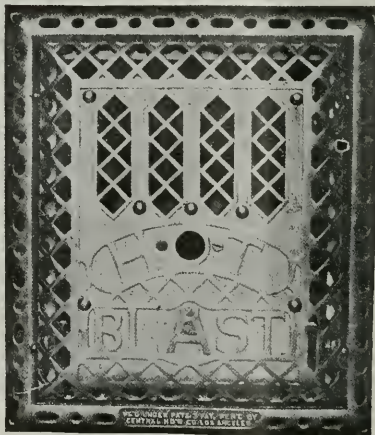
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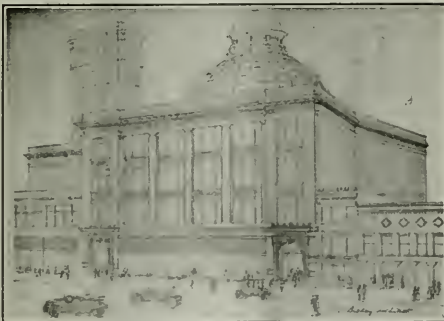
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C. W. Dickey, Architect.

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Frederick H. Meyer, Architect

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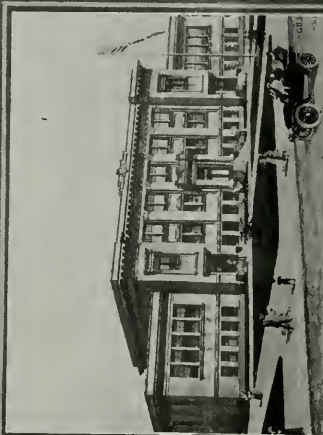
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Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
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Issued Weekly, \$3.00 per year

San Francisco, December 22, 1915

Fifteenth Year, No 51

Motion Study and Time Study Instruments of Precision.*

By Frank H. Gilbreth, Mem. A. S. M. E.,
and William Moller Gilbreth, Ph. D.,
Providence, R. I.

The greatest waste in the world comes from needless, ill-directed, and ineffective motions. These motions are unnecessary and preventable. Their existence in the past was excusable, because there was no knowledge of how to dispense with them. That excuse no longer obtains. The methods and devices of waste elimination are known and are being constantly used. But the knowledge of how to make these great world-wide economies is being disseminated at an astonishingly slow speed.

In the science of management, as in all other sciences, progress that is to be definite and lasting depends upon the accuracy of measurements that are made. There are three elements to every measurement:

1. The unit measured.
2. The method of measurement
3. The device by which the measurement is made.

The fundamental idea of the new type of management that has been variously called "Scientific Management," or "Measured Functional Management," is that it is based upon the results of accurate measurement. This fundamental idea has been derived as follows: Each operation to be studied is analyzed into the most elementary units possible. These units are accurately measured, and, as the results of the measurement, the efficient units only are combined into a new method of performing the work that is worthy to become a standard.

Dr. Taylor, the great pioneer in time study, and his co-worker, Mr. S. E. Thompson, have clearly defined their conception of time study as "the process of analyzing an operation into its elementary operations, and observing the time required to perform them." Time study has to do, then, fundamentally, with the measurement of units.

Now motion study has to do with the selection, invention, and substitution of the motions and their variables that are to be measured. Both accurate time study and motion study require instruments of precision that will record mechanically, with the least possible interference from the human element, in permanent form, exactly what motions and results occur. For permanent use the records must be so definite, dis-

tinct, and simple that they may be easily and immediately used, and lose none of their value or helpfulness when old, forgotten, or not personally experienced by their user.

There have undoubtedly been some vague motion studies and guess-work time studies made as far back as historical records are available, particularly in the arts of warfare. Babbage, Coulomb, Adam Smith—all recognized the importance of the time element in industrial operations, for the purpose of obtaining methods of greatest output, but not methods of least waste. It was not, however, until Dr. Taylor suggested timing the work periods separately from the rest periods that the managers tried to find accurate time-measuring devices.

It is not always recognized that some preliminary motion study and time study can be done without the aid of any accurate devices. It is even less often recognized that such work, when most successful, is usually done by one thoroughly conversant with, and skilled in, the use of the most accurate devices. In other words, it is usually advisable in studying an operation to make all possible improvements in the motions used and to comply broadly with the laws of motion study before recording the operation, except for the preliminary record that serves to show the state of the art from which the investigation started. However, in order to make a great and lasting success of this work, one must have studied motions and measured them until his eye can follow paths of motions and judge lengths of motions, and his timing sense, aided by silent rhythmic counting, can estimate times of motions with surprising accuracy. Sight, hearing, touch, and kinesthetic sensations must all be keenly developed. With this training and equipment, a motion and time study expert can obtain preliminary results without devices, that, to the untrained or the uninformed, seem little short of astounding. When the operation has received its preliminary revision and is ready for the accurate measurements that lead to actual standardization and the teaching that follows, devices of precise measurement become imperative for methods of least waste that will stand the test of time.

Early workers in time study made use of such well-known devices as the clock, the watch, the stop watch, and

various types of stop-watches attached to a specially constructed board or imitation book. Through the use of these it became possible to record short intervals of time, subject, of course, always to the personal error. The objection to the use of these methods and devices is their variation from accuracy, due to the human element. This is especially true of the use of the stop-watch, where the reaction time of the observer is an element constantly affecting the accuracy of the records. But the greatest loss and defect of personally observed and recorded times is that they do not show the attending conditions of the varying surroundings, equipment and tools that cause the difference in the time records and give no clue to causes of shortest or quickest times.

As for motion study, Marey, with no thought of motion study in our present use of the term in his mind, developed, as one line of his multitudinous activities, a method of recording paths of motions, but never succeeded in his effort to record direction of motions photographically.

Being unable to find any devices anywhere such as the work of our motion study required, the problem that presented itself, then, to us who needed and desired instruments of precision, applicable to our motion study and to our time study, was to invent, design and construct devices that would overcome lacks in the early and existing methods. It was necessary to dispense with the human element and its attending errors and limitations. We needed devices to record the direction as well as the path or orbits of motions, and to reduce the cost of obtaining all time study and motion study data. These were needed not only from the scientific standpoint, but also from the standpoint of obtaining full co-operation of the mechanics and other workers. Many of these had, as a class, become suspicious of time study taken secretly by those who, they thought, did not know enough about the practical features of the trade to take the time study properly, and could not prove that the times were right after putting them on paper. Here was absolute pioneer work to be done in inventing devices that would record times, paths, and directions of motions simultaneously. With the older time study devices there was no

*From a paper presented at the International Engineering Congress, San Francisco, 1914.

way of recording accurately either the unit timed or the controlling surrounding conditions. The "elementary units" were groups of motions. They were elementary only with relation to the stop-watch, with which it is impossible to record accurately the time of an element of a motion, since it takes two decisions and two motions to press the stop-watch.

Through our earliest work in making progress records we recognized the necessity of recording time and conditions accurately and simultaneously, the records being made by dated photographs. This method was particularly applicable in construction work,¹ where progress pictures taken at frequent intervals present accurate records of the surroundings, equipment and tools that affect records of output of various stages of development.

In making more intensive studies of certain trades, such as shoveling, concrete work, and bricklaying, we found it advantageous to photograph the various positions in which the hands, arms, feet, and other parts of the body involved in the operations were placed, and to record the time taken in moving from one position to another by one method, as related to the time taken in moving from the same first to the same second position by another method.² Our intensive study of bricklaying, which grew out of an appreciation of the unique history, present practice and doubtful future of this trade, led us to a more intensive study of the problems of motion and time study in general.³ Bricklaying will always be the most interesting of all examples to us, for the reason, among others, that it was the first trade to use the principle of duplicate, interchangeable parts system of construction; had had six thousand years of practice in all countries; and was, therefore, a comparatively finished art, but not a science, when we undertook to change it by means of motion study.

Fortunately, we are now able to use the motion picture camera with our speed clock, and other accessories, as a device for recording elements of motions and their corresponding times, simultaneously. Our latest microchronometer records intervals of time down to any degree of accuracy required. We have made, and used, in our work of motion study investigations of hospital practice and surgery, one that records time to the millionth of an hour. This is designed for extremely accurate work, but can be adjusted to intervals of any length desired, as proves most economical or desirable for the type of work to be investigated.

Having completed our microchronometer, we proceeded as follows: The microchronometer was placed in the photographic field near the operator and his working equipment, and against a cross-sectioned background or in a cross-sectioned field, and at a cross-sectioned work bench or table. The operator then performed the operation according to the prescribed meth-

od, while the motion-picture camera recorded the various stages of the operation and the position of the hand on the microchronometer simultaneously. Thus, on the motion picture film we obtain intermittent records of the paths, the lengths, the directions, and the speeds of the motions, or the times accompanying the motions, these records all being simultaneous; and the details of the conditions of the surroundings that are visible to the eye are recorded without the failings of memory. This was a distinct step in advance, but we realized that there was a lack in the records. It was difficult, even for one especially trained and experienced, to visualize the exact path of a motion, and it was not possible to measure the length with precision from the observations of the motion picture film alone, as there is no summary or recapitulation of all the motions of a cycle or operation in any one picture. To overcome this lack we invented the cyclograph method of recording motions. This consists of attaching a small electric light to the hand or other moving part of the person or machine under observation. The motion is recorded on an ordinary photographic film or plate. Upon observing our very first cyclograph records, we found that we had attained our desire, and that the accurate path taken by the motion stood before us in two dimensions. By taking the photographic record stereoscopically, we were able to see this path in three dimensions, and to obtain what we have called the stereocyclograph. This showed us the path of the motion in all three dimensions; that is, length, breadth, and depth. It did not, however, contain the time element. This time element is of great importance not only for comparative or "relative" time, but also for exact times. This time element is obtained by putting an interrupter in the light circuit, that causes the light to flash at an even rate at a known number of times per second. This gives a line of time spots in the picture instead of a continuous cyclograph light line. Counting the light spots tells the time consumed.

The next step was to show the direction of the motions. To do this it was necessary to find the right combination of volts and amperes for the light circuit and the thickness of filament for the lamp, to cause quick lighting and slow extinguishing of the lamp. This right combination makes the light spots pointed on their latest, or forward ends. The points, thus, like the usual symbol of arrow heads, show the direction. The result was, then, of course, finally, stereochronocyclographs showing direction. These act not only as accurate records of the motions and times, but also serve as admirable teaching devices. Wire models of cyclographs and chronocyclographs of the paths and the times of motions are now constructed that have a practical educational value besides their importance as scientific records. These models are particularly useful as a step in teaching visualization of paths by photographs alone, later.

Our latest apparatus in the field of recording devices apparently fulfills all present requirements of the time and

motion study experts and their assistants and the teachers who are now devoting their lives to the transference of skill and experience from those who have it to those who have not.⁴

We have also devised and used many special kinds of apparatus; for example, devices for recording absolute continuity of motion paths and times, doing away with the slight gaps in the record that occur between one picture and the next on the cinematograph film, due to the interval of time when the film is moving, to get in place for the next exposure. To overcome this objection we have a double cinematograph, that one part may record while the other moves from one exposure to the next. In this way we get a continuous record of the operation. There have been occasional objections to all methods of making time and motion studies that involve the presence of an observer. Some of these have come from those working on what they consider their own secret processes, who object to having any observer record what they are doing, believing that the time study man is obtaining knowledge of their skill and giving them no information in return. Others have come from those who have seen or heard "secret time study" and "watch-book time study," and who regard all observers as spies because of general lack of understanding and co-operation; and there are some instances where they are right. For such cases we have designed an autiomotion study, which consists of an instantaneous modification of the standard micromotion apparatus, and also the auto-stereochronocyclograph apparatus. This enables the operator to take accurate time study of himself. He can start the apparatus going and stop it where he works, with one motion of his finger or his foot. This invention supplies every possible requirement and feature for time and motion study processes, except the help and advice of a properly qualified observer, or the annoyance of having one not fitted by training, experience, or natural qualities to cooperate.

We have now a complete set of inexpensive, light, durable apparatus, adaptable to any type of work and to any type of observer or self-observation. It consists of systematically assembled units that may be so combined as to meet any possible working condition. Through a specially devised method of using the same motion picture film over and over again, up to sixteen times, and through a careful study of electrical equipment and of various types of time spot interrupters, we have been enabled to cut down the cost of making time and motion study, until now the most accurate type of studies, involving no human equation in the record can be made at less cost than the far less accurate stop-watch study.

When the time and motion study is taken with such instruments of precision, there are still other by-products that are of more value than the entire cost of the time and motion studies.⁵

¹See "Concrete System," Engineering News Publishing Co., N. Y.

²See "Motion Study," D. Van Nostrand Co., New York City.

³See "Bricklaying System," Myron C. Clark Publishing Co., Chicago.

⁴See "Primer of Scientific Management," D. Van Nostrand Co., N. Y.

⁵See "Time Study, the Science of Obtaining Methods of Least Waste."

Railroad Commission News.

The Railroad Commission has issued an order setting the reproduction cost less depreciation of the San Francisco, Napa and Calistoga Railway at \$1,619,846.19. The line is in Napa and Solano counties. The proceeding was on the Commission's own initiative, under the public utilities act.

The road extends from Vallejo to Calistoga, with an aggregate of 41 miles of main line, and three miles of sidings.

The city of Long Beach has filed with the Railroad Commission a protest against the order of the Commission establishing an experimental rate by the Long Beach Consolidated Gas Company of \$1.25 a month for 1,000 cubic feet of natural gas. Long Beach is in Los Angeles County, and has been served by the company with a mixture of artificial and natural gas of about 800 heat units at \$1 a 1,000 cubic feet. The company asked to be permitted on December 1 to furnish natural gas exclusively of 1,000 heat units. The company said that the higher heat unit of efficiency would cause much less gas to be used, and at the \$1 rate would reduce the consumers' bills so much as to cause the company serious financial loss.

Long Beach now says to the Commission that gas of the same heat unit it was served until December 1, has been served to cities and towns in the same part of California at a much lower price. Los Angeles, it says, has gas at 68 cents, and Compton at the same rate. Long Beach has been discriminated against hitherto, the protest says, and this discrimination will be emphasized if the \$1 rate is increased. The city denies that the reduction of consumers' bills by increased units will warrant any increase in the rates.

Besides, it says, the natural gas comes from the Fullerton fields instead of from the Kern fields as before, and that the cost of delivery can not be more than one-half of that from the Kern fields.

The Southern Counties Gas Company, operating in Orange County, adjoining Long Beach, changed from manufactured gas to natural gas without any raise of rates, says Long Beach, and while there was some reductions in the revenue of the company for a while, this was overcome by an increase in the amount of gas used, and a decrease in the cost of furnishing it. Long Beach complains also against the suddenness of change and says that the gas burners of the consumers are not adjusted to the natural gas, and that pending the adjustment, which will take some time, an excess of gas will be used, besides danger and annoyance.

The Railroad Commission has issued an order postponing until March 10, 1916, the time within which Wells, Fargo & Company is to file with the

Commission tariffs covering the transportation of express packages within the State of California. The original order to the express company was issued by the Commission nearly two years ago, and the express company has been making computations to comply with it. A month ago, the company applied to the Commission for a raise in its rates, saying that it was losing more than \$500 a day on account of the low charges imposed upon it. This application of the company has not yet been set for hearing before the Commission, but will be shortly, and at this hearing the tariffs for transportation of express packages will be thoroughly gone into. The Commission prevents unnecessary duplication of effort by Wells, Fargo & Company by a postponement of the effect of its previous order.

The Railroad Commission has issued an opinion in the controversy over the franchises of the Southern California Edison Company, arising from the application of the City of Los Angeles for a fixing of the price to be paid by the city for the company's electric distributing system in Los Angeles. This valuation hearing was begun on November 22, and was adjourned to December 13. The city of Los Angeles wants to buy the distributing system of the Edison Company in the city, to use the electric power derived from the Owens River Aqueduct project for supplying electricity to the government and people of Los Angeles. After the application was filed by the city for the fixing by the compensation to the company for the condemnation of this part of the company's plant, more territory was annexed to Los Angeles. The city then, by an amendatory petition added the property in this annexed territory for compensation valuation. The question then arose as to whether certain property of the company's was excluded in the description in the application. Both sides of the controversy were heard before the Commission at the hearing on November 22. There was no dispute over the description of the physical properties, but the city claimed that it had described the parts of the company's rights to occupy and use the streets that were necessary to maintain and operate the part of the plant sought to be condemned, and that the Commission should fix the compensation on this.

The company claims that the city's description included all its franchises in the city, though there are certain important electric lines of the company in Los Angeles which were purposely left out of the description, as the city does not want them.

The Commission in its opinion says that the application by the city embraces all the franchises and says:

"It will be difficult, if not impossible, to reach a satisfactory conclusion, un-

less the application is amended, so as to make definite and specific the franchise rights of the company which the city proposes to acquire."

The opinion also says:

It is not the function of this Commission to determine whether the city can by condemnation take a part of a franchise held or exercised by the company, and leave the remainder of the franchise in effect, but under the law it is the duty of the Commission to fix just compensation for a part of a public utility property for which valuation is asked by a city, and the Commission may thus be called upon to fix the compensation for part of the franchise, any controversy as to the legal rights of the city to make such separation, to be settled by the courts.

The city of Long Beach has filed with the Railroad Commission an application for authority to build two highway crossings over the tracks of the Pacific Electric Railway Company, one to serve a pleasure pier at the foot of Thirty-ninth Place, and the other to give access to the beach at Termino avenue.

The Bell Water Company, of Bell, Los Angeles County, has filed with the Railroad Commission an application to increase its domestic water rate from \$1.25 minimum for 1250 cubic feet or less a month, and 5 cents a 100 cubic feet in excess thereof to \$1.50 minimum, and the same excess as before.

The Consolidated Water Securities Company, of Los Angeles, has filed with the Railroad Commission an application for authority to issue a promissory note for \$25,000 to the California Securities-Loan Corporation for 3 years at 7 per cent, secured by a trust deed to the Title Guarantee and Trust Company. The company deals in real estate and incidentally operates a water utility. The money received is to buy land and pay off debts upon property.

The Sateioy Water Company, of Sateioy, Ventura County, has filed with the Railroad Commission an application for authority to borrow \$5,000, to reimburse it for expenditures for plant.

The Pacific Gas and Electric Company has filed with the Railroad Commission an application for authority to issue and sell \$2,500,000 of its first preferred stock, and to use the proceeds for betterments and extensions of its system. The company wishes permission to dispose of the stock at a price that will not be less than \$90 a share. In its application the company mentions the construction for which expenditures are being made and this includes all its departments.

Items Of Interest.

By George Nelson, C. E.

NEW BRIDGE AT PRIZE OPEN.

The new concrete bridge across the trough east of Prize was crossed Wednesday by the first automobile.

The auto was driven by County Surveyor J. W. Kaerth and in the machine was S. T. Sherer and Supervisors C. J. Wescott, P. V. Berkey and Geo. B. Pence.

The old Prize bridge, a modern structure 2,140 feet in length, was constructed in 1880 and in the fall of that year Sam Sherer and Jake Kaerth, two small boys, stole a march on all hands by jumping their saddle horses onto the bridge a few days before the earth approaches were finished and rode across. Jake Kaerth insisted that when the new bridge was crossed for the first time, officially, Sam Sherer be along. So the two boys now middle aged men, who crossed the old bridge the first time, were in the party to cross the new bridge officially for the first time, 35 years later.

The new Prize bridge is one of the longest concrete bridges in the state, having a length of 2,856 feet, consisting of 24, 34-foot spans. It is of the reinforced concrete girder type 19 feet wide and was constructed for \$59,300, \$800 less than the bond issue. It was designed and constructed under the direction of County Surveyor J. W. Kaerth, Ward B. Esterly and S. V. Saph were the consulting engineers and O. N. Critchfield was the inspector in charge of construction.

Duncanson & Harrelson Company were the contractors—Colusa Sun.

TWO CITY ELECTRICAL SUPPLY SYSTEMS IN PROSPECT.

At a total cost of \$869,353 the city of Los Angeles may be called upon to provide two electrical distributing systems, one in the Eastlake Park section and another in the Hollywood district.

The proposition came up at a meeting of the water board when E. F. Scattergood, chief electrical engineer, presented a report showing the probable expenditure and the estimated revenue. The report was referred to a committee of the whole and a decision is expected to be rendered upon it at a future meeting.

Mr. Scattergood's report follows, in part:

"There are two districts of considerable size within the city of Los Angeles which are not reached by the electrical distributing lines of the Southern California Edison Company, and the electric lines of the electric companies serving these sections are so constructed as to make their separation or isolation from the remainder of the distributing systems of such companies in every way practicable.

Northeast Section.

"One of the two districts referred to is in the northwestern section of the city, lying east of the Los Angeles

River and north of Wabash avenue, and may be properly designated as the Eastlake Park-Highland Park-Garvanza district.

"The other district referred to may properly be termed the Hollywood and East Hollywood district, lying north of Fourth street and west of Hoover street.

"The estimated cost of constructing a complete electrical distributing system, sufficient to take care of all the electrical business within the Eastlake Park-Highland Park-Garvanza district, including street lighting, a local distributing substation in Garvanza, and the necessary equipment to make possible the delivery of surplus power wholesale for use of the city of Pasadena, is \$161,351.

The corresponding estimate of cost for the Hollywood district, not including any equipment with reference to the city of Pasadena, is \$408,022.

Cost Enumerated

"The probable total gross earnings from the Eastlake Park-Highland Park-Garvanza district from all commercial and domestic light and power, street lighting and the wholesale power referred to, would be \$200,000 per annum. The earnings from the street lighting, allowing \$60 per annum for arc lights, instead of the present rate of \$75.60, and corresponding reduced rates for incandescent lighting, would be \$50,000 per annum, which, together with 50 per cent of the remaining business, would be \$125,000 per annum, while the total cost of operation and the necessary maintenance of the generating system of the city now being installed, together with such complete distributing system, with one-half of the business attached, would not exceed \$50,000 per annum.

"The total cost of the Eastlake Park-Highland Park-Garvanza system complete as above, excepting that but half of the commercial and domestic light and power business is connected, would be \$275,000.

35 Per Cent Increase.

"The amount of street lighting contemplated is about 35 per cent greater than the present amount."

It was the opinion of the board that an ordinance of intention should follow the election in Hollywood regarding the creation of a new water district. A report on this matter will be submitted to the City Council.

A resolution was passed reappointing Dill, Thomson & Clay, New York, as bond attorneys. This firm, as in the past, will pass on the legality of presentation of all bond issues.

ARMY ENGINEERS FILE HARBOUR ESTIMATES.

That the sum of \$106,500 will be necessary for the work projected on Oakland harbor during the coming year, is the estimate of the United States army

engineers, as submitted to Congress, according to news from Washington.

The money will be expended on the existing project. No report has been made in the new survey authorized in 1912.

The work on the Oakland estuary is urged in the reports of the army men as being of extreme importance. The completion of the quay wall by the city, and the docking of a battleship there, are cited as indications of the value of the waterway and of the enterprise of the city itself, and the appropriation asked for is larger than that recommended for any other part of the bay. San Francisco's appropriation was set at \$15,000 by the army engineers and \$105,500 was urged for San Pablo Bay improvements.

Almost \$16,000,000 is asked by the army engineers for maintenance and improvement of rivers and harbors for the twelve months beginning July 1, 1916. Estimates submitted to Congress call for appropriations aggregating \$15,839,510. That amount is \$7,538,308 less than was estimated last December would be required for the year ending on July 1 for which, after a filibuster in the Senate defeated the rivers and harbors appropriation bill, \$30,000,000 was appropriated in a lump sum to be used among projects selected by the Secretary of War.

The great commerce-bearing rivers in the new estimates demand the larger portion of the money, the Mississippi leading with a call for almost \$10,000,000 and the Ohio following with \$5,509,500.

The country's greatest port of foreign commerce, New York, asks for more than \$2,000,000 for channels main-lar ge area, which includes the waterfront and rivers in adjoining New Jersey and Long Island.

Estimates in Seriatim.

California: Humboldt harbor and bay, \$450,000; Los Angeles harbor, \$75,000; Oakland, \$106,500; San Francisco, \$15,000; San Pablo Bay, \$105,500; Mokelumne River, \$2,500; Petaluma Creek and Napa River, \$30,500; Redwood Creek, \$10,250; Sacramento and Feather Rivers, \$105,000; California Debris Commission, \$75,000; San Joaquin River, \$21,000.

Oregon: Coos Bay, \$70,000; Tillamook Bay and bar, \$40,000; Clatskanie River, \$1,000; Coquille River, \$6,000; Coos River, \$3,000; Siuslaw River, \$5,000; Yaquina River, \$2,000; Columbia and Lower Willamette Rivers below Portland, \$360,000; Columbia River, mouth \$2,104,000; Upper Columbia River and tributaries above Celilo Falls to mouth of Snake River, \$38,000; Snake River, up to Pittsburg Landing, \$25,000; Willamette and Yamhill Rivers, \$47,000.

Washington: Cowlitz and Lewis Rivers, \$22,500; Gray's harbor, \$500; inner portion Gray's harbor and Chehalis River to Montesano, \$30,000.

"Beneficial Use," the Newest Principle in Water Appropriation.

By George E. McLeod, Special Agent of the State Water Commission

Abraham Lincoln said, "God must have liked the common people—He made so many of them." The common people must have liked the idea of the preservation of their natural resources of water, for they may virtually be said to have "made" the State Water Commission. This idea of conservation had been growing for several years, and in the State of California, one of its phases took the shape of an act passed in 1913 by the Legislature after a great deal of prior investigation and preparation by the previous State Conservation Commission, an organization based on Progressive principles. But some of the powerful special interests would have none of it and applied the referendum in the hope of strangling the idea near the font of its inception.

Placed upon the ballot by operation of the referendum, it was approved by the people at the general election in 1914.

Thus backed by public approval of the measure, the Water Commission is endeavoring to reflect the wishes of the people in a broad and liberal manner in matters pertaining to the waters of the State, at the same time protecting to the fullest extent of its ability the paramount and underlying principle of this new gospel of the waters, namely, that the people's water shall be for those, only, who will put it to "beneficial use" and thereby "cause the desert to bloom as the rose," the city "to shine as by day" and apply it to those other avenues of human endeavor and progress for which, under the act, it may be employed.

The Old Way and the New.

The former idea of the principle involved in water appropriation was that individuals or corporations might file upon and appropriate the waters of the State at their pleasure, with little or no regulation, in as great an amount as they might elect, and continue to hold and possess such waters without placing the same to any immediate "beneficial use," depriving others of appropriation, capitalizing the water rights so obtained at get-rich-quick figures and speculating in a natural resource through the growth of the community—all to the detriment of the real owners of the water, the people. Under this idea immense appropriations of water have been made, and there has been an impression held by some that not much water remained unappropriated; but such is not the case. There is a vast amount of water still unappropriated, and it is this vast empire of water which it is the intent of the Water Commission Act to protect and conserve to "beneficial use," as well as the waters which may revert to the State through forfeiture and again become unappropriated waters.

The aims and objects of the Water Commission Act are therefore directed toward a continual study to protect the waters that are left and to see to

it that they are "beneficially used," not merely held, and with an avoidance, as far as may be, of long, unnecessary and costly suits to determine the rights of various claimants on common sources of supply. The use to which waters may be put under the act, is divided into four classes, viz: agricultural, power, mining and municipal supply. In the matter of domestic supply for cities, that is, water used for what may be termed "human consumption," municipalities have what is termed a "preferential right" over the individual; and the State, any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State shall have a right any time after the expiration of a period of twenty years from the time a license has been granted to an individual (or corporation), to purchase the works and property occupied and used under such license, paying therefor a price to be determined under proceedings of eminent domain—that is condemnation of the property by the people, with compensation for the property so condemned. Thus it may be seen the intent of the act has always in mind, the People, the People, the People.

How, When and Where.

This latest idea of "beneficial use" is somewhat a new one and one of strict construction. An intending appropriator can not merely formally declare that he will put waters of the State to "beneficial use," for the purpose of acquiring the water, but he must say **how, when and where**, to express it tersely. All applications are subjected to the closest scrutiny and examination by competent authority. All things must dovetail into each other to make a complete whole. Prior appropriators on a stream are notified of the new application. They may protest on one or many grounds, for instance: That the natural flow of the stream is already used by prior appropriation or that the application may cover other rights. All these matters are heard and a determination reached only after all possible facts have been adduced. It is just as important to the applicant that his application be denied, if there is any question as to its legality, as it is to the protestant, both of whom are protected thereby from useless expense and perhaps costly and interminable litigation.

The Water Commission is therefore a clearing house of information for the intending appropriator and others, aiding and assisting them in divers ways. Reverting to the all important doctrine of "beneficial use," the appropriator must continue to apply the waters to such "beneficial use," or same will revert to the State to be again appropriated by other users. As water becomes more valuable, and the demand for it grows more acute than it now is, there will always be others waiting to use the waters that pre-

vious appropriators may cease to put to beneficial use—if in fact any may be so foolishly as to allow a license once obtained to lapse and the waters forfeit to the State to again be placed in the category of unappropriated waters.

On the approval of an application by the Commission, a permit is issued, which assures to the applicant his right to the use of the waters involved and to none other. But no license is issued to him as proof of his water-right until he has complied with all the provisions of the permit—that is, has done all those things which he set forth in his application that he would do, and contingent on which his license issues. Therefore there are many checks kept by the State on those who wish to avail themselves of Nature's gift of life-giving waters.

Although the Commission has been organized considerably less than a year 207 applications have been submitted to it.

The creation of the Water Commission will mean much to the immediate development of many different interests of the State, as the enforcement of the completion of the work for the appropriation of waters stimulates the requirement for professional services, labor, mechanics of many classes, construction material and the like, as well as creating an additional and increasing source of wealth by reason of increased production and all that accompanies the same.

The Water Commission endeavors to be a popular organization, in the sense that it wishes to come into closest touch with the people, who were its real creator, and to extend to all the spirit and hand of helpfulness and, being a new organization in the life of the State's manifold activities, it has not yet come into the prominence that its ever-expanding sphere of usefulness will eventually bring it.

The Rain Drop Is Supreme.

The potentiality of the rain drop is supreme, whether it falls on the parched stretches of the desert or on the luxuriant slopes of the mountains of the rain-belt, and that those accumulated rain drops shall be put to "beneficial use" as is the fundamental desideratum, and not absorbed by special interests for speculative purposes. As has been aptly said, in emulation of Pinckney's famous utterance, "Millions for defense, but not one cent for tribute," "millions of drops of water for irrigation (and other beneficial uses may be added), but not one drop for inflation."

And may we not fitly come back to the great "Mother of Waters," and incline ourselves not to accept the dismal view of the poet in his reference to "Old Ocean's gray and melancholy waste," but rather to realize that "in the seas is salvation of the soul." It is fortunate for us that it is as Byron

expresses it in the "Apostrophe to the Ocean":

"Thy shores are empires, changed in all, save Thee:

Assyria, Greece, Rome, Carthage—
what are they?

Thy waters wasted them while they were free

And many tyrant since. Their shores obey

The stranger, slave or savage; their decay

Has dried up realms to ruins. Not so Thou—

Unchangeable, save to the wild wind's play,

Time writes no wrinkle on Thy azure brow—

Such as Creation first beheld—Thou rollest now."

WATER COMMISSION NEWS.

Geo O. Berry of Cajon, San Bernardino County, has been granted a permit to appropriate one second foot of water from Vincent Springs in that county for purposes of irrigation and domestic use. By means of a pipe line he will conduct the water $1\frac{1}{4}$ miles to 160 acres to be irrigated. The estimated cost of the works is \$1,500. The springs are located in the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Sec. 1, Tp. 3 N., R. 7 W., S. B. M.

Springs in Kern County located in the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ and the NE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Sec. 34, Tp. 11 N., R. 14 W., S. B. M., are the source of the appropriation of one second foot of water, a permit for which the State Water Commission has just granted Alfred F. Mansfield of 528 California street, Los Angeles. The diversion works are a shaft to be sunk at the springs and cased with rock and cement and a pipe line leading to the 326.60 acres to be irrigated. The estimated cost is \$1,000.

M. J. Whitney of Straw, Modoc County will proceed to bring under irrigation 165 acres of land in that county under a permit which has just been granted him by the State Water Commission to appropriate 800 miner's inches or 20 second feet of water from Hole in The Rock Canyon. The canyon is not tributary to any stream, but the waters which flow through it sink into the lava and are lost, at least to immediate use. By means of a storage dam 11 feet high, 290.4 feet in length the waters of the canyon through a ditch 2,291.8 feet long to the lands to be irrigated. The storage amount of the dam is 552 acre feet.

The Whitewater River in Riverside County will bring refreshment to 160 acres of land in that county, through a permit just granted to Stuart D. Allen of Redlands, San Bernardino County, by the State Water Commission. The Whitewater River is tributary to the great Salton Sea, although it sinks in the desert before it reaches that inland ocean. Mr. Allen will use 200 miner's inches of water or 5 second feet of water through a ditch a mile long from a diversion dam three feet high and twenty feet in length, made of loose rock and timber at an estimated cost of \$1,000.

James McBrien of Alturas, Modoc County, has been granted a permit by the State Water Commission to appro-

priate 104 acre feet of water from a reservoir site in that county, tributary to the Pit River. The diversion is located in the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ and SE $\frac{1}{4}$ of SE $\frac{1}{4}$ of Sec. 23, Tp. 42 N., R. 11 E., M. D. M. At a cost of \$6,000, the permittee intends to construct a storage dam 18.6 feet high, 1,021 feet in length, 12 feet wide on top with a slope of 3 to 1 in the front and 2 to 1 on the back, top of dam to be three feet above the water line of the reservoir when full. The system will irrigate 98 acres.

H. D. Porter of Rhyolite, Nevada, has been granted a permit by the State Water Commission to appropriate 2 second feet of water from Willow Springs in Inyo County for purposes of stock raising. Willow Springs are one mile southeasterly from the monument on the summit of a mountain which is the boundary line between the States of California and Nevada, being in the SE $\frac{1}{4}$ of Sec. 7, Tp. 30 N., R. 1 E., S. B. M. The cost of the diversion is \$5,000.

Walter K. Fisher of 1523 Waverly street, Palo Alto, has been granted a permit by the State Water Commission to appropriate one miner's inch of water from a spring tributary to Eau Claire Creek in El Dorado County for domestic purposes. It is in the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Sec. 14, Tp. 12 N., R. 17 E., M. D. M. A pipe line 200 feet long will carry the water from a small wooden tank to the place of use.

The State Water Commission has just issued a permit to F. H. Roberts of Lookout, Modoc County, to appropriate 95 acre feet of water by means of storage of run-off from lands tributary to Pit River, for irrigation purposes. The point of diversion is in the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Sec. 23, Tp. 40 N., R. 7 E., M. D. M. The diversion works consist of two dams, one 835 feet long and the other 1,185 feet long with 12-inch steel headgate pipe. A ditch 700 feet long conducts the water to a natural rocky channel from where it is diverted again to the 175 acres to be irrigated. The estimated cost is \$1,800.

W. Scott Russell of Bakersfield, Kern County, has been granted a permit by the State Water Commission to appropriate 200 miner's inches or 5 second feet of water from Plato Stream in that county for agricultural purposes. The point of diversion is near the NW corner of Sec. 7, Tp. 11 N., R. 20 W., S. B. M. From two timber headgates a ditch 3,100 feet in length will conduct the water to 160 acres to be irrigated.

\$19,000 BRIDGE COMPLETED.

The new reinforced concrete bridge across the Sacramento River at Kennett is practically completed. It will not be thrown open to public travel until it is formally accepted by the Board of Supervisors.

Supervisor Welsh, father of the bridge, because it was largely through his persistent efforts it was built, was the first person to cross in an automobile.

Kennett has not yet received its money from the \$5,000 bonds sold a week or so ago. As soon as the money comes the city will pay the county \$4,000.

A TELEGRAM.

The Germans have taken Pilsener and are now surrounding Delicatessen, where the Wurst is expected. The Belgian Hares have had a falling out with the Welsh Rarebits and the Swiss Cheese is shot full of holes. This will make the Irish Stew and the English Mustard hot, and when the Russian Caviar meets with the French Pastry, it will cause a serious mobilization of the forces of the Interior. The Spanish Onions are strong for a mix-up, and if the Home Preserves are called out and spread over the German Noodles, they may Ketchup with the Navy Beans, thereby causing an uprising of the Brussels Sprouts.

KAISER WILHELM.
American Co-operative Journal.

COMMISSION OF SCIENTISTS, GEOLOGISTS AND ENGINEERS TO REPORT ON CANAL SLIDES.

President Wilson is determined to ascertain the facts with respect to the slides in the Gaillard cut that have put the Panama Canal out of commission for the commerce of the world and prevented the use of the canal by the American navy for an indefinite period.

With this object in view, announcement has been made at the War department that a commission of ten engineers, geologists and scientists has been designated to go to the Isthmus of Panama immediately to investigate the "entire subject of the slides of the Panama Canal and submit a report to the President thereon."

The commission sailed for the Isthmus Saturday, December 11, and will include some of the ablest scientists of the country.

It consists of the following:

Charles Richard Van Hise of Madison, Wis., president of the University of Wisconsin.

Brigadier General Henry Lecom Abbot of Cambridge, Mass.

John Casper Branner, geologist, president of Leland Stanford Junior University, California.

Whitman Cross of Washington, D. C. Harry Fielding Reid of Baltimore, geologist.

Dr. Charles D. Wolcott of Washington, D. C., president of the Smithsonian Institution.

Rolin Clinton Carpenter of Ithaca, N. Y., president of engineering at Cornell University.

Arthur Powell Davis of the United States Reclamation Service.

John Ripley Freeman of Providence, R. I., civil and mechanical engineer.

LELAND RAAB TO BE ENGINEER AT TRACY.

Leland B. Raab, who has been associated with former Engineer Tumulty, has been appointed to the office of city engineer of Tracy. He takes the place of J. Henry Smith, who resigned to transfer his headquarters to San Francisco. Raab takes office on January 1st.

ADVANCE CONSTRUCTION NEWS.

Classified According to Character of Work.

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FULL COUNT SHINGLES.

SACRAMENTO—Charles G. Johnson, State Superintendent of Weights and Measures, has been advised that the Redwood Shingle Association, one of the largest organizations dealing in shingles in the State, has decided that in the future all quotations made on redwood shingles would be based on the full count. In other words, if 1000 shingles are paid for 1000 shingles will be delivered. The State Department of Weights and Measures recently notified all shingle dealers that in future all sales must be full count. Heretofore the public had been paying for 1000 shingles and getting 800.

APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$18,000. Architect, O. R. Thayer, 20 Montgomery street, S. F. Owner's name withheld. Location, northwest corner Dolores and 16th streets. Will contain a total of fourteen suites arranged for two, three and four room apartments and a basement garage accommodating five machines. Interiors finished in pine, hardwood and red gum. Hardwood floors. Steam heat and a hot water system. Bath rooms monolith floors. Marble and tile wainscot in the entrance lobby. Exterior covered with brick veneer and cement and English half timber. Plans being prepared.

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$6,000. Architects, O'Brien Bros., 210 Montgomery street, S. F. Owner, Mr. Gallagher, Location, south Hayes near Webster. Will consist of altering three flats into six modern three room apartments. Will require new interior trim, pine and hardwood, plumbing, painting, electric work, plastering and electric work. Plans complete and figures being taken.

BERKELEY, ALAMEDA CO., CAL.—Apartment house, 2 story and base, frame, \$7,500. Architect, W. H. Ratcliff, Jr., First National Bank Bldg., Berkeley. Owners, Alameda County Home Builders. Location, Benvenue avenue. Will contain a number of two, three and four room suites with wall beds and private baths. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat and hot water system. Bath rooms composition. Exterior covered with rustic and cement plaster. Plans complete and figures being taken.

BERKELEY, ALAMEDA CO., CAL.—Apartment house, 2 story and base, frame, \$1,500. Architect, none. Owners, F. R. Peake Co., 2127 University avenue, Berkeley. Location, Hopkins east of The Alameda. Will contain eight room suites. Interior finished in pine and red gum with hardwood floors. Furnace heat. Open fire places and tile mantels. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

SEATTLE, WASH.—Apartment house, 5 story and base, reinforced concrete and brick, \$5,000. Architects, Lawton & Moldenhauer, Alaska Bldg., Seattle. Owner, C. E. Sherwood, 2622 Alki avenue, Seattle. Location, Howard and Alrose. Will cover a considerable ground area and will be arranged for a number of two, three and four room apartments. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat, oil burning system, hot water system and vacuum cleaning. Wall beds. Bath rooms tile and composition. Marble and tile wainscot in entrance vestibule. Ex-

terior faced with pressed brick. Plans complete and figures being taken.

BONDS

MARTINEZ, CONTRA COSTA CO., CAL.—The Martinez Development Board has adopted resolutions asking the City Trustees to call an election to vote \$45,000 bonds for the purchase of an adequate water supply system. The plan includes the construction of a reservoir of 55,000 barrels capacity and a system of wells.

PATTERSON, STANISLAUS CO., CAL.—On completion of the railroad now being constructed from Patterson, owners of mines on Red Mountain will construct a number of calcining plants.

SANTA BARBARA, SANTA BARBARA CO., CAL.—The three propositions placed before the people at a recent bond election were defeated. The improvements planned were for paving and road work.

CROCKETT, CONTRA COSTA CO., CAL.—The proposition of erecting a new fire house building here is now being discussed. The present quarters are inadequate.

BAKERSFIELD, KEERN CO., CAL.—Bids are being taken by the Supervisors for the purchase of the \$60,000 issue of school bonds voted by the Conley School District.

The State Board of Control has purchased the \$15,000 of the Maricopa School District. A new school building will be erected from the proceeds of this sale.

LONG BEACH, LOS ANGELES CO., CAL.—Following the advice of J. J. Engledrum, the City Commissioners may take steps for the establishment of a municipal gas plant. According to Engledrum the plant may be constructed for \$125,000 and would save the people from \$50,000 to \$75,000 a year.

Action is expected to be taken by the Commissioners in the near future.

UPLAND, SAN BERNARDINO CO., CAL.—H. D. Blakeslee and J. B. Brangan are urging the Chamber of Commerce to back them in the establishment of a glass factory. A site is now being considered.

MARTINEZ, CONTRA COSTA CO., CAL.—Geo. H. Lyford has purchased a site on Smith street near Arriba and will erect a modern laundry building on the site. Up to date machinery will be installed in the new plant.

SAN JOSE, SANTA CLARA CO., CAL.—A. J. Hart, a wealthy merchant of this city, has started a campaign to have the electric tower, destroyed by recent storms, rebuilt.

LODI, SAN JOAQUIN CO., CAL.—Bonds of \$100,000 were voted last week. An architect will be selected to draw the plans in a few days.

SAN GABRIEL, LOS ANGELES CO., CAL.—This city is planning a \$100,000 bond issue to pave every street within the city limits. The election will be

called within the next few weeks.

WASCO, KERN CO., CAL.—The \$45,000 bond issue held recently carried. The funds will be used in purchasing a site and erecting a new school.

OAKDALE, STANISLAUS CO., CAL.—The \$2,500 bond issue of the Rodden School District has been purchased by the State Board of Control, which has also purchased the \$2,500 issue of the River Road District.

RIVERDALE, FRESNO CO., CAL.—An election will be held shortly by the joint union high school district to revote bonds of \$25,000 in which the State Accident Commission discovered a flaw.

SANTA ANA, ORANGE CO., CAL.—The \$65,000 school bond issue held December 4th, carried and plans for a new school will be ordered prepared in the next few days.

DOWNY, LOS ANGELES CO., CAL.—The \$30,000 school bonds carried at a recent election held here.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Bids will be received by the County Board of Supervisors up to January 3rd, 10 a. m., for the sale of \$200,000 of the \$350,000 State Highway bridge bond issue, which was voted here last September.

POMONA, LOS ANGELES CO., CAL.—An election will be held on January 11, 1916, for the purpose of voting on the following issues: \$15,000 bonds for street work in First street, Oak avenue, Lordsburg road, and other streets; \$15,000 bonds for storm drains in Garey avenue and Fulton road; \$10,000 bonds for construction of roads and extending bath house in Ganesha Park and constructing an underground sprinkling system in Lincoln Park; \$5,000 bonds for street work in Fifth street, and \$5,000 for the construction of a Chamber of Commerce building. T. R. Trotter is the City Clerk.

HOLTVILLE, IMPERIAL CO., CAL.—The Board of Supervisors has ratified the sale of Niland school bonds amounting to \$20,000 and the Ferrell school bonds, \$6,000, to the First National Bank.

CHINO, SAN BERNARDINO CO., CAL.—A bond issue in the sum of \$128,000 for the new sewer system (\$55,000), and street paving (\$73,000) will be voted on early next spring. The plans for the work have been approved by the Board of Trustees.

BAKERSFIELD, KERN CO., CAL.—The election held in this city last week to vote on the question of issuing and selling bonds of \$75,000 for school improvements carried by a large majority. Plans for the improvements will go under way.

SANTA CLARA, SANTA CLARA CO., CAL.—An ordinance has been passed by the City Trustees for calling an election to vote bonds of \$45,000 for the construction and completion of certain municipal improvements. The election will be held on December 23rd.

CHICO, BUTTE CO., CAL.—In an effort to secure the financing of the link of State Highway from the Butte County line to Los Molinos, which would complete the highway from Chico to Red Bluff, have appeared before the Highway Commission in Sacramento to offer for sale enough bonds to build the road.

Already Tehama and Butte County citizens have promised to subscribe for the issue. The strip of road is about twelve miles in length.

SACRAMENTO, CAL.—The Supreme Court of California has issued a writ of mandate directing E. D. Adams, City Auditor of Sacramento, to sign and issue \$700,000 of bonds authorized by the people, to purchase two blocks of ground for the extension of the State Capitol grounds.

The bond issue was voted to enable the city to acquire title to a strip of land two blocks long and one wide near the Capitol grounds, and to present the land to the State for the erection of an addition to the Capitol building.

FORTUNA, HUMBOLDT CO., CAL.—The Industrial Accident Commission, through the State Board of Control, purchased the Fortuna High School bonds, offering a premium of \$1,000. Now that the bonds are sold plans for the new building will be ordered prepared.

OROVILLE, BUTTE CO., CAL.—Final action on the Paradise petition asking the calling of an election on the formation of a drainage district by the Board of Supervisors will be taken at a hearing scheduled for January 4.

The petition has received the official approval of the State Engineer's office and also that of County Surveyor Martin C. Polk of Butte County.

SELBY, CONTRA COSTA CO., CAL.—By a unanimous vote the \$11,000 issue of school bonds carried last week. Bids for the sale of the bonds will be asked immediately.

GIOVILLE, BUTTE CO., CAL.—The establishment of a cannery in Oroville for fruits and vegetables is now being considered by the California Ripe Olive Company. The matter has been under consideration for some time, and definite plans may be evolved in the near future.

RIVERSIDE, RIVERSIDE CO., CAL.—That the Pacific Light and Power Company's plant at Highgrove, destroyed March 28 last by fire, will probably be rebuilt in the very near future, is indicated by the fact that the company has been granted a new 20-year lease on the water power by the directors of the Riverside Water Company.

BRIDGES, DAMS AND HARBOR WORK

SAN ANDREAS, CALAVERAS CO., CAL.—Bridge, reinforced concrete, \$8,000. Engineer, County Surveyor, San Andreas. Owners, Calaveras County. Two sets of plans were received by the County of Board of Supervisors at their last meeting for a reinforced concrete bridge over the Calaveras River between San Andreas and North Branch. Jenkins & Wells, Sacramento, "Girder Concrete bridge." Estimated cost, \$8,000. Commonwealth Engineering Co., San Francisco, "Arch Reinforced Concrete bridge." Estimated cost, \$9,500. The plans and specifications received will be forwarded to the Highway Commission for approval or rejection. Further mention will be made of this work when the Highway Commission takes action on the plans.

AUBURN, PLACER CO., CAL.—Bridge, reinforced concrete and steel.

Cost not stated. Engineer, County Surveyor, Auburn. Owners, Placer County. The Supervisors have agreed to pay one-third of the cost of constructing a bridge across the Bear River on the Dutch Flat and You Bet road, providing the County of Nevada and the Pacific Gas and Electric Co. pay the other two-thirds. The proposition of the counties and the electric company each paying a third of the cost was put up to the Placer Supervisors about a month ago. The Supervisors spent much time in seeking rights of way along the line of the proposed State Highway lateral leading from Auburn to Roseville. The Board has appropriated \$500 to be used in repairing the road leading from Auburn to the American River where the wire bridge crosses.

RED BLUFF, TEHAMA CO., CAL.—Bridges, steel and reinforced concrete. Cost not stated. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Plans and specifications having been completed, the Clerk of the Supervisors has been instructed to advertise for bids until January 4th, 10 a. m. for the construction of a steel and concrete bridge across Brickyard Creek on the Red Bluff and Corning road. Further information may be had from the County Clerk at Red Bluff.

MERCED, MERCED CO., CAL.—Bridges, reinforced concrete. Cost not stated. Engineer, County Surveyor, Merced. Owners, Merced County. Bids will be received on January 4th for the construction of reinforced concrete bridges in Road District No. 4 as follows: Over Quinto Creek on the Cottonwood School House road, to be known as Bridge No. 41; over the lower canal on the Cottonwood road, to be known as Bridge No. 42; also for the construction of a reinforced concrete bridge on the State Highway about one mile south of Buhach Station in Road District No. 3, to be known as Bridge No. 43.

SONOMA, SONOMA CO., CAL.—Bridge, reinforced concrete, \$1,250. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, City of Sonoma. At the last meeting of the City Council plans and specifications were ordered prepared for the construction of a bridge on Washington street. Further mention will be made of the work when the plans are complete.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Bridge, reinforced concrete. Cost not stated. Engineer, County Surveyor, Santa Cruz. Owners, Santa Cruz County. Bids will be opened on January 3rd for the construction of a bridge across Branciforte Creek, just below the junction with Granite Creek.

COURT HOUSES.

SAN FRANCISCO—City Hall furniture. Cost not stated. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owners, City and County of San Francisco. Bids will be opened by the Board of Public Works on December 24th for furnishing special furniture for the Supervisors' Chambers in the new City Hall.

MERCED, MERCED CO., CAL.—Court house alterations. Cost not stated. Architect's name not given. Owners, Merced County. Bids will be re-

ceived on January 14th for the placing of hardwood flooring in the lower corridor of the Court House and also for the remodeling of the upper floor.

FACTORIES AND WAREHOUSES

SAN FRANCISCO—Warehouse and offices, 5 story and base, reinforced concrete. Cost not stated. Architect, George Wagner, 110 Townsend street, G. Albert Lansburgh, Advisory Architect, 709 Mission street. Owner, L. A. Norris, leased to M. J. Brandenstein Co. Location, Third near Townsend, covering an area of 127 by 160 feet. Fireproof construction, metal window sash and frames and fireproof doors. Special conveying machinery. Steam heat, oil burning plant, and elevator equipment. Special trim in office portion. Exterior faced with cement plaster. Plans being prepared.

SAN FRANCISCO—Assembling plant, 5 story and base, reinforced concrete, \$200,000. Architect, Engineering Department Ford Motor Car Co., Detroit, Mich. Owners, Ford Motor Car Co. Location, Treat avenue and 21st street, covering an area of 125 by 139 feet. Fireproof construction, concrete walls, floors and roof slabs. Interior pine and rough. Elevator service. Metal window sash and frames and fireproof doors. Exterior faced with cement plaster. Plans complete and to be forwarded to San Francisco at once.

SAN FRANCISCO—Factory, 2 story and base, reinforced concrete, \$3,000. Architect, none. Owner, A. Haus, 425 Potrero street, S. F. Location, rear of 125 Potrero. Concrete floor. No interior trim. Designed for factory for ornamental iron work. Exterior cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Factory plant, 1, 2 story and 3, 1 story, reinforced concrete, \$200,000 to \$300,000. Architect's name not given. Owners, Chevrolet Co., represented by Norman De Vaux, 1600 Van Ness avenue, S. F. Location, Pothill Boulevard. Plans have been prepared in the east and will be forwarded to San Francisco shortly, when complete details of construction can be given. A local supervising architect will be appointed.

OAKLAND, CAL.—Flour mill, 1 and 4 story, reinforced concrete. Cost not stated. Engineer's name not given. Owners, Albers Bros. Milling Co., 243 Pine street, S. F. Location, Key Route Hill. Details of the buildings have not been made public. The selection of an architect will be announced within a week or ten days when further mention will be made of the work.

OREGON CITY, ORE.—Paper mill, 2 story and base, reinforced concrete, \$550,000. Architect's name not given. Owners, Hawley Pulp and Paper Co. The special committee appointed to investigate the proposition to sell a piece of property to the Hawley Pulp and Paper Co., filed their report which favored the action, and the Council in turn passed an ordinance permitting the sale. The action of the Council will result in the erection of a \$500,000 plant by the company. The proposed structure will be of reinforced concrete construction and will be modern in every respect, according to W. P.

Hawley, president and manager of the company.

ONTARIO, SAN BERNARDINO CO., CAL.—Packing houses, 2, 1 story, frame and concrete, \$10,000. Architect's name not given. Owners, San Antonio Growers' Association. The San Antonio Growers' Association has decided to erect two packing houses and dry yards. Funds will be raised by a pro rata acreage assessment. One will be erected in Ontario and the other at Chino. Judge C. M. Whitney of Ontario is the secretary of the board of trustees.

PLACER, ORANGE CO., CAL.—Packing plant, 2 story, hollow tile construction. Cost not stated. Architect, Foss Designing and Building Co., 100 East Colorado street, L. A. Owners, California Fruit Products Co. Will cover an area of 60 by 80 feet. No interior finish. Exterior faced with cement plaster. Plans are being prepared and the building will probably be erected by the Foss Designing and Building Co.

LOS ANGELES, CAL.—Warehouse, 4 story and base. Class C construction. Cost not stated. Architects, Morgan, Walls & Morgan, Van Nuys Bldg., L. A. Owner, Los Angeles Soap Co. Location, Lanning street, covering an area of 100 by 100 feet. Pine and rough interior finish. Electric freight elevator, automatic sprinkler system throughout the building. Metal window sash and frames and fireproof doors. Exterior faced with selected common brick. Plans complete and figures being taken.

Contracts Awarded.

CAMARILLO, VENTURA CO., CAL.—Storage building, 1 story and base, reinforced concrete, \$21,500. Architect, Alfred P. Priest, Fay Bldg., L. A. Owners, J. L. Lewis & Son. Contractor, J. A. Crook, Byrne Bldg., L. A. Contract price, \$21,300.

FIRE HOUSES AND JAILS

SAN FRANCISCO—Fire house, 3 story and base. Class C construction, \$60,000. Architects, Ward & Blohme, Alaska Commercial Bldg., S. F. Owners, City and County of San Francisco. Final approval of plans and specifications for this building have been given and the Board of Public Works has been instructed to advertise for bids. The building will be known as Engine House No. 4, and will be erected on the north side of Howard street between Second and Third streets.

FIRE REPORT

OAKLAND, CAL.—Fire destroyed the residence of Mrs. A. Petrey at 1512 Harrison street, last week, causing a loss of \$10,000.

HEIDELBERG, CONTRA COSTA CO., CAL.—Mixing plant No. 2, of the Dupont Powder Company, was destroyed last week at a loss of \$9,000. Short circuit of a motor was the cause of an explosion. Preparations will be made immediately to have the plant rebuilt.

STOCKTON, SAN JOAQUIN CO., CAL.—The store building of L. McPaul was completely destroyed by fire last week. The loss is estimated at \$30,000. Insurance covers 40 per cent of the loss. The building was a two-story brick.

MARTINEZ, CONTRA COSTA CO., CAL.—The residence of Frank DeLuca

at Vine Hill was destroyed by fire last week, causing a loss of \$6,000.

FLATS

SAN FRANCISCO—Flats, 2, 2 story and base, frame, \$5,000 each. Architect, none. Owner, O. E. Anderson, 248 15th avenue, S. F. Location, east 10th avenue south of Balboa, covering an area of 27 by 66 feet. Will contain two modern flats of five and six rooms. Basement garages. Interior finished in pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$5,500. Architect, none. Owner, Louis H. Lee, 135 Carl street, S. F. Location, west 9th avenue north of Anza. Will contain two flats of five and six rooms, bath and sleeping porch. Basement garage. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile in bath rooms. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$3,000. Architect, none. Owner, Michael Cain, 1255 21st avenue, S. F. Location, west 21st avenue north of Irving. Will contain two flats of five and six rooms. Interiors finished in pine and white enamel. Hardwood floors, open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats and store, 3 story and base, frame, \$4,000. Architect, none. Owner, Thomas Kelly, 2909 Bush street. Location, southeast Clement and 15th avenue. Will contain one store and three small flats. Interior finish pine throughout. Open fire places and tile mantels. Wall beds. Hardwood floors. Exterior covered with shiplap and cement plaster. Plans complete and work to be done by Day Labor.

GARAGES

SAN FRANCISCO—Garage, 2 story and base. Class A construction, \$25,000. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner's name withheld. Location, Down Town District. Will cover an area of 60 by 120 feet. Complete steel frame, steel roof trusses and concrete floor. Interior finish pine and rough. Special gasoline tanks. Metal window sash and frames. Exterior faced with cement plaster. Plans being prepared and will be ready for figures in ten days.

SAN FRANCISCO—Sales room and garage, 1 story and base, brick, \$6,000. Architects, M. C. Runghe & Co., 612 Washington street, S. F. Owner, John A. McRae. Location, south Golden Gate east of Larkin. Interior finish pine. Some tile floors. Patent store fronts and marble base. Exterior faced with pressed brick. Plans being prepared.

LOS ANGELES, CAL.—Automobile school and garage, 1 and 2 story and base, brick. Cost not stated. Architects, Morgan, Walls & Morgan, Van Nuys Bldg., L. A. Owner, Mrs. S. H.

Van Nuys, leased to National Automobile School. Location, Figueroa south of 8th, covering an area of 60 by 153 feet. Will contain offices, shop rooms, garage and assembly hall on first floor and class rooms above. Interior finish pine. Cement floors. Metal window sash and frames. Exterior faced with pressed brick. Plans complete and figures being taken.

Contracts Awarded

OAKLAND, CAL.—Garage, 1 story and base, brick, \$8,000. Architect, none. Owner, John Dacha. Contractor, C. A. Scoville, 5246 Claremont avenue, Oakland. Contract price, \$8,000. Contractor is now taking subfigures.

OAKLAND, CAL.—Garage, 1 story and base, brick, \$8,348. Architect, none. Owner, C. P. Kiel, San Leandro. Contractors, Larmer & Muller, 470 Boulevard Way, Oakland. Contract price, \$8,348. Contractor is now taking subfigures.

GOVERNMENT WORK & SUPPLIES

Sale of Vessel.

The Navy Department is advertising for sale the U. S. S. Justin and the U. S. S. Oneida. In connection therewith the following circular has been issued:

In accordance with the provisions of section 5 of the act of Congress approved March 3, 1883, sealed proposals will be received at the bureau of supplies and accounts, Navy Department, Washington, D. C., until 12 o'clock noon January 24, 1916, at which time and place they will be publicly opened, for the purchase of the following vessels, which have been stricken from the Navy Register, after survey, condemnation, and appraisal, under authority of the act of August 3, 1882: U. S. S. Justin.

The Justin is a steel schooner, built in 1891 at Middlesboro-on-Tees, England, by R. Dixon Co. She is expected to reach the navy yard, Mare Island, Cal., about December 15. Length, 287 feet 6 inches; breadth, 39 feet; depth of hold, 23 feet; mean draft, 19 feet 8 inches.

Vertical 3-expansion engine; total maximum 1. H. P., 978. Bunker capacity, 167 tons; cargo capacity for coal, 2,900 tons.

As appraised by a board of survey and appraisal the value of the vessel is \$75,000, and she will be sold for cash to the bidder offering the highest price above the appraised value.

anchors, chains, furniture, galley equipment, engines, electrical equipment, standing rigging, spare propeller and patterns, etc., will be sold with the vessel.

Fort Logan, Colo., Building.

The contract for the construction of a basement under the N. C. O. quarters at Fort Logan, Colo., has been awarded to C. B. Elkins of Denver, Colo., at \$2,490.

Clearing Land.

Schedule of bids received at opening at Meadow Creek, Wash., for clearing of 1,200 acres of timbered land at Lake Keechelus:

Harrington-Peters Co., Seattle, Wash., \$129,000.

Maxham & Maxham, Tacoma, Wash., \$168,000.

M. P. Zindorf, Seattle, Wash., \$178,000.

T. J. Meagher, Snohomish, Wash., \$197,120.

King & Lohnes, Snohomish, Wash., \$234,080.

Alex. I. Odegard, Kittitas, Wash., \$243,336.

Pearl Harbor, H. T., Radio Building.

The following bids were received by the chief of the bureau of yards and docks, Navy Department, Washington, D. C., for constructing 3 radio station buildings at the naval station, Pearl Harbor, H. T.:

Item 1, work complete; A, powerhouse; B, operating building; C, double quarters for operators; item 2, deduct for omitting furring and plastering; 3, work, complete, with several modifications; A, powerhouse; B, operating building; C, quarters for operators.

The Spaulding Construction Co., Rialto Building, San Francisco, Cal., item 1, \$31,685; A, \$12,023; B, \$10,127; C, \$9,535; 2, \$250; 3, \$28,635; A, \$12,223; B, \$7,127; C, \$9,535.

The Construction & Engineering Co., 1047 Polson street, San Francisco, Cal., item 1, \$29,322; A, \$11,471; B, \$9,722; C, \$8,129.

Government Contractors' Association.

The fourth annual meeting of the Association of Government Contractors will be held at the Raleigh Hotel, Washington, D. C., from January 4 to January 6 next.

Los Angeles, Cal., Paluting.

The contract for exterior painting at the U. S. post office, Los Angeles, Cal., has been awarded to Amos & Berg at \$500.

Denver, Colo., Mail Chutes.

The contract for installing two mail chutes in the U. S. post office at Denver, Colo., has been awarded to American Mailing Device Corp., 103 Park avenue, New York City, at \$743; time 40 days.

New Army Construction.

The quartermaster general of the Army recently visited, on his transcontinental inspection trip, the Presidio of San Francisco and examined the buildings at that post with a view of having certain alterations and repairs made and determining to what extent there should be new construction. General Aleshire will shortly make his recommendations regarding the changes in the existing structures, and steps will soon be taken to obtain bids for the construction of new officers' quarters sufficient to provide habitations for a brigade commander and his staff and a number of line officers. It has not been decided whether the buildings will be of concrete, brick, tile, or stucco. The design will be in accordance with the prevailing type of architecture. Considerable criticism has been directed against the Army quartermasters by the San Francisco papers, notably the Chronicle, of that city, because there has been a failure to erect new buildings, and it is asserted, among other things, that "the military brain works slowly" and that there could be profitable application made of the sum of \$450,000 appro-

priated for the exposition and remaining unexpended in that direction. Of course, this amount is not available for Army purposes, and it would require the authority of Congress to have it expendable for quarters at the Presidio or any other Army station.

Letterman Hospital Roads.

The bid of the Fay Improvement Co., of San Francisco, Cal., \$2,697.50 in amount, has been accepted for constructing roads, wharfs, and gutters at the Letterman General Hospital, San Francisco, Cal.

Trouble With Cable Contractor.

The question has been presented whether or not the General Electric Company can be relieved from entering into a contract with the War Department for supplying certain cables for use at Corregidor Island in accordance with the accepted bid of the company on the ground of a mistake as to the character of cable to be furnished under the specifications. The contractor specified the character of the insulation of the cable, but made no statement as to whether or not the cable would be armored. The application for relief is based on the claim that the specifications are not clear as to whether or not the cable was to be steel armored cable; that the company frequently had requests for armored cable when only lead-covered cable was desired, and that in submitting the bid it was assumed that lead-covered cable only was required. It was found that if the company was held to its bid it would suffer a financial loss, and, as it was not desired to impose unnecessary hardships upon bidders because of their mistakes, it was recommended by the quartermaster general that the item be readvertised. The War Department has approved of this recommendation on the ground that this is a case where there is a fundamental error which excludes true consent, one partly intending one thing and the other a different thing. This action is in line of precedence. The amount involved in the contract is about \$3,000.

SAN FRANCISCO — Bronze lamp standards. Cost not stated. Architect, Supervising Architect, Washington, D. C. Owners, United States Government. Bids will be opened on January 5th for furnishing ornamental bronze lamp standards for the United States Customs House. Plans can be secured from the office of the Supervising Architect or from the Custodian of the building.

HALLS AND SOCIETY BUILDINGS

Contracts Awarded.

TULARE, TULARE CO., CAL.—Lodge hall and offices, 2 story and base, brick, \$20,000. Architect, Ernest J. Kump, Rowell Bldg., Fresno. Owner, E. J. Ryan. Contractor, James J. Daley, Fresno. Contract price, \$20,000.

HOSPITALS

SAN FRANCISCO—Hospital excavating and foundation work, \$15,637. Architect and foundation work, \$15,637. Architect, John Reid, Jr., First National Bank Bldg., 4. F. Owners, City and County of San Francisco. O. Mon-

son presented the low bid for excavating and foundation work at the San Francisco Hospital at \$12,677, and will be awarded the contract. A complete list of the bids opened appears under the heading of San Francisco in this issue.

BERKELEY, ALAMEDA CO., CAL.—Hospital, dairy building, frame, \$5,400. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. L. G. Bergen & Son, Hearst Bldg., S. F., were the low bidders on this work and will be awarded the contract. A complete list of the bids appears under the heading of Oakland and Alameda County in this issue.

EUREKA, HUMBOLDT CO., CAL.—Hospital addition, 2 story and base, frame and plaster, \$12,900. Architect, E. J. Burke, Eureka. Owners, Humboldt County. Louis Halvorsen, Eureka, presented the lowest figure for the new addition to the County Hospital and will be awarded the contract. A complete list of the bids received will be found under the heading of Sacramento, Stockton and Northern California.

NORWALK, LOS ANGELES CO., CAL.—Hospital laundry building, 1 story and base, reinforced concrete, \$14,672. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. L. B. Burgen & Son, Hearst Bldg., S. F., presented the low bid for the construction of the laundry building at the Norwalk State Hospital and will be awarded the contract. A complete list of the bids received will be found under the heading of Los Angeles and Southern California.

Contracts Awarded.

SAN FRANCISCO—Hospital steel, \$60,190 and \$40,975. Architects, Hermann Barth, 12 Geary street, and John Reid, Jr., First National Bank Bldg., S. F. Owners, City and County of San Francisco. Contractors, Dyer Bros., S. F., southeast wing, \$60,190; northeast wing, \$40,975.

HOTELS

AGUA CALIENTE, SONOMA CO., CAL.—Resort hotel, 1 and 2 story and base, frame, \$35,000. Architects, O'Brien Bros., 210 Montgomery street, S. F. Owners, Agua Caliente Hot Springs Hotel Co. There will be one two-story hotel and two bath houses, each of one story. The design is in the Mission style. Interior will be finished in pine and redwood with some hardwood floors. Steam heat and a hot water circulating system will be installed. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures will be called for in about ten days.

FRESNO, FRESNO CO., CAL.—Hotel addition, 2 story and base, brick. Cost not stated. Architects, Swartz & Swartz, Rowell Bldg., Fresno. Owners, Erix Estate. Location, J street. The proposed addition will be made to a two-story brick store building. The new portion will contain in the north end of 85 rooms and a number of public and private baths. Interior finish pine. Steam heat and a hot water system. Exterior faced with pressed brick. Plans being prepared.

SEATTLE, WASH.—Hotel, 1st story and base, reinforced concrete, \$100,000. Architect, A. Warren Gould, American

Bank Bldg., Seattle. Owners, Arctic Club. Location, corner of 2nd avenue and Cherry street, covering an area of 170 by 120 feet. A portion of the building will be occupied by the Arctic Club and others, but by far the largest part of the building will be given over to the hotel. Interior will be hand-somely finished. Steam heat, oil burning plant, elevator service and hot water system. Bath rooms tile. Exterior faced with terra cotta. Plans complete and figures to be called for shortly.

IRRIGATION PROJECTS

SACRAMENTO, CAL.—Irrigation project. Cost not stated. Engineer's name not given. Owners, Cosumnes Water District. A plan for the formation of an irrigation district which will bring under intensive cultivation some 10,000 acres of land in Sacramento County, has been made known through the Cosumnes water contest, which is now pending in the United States Land Office. The plans of the Cosumnes Irrigation Co. to store water at Lecker's Ford and other places along the Cosumnes River and by means of ditches to carry it to Sacramento County, will be carried out.

MODESTO, STANISLAUS CO., CAL.—Laterals and drops, concrete. Cost as follows. Engineer, Chief Engineer Hermann, Modesto. Owners, Modesto Irrigation District. At the last meeting of the Board of Directors of the Modesto Irrigation District bids were opened for constructing four concrete structures, drops, in laterals Nos. 3 and 4. Of nine bids, the lowest was that of Geo. A. Eos, Hearst Bldg., S. F., at \$7,184.50, and the second lowest was the Ross Construction Co., Forum Bldg., Sacramento, at \$7,558. These two bids were retained, and Eos was given until the 15th to file proper bonds and workmen's compensation insurance. The second bid is retained as a protection for the district in case Eos should fail to meet the requirements. The other bids for the work were: M. Blumenkranz, \$8,404.21; Tieslau Bros., \$8,912.50; March Bros. & Gardner, \$8,260.75; J. C. Westley, \$8,234.75; H. J. Ulrich, \$8,955.25; Barrett & Hilp, \$8,755; and Tinsion Co., \$8,290.

MODESTO, STANISLAUS CO., CAL.—Irrigation fl. Cost not stated. Engineer, Chief Engineer Hermann, Modesto. Owners, Modesto Irrigation District. Bids will be received until January 1st for the construction of an earth fl. along the line of lateral No. 1 of the Modesto Irrigation District on the site of the present fl.

Contracts Awarded.

YREKA, SISKIYOU CO., CAL.—Ditch. Cost not stated. Engineer's name not given. Owners, Putte Valley Land Co., Modesto. Contractors, Chapman & Co., Klamath Falls, Ore. Ten miles of ditch. Cost not stated.

RAILROAD CONSTRUCTION AND IMPROVEMENTS

MARTINEZ, CONTRA COSTA CO., CAL.—Railroad work. Cost not stated. Engineer's name not given. Owners, represented by Inda & Clifford, Modesto. J. Edgar Hubbard, Modesto, of San Francisco, has retained a consulting

engineer of a proposed electric car line to connect the city with Concord, and, according to a statement issued by him the line will soon be in course of construction. While Mr. McClellan, who is a capitalist, asserts that the line will not be owned or operated by the Oakland and Antioch, he admits that men connected with that company may be with him in the enterprise, and that the proposed line will connect with the present electric road at Concord, and passengers taken to San Francisco and Sacramento from there. Further mention will be made of this work.

THICKETTS CO., CAL.—Electric line extension. Cost not stated. Engineer, Engineering Dept. of Western Pacific Co. Owners, Western Pacific Co. According to word received from this city, a branch line from Croville to Chico will be constructed as soon as the Western Pacific Company emerges from the present receivership, according to statements made by General Manager C. M. Levy. Funds for this work are available. Other proposed feeders are: Oakland to Berkeley, 10 miles; San Francisco to San Jose, along the peninsula, 19 miles; Oakland to Sacramento through Alameda, Contra Costa, Solano, Yolo and Sacramento Counties, 55 miles; Point Richmond to a point on Oakland and Sacramento branch, 27 miles; Martinez to a point on the same branch, 9 miles; Stockton to Fresno, 115 miles; Spanish Creek to Big Meadows, 20 miles; Beckwith Pass to Truckee, 36 miles.

Contracts Awarded.

PORTLAND, ORE.—Refining railroad tunnel, \$100,000. Engineer, Engineering Dept. of O. R. & N. Co. Owners, Oregon-Washington Railroad and Navigation Co. Contractors, Guthrie-McDougall Co., Pittsburg, Kan.; Portland. Contract price, \$100,000.

POWER IMPROVEMENTS

SAN FRANCISCO—Power improvement, \$4,000,000. Engineer, Engineering Department of Great Western Power Co., Shreve Bldg., S. F. Owners, Great Western Power Co. Plans for immediate expenditure of \$1,000,000 for improvements have been submitted to the Railroad Commission by the newly organized Great Western Power Co., incorporated for \$60,000,000 to take over the properties of the twelve companies comprising the Great Western Power system, operating in San Francisco and ten other counties. Mortimer Hershacker, president of the company, said \$10,000,000 would be spent in the next ten years. The plans submitted include the following: Two new motor generator sets in Oakland on the Key Route system to cost \$150,000. A hundred and fifty-six mile transmission line from its plant in Thomas County to Oakland, \$1,000,000. A sixth unit for the Plumas County plant, \$300,000. A third cable under San Francisco Bay, \$100,000. New transmission line in Oakland, Sacramento and in the Sacramento Valley. **CLAMPA, WASH.**—Power development, \$1,000,000. Engineer's name not given. Owner, Hugh L. Copper Co. The granting of a permit to the Hugh L. Copper Co. to overflow the land of the Grand Pacific River for a distance of 1000 miles on both sides in the "Z"

Canyon, coupled with a permit secured a year ago for similar rights, and another pending before the land commissioners at Olympia, means the immediate starting of construction on a huge dam about a mile north of Blueside, Wash. The grant now asked extends from Blueside to Ione, Wash. Surveys are now being made by the company's engineers of the proposed power site. The hydro-chemical and power project will involve an expenditure of \$10,000,000.

RESIDENCES

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$5,000 each. Architects, Fabre & Bearwald, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location, Forest Hill. Each house will contain eight rooms, two baths and sleeping porches. Separate garages will be erected. Interiors will be finished in pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile or brick. Bath rooms tile. Automatic water heaters. Exteriors covered with rustic and cement plaster on metal lath. Plans being prepared.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$3,000 each. Architect, none. Owner, Thomas Hamill, 5535 Geary street, S. F. Location, west 19th avenue north of Balboa. Each house will contain seven rooms, bath and sleeping porch. Interiors finished in pine, white enamel and southern gum. Hardwood floors and open fire places. Mantels tile and brick. Tile bath rooms. Automatic water heaters. Exterior covered with shiplap and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$5,000. Architect, none. Owners, Conservative Building and Investment Co., Phelan Bldg., S. F. Location, southeast Alton and 9th avenue. Will contain eight rooms, two baths and sleeping porch. Interior finished in pine, southern gum and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, none. Owners, Elmer and Mable Clark, 574 26th avenue, S. F. Location, east 25th avenue north of Anza. Will contain six rooms, bath and sleeping porch. Basement garage. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Tile and composition in bath room. Automatic water heater. Exterior covered with rustic and brick veneer. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, H. P. Otten, 555 25th avenue, S. F. Location, west 25th avenue south of Geary. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile and composition in bath room. Automatic water heater. Exterior covered with cement

plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO — Residence, 2 story and base, brick and frame, \$30,000. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owner, Frank B. King. Location, northeast corner of Jackson and Laurel street. Will contain a large number of rooms besides three baths and sleeping porches. Basement garage. Interior finish pine, white enamel and hardwood. Hardwood and tile floors. Tile wainscot in bath rooms. Central heating system and hot water circulating system. Open fire places and tile and brick mantels. Exterior faced with pressed brick and cement plaster. Plans being prepared.

SAN FRANCISCO—Residence alteration, 2 story and base, frame, \$2,000. Architect, Charles C. Frye, 20 Montgomery street, S. F. Owner, B. K. Malcomb. Location 34th avenue. Work will include new plumbing, painting, plastering, electric work and interior trim. Exterior will be faced with cement plaster. Plans complete and figures being taken.

SAN FRANCISCO — Residence, 2 story and base, frame, \$5,000. Architect, J. W. Dolliver, Royal Insurance Bldg., S. F. Owners, Allen Co., 128 Sutter street, S. F. Location, Forest Hill. Will contain eight rooms, two baths and sleeping porch. Separate garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Tile and brick mantels. Automatic water heater. Bath rooms tile and composition. Exterior faced with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL. — Residence, 1½ story and base, frame, \$2,500. Architect, none. Owner, George H. Hollidge, 592 Taft avenue, Oakland. Location, east Broadway south of prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel with some elm panels. Hardwood floors. Open fire place and furnace heat. Tile bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,200. Architect, none. Owner, Edward Grandin, 1533 Prince street, Berkeley. Location, north 56th street west of Adeline. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior rustic and cement plaster. Plans complete and work by Day Labor.

PIEDMONT, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$3,700. Architect, none. Owner, R. E. Stubbs, 1408 Grand avenue, Piedmont. Location, Piedmont Cable Tract. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors. Open fire places and furnace heat. Mantels tile and brick. Bath rooms tile and composition floors. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$3,500. Architect, Merrill Newsom, 1748 Broadway, Oakland. Owner, E. L. Higgins. Location, Thomas street. Will contain seven rooms, bath and sleeping porch. Interior finished in pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath room tile and composition. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans being prepared.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, E. H. Strang, 3741 Elston avenue, Oakland. Location, east 23rd avenue north of East 30th street. Will contain five rooms and bath. Interior finish pine and redwood with some white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BELKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$6,500. Architect, W. H. Hatcliff, Jr., First National Bank Bldg., Berkeley. Owners, Alameda County Home Builders. Location, Spring street. Will contain eight rooms, three baths and sleeping porches. Separate garage. Interior finish pine, white enamel and southern gum. Hardwood floors. Open fire places and furnace heat. Hot water circulating system. Tile bath rooms. Mantels tile and brick. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, W. A. Pryal, 6602 Chabot Road, Oakland. Location, east Harne south of Chabot Road. Will contain six rooms, bath and sleeping porch. Interior finish pine and hardwood with white enamel in the bed rooms. Mantels tile or brick. Bath room tile and composition. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

VISALIA, TULARE CO., CAL.—Residence, 2 story and base, brick and frame, \$8,000. Architect, E. A. Mathewson, Forsythe Bldg., Fresno. Owner, Phil Brown. Will contain eight rooms, two baths and sleeping porches. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Tile bath rooms. Automatic water heater. Exterior faced with pressed brick and cement plaster. Plans being prepared.

FRESNO, FRESNO CO., CAL.—Residence, 2 story and base, frame, \$4,950. Architect, none. Owner, S. L. Allen, 3215 McKenzie street, Fresno. Location, Ardonale Addition. Will contain seven rooms, baths and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors and open fire places. Mantels tile and brick. Automatic water heater. Bath rooms tile. Exterior cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$2,000.

Architect, none. Owner, George Braswell, 3069 Madison street, Fresno. Location, East Fresno. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room tile. Automatic water heater. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$1,500. Architect, none. Owner, S. A. Boltz, 2216 33rd avenue, Sacramento. Location, 1435 Carmelia avenue. Will contain five rooms, bath and sleeping porch. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SCHOOLS

SAN FRANCISCO—School, 3 story and base, brick and steel. Cost not stated. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, City and County of San Francisco. New bids are now being called for on the general construction of the Redding School, southwest corner of Pine and Larkin streets. Bids will be opened on December 24th. Plans can be secured from the Department of Architecture, Temporary City Hall.

LOS ANGELES, CAL.—Schools, 2, 1 story and base. Class C, \$212,550. Architects, Norman F. Marsh and Herbert C. Howard, Broadway Central Bldg., L. A. Owners, City of Los Angeles. The low bidder for the construction of a school group at the corner of 38th and Hooper streets was J. and F. A. Kinson, Story Bldg., at \$212,550. Bids have been taken under advisement.

LOS ANGELES, CAL.—School addition and alteration, brick. Cost not stated. Architect, Architectural Dept. of Board of Education, L. A. Owners, City of Los Angeles. Bids will be received until December 30th for the addition of two stories, 60 by 70 feet, and for extensive alteration to two old buildings. Plans can be had from the secretary of the Board of Education.

LOS ANGELES, CAL.—School, 2 story and base, brick, \$27,300. Architect, Architectural Dept. Board of Education, L. A. Owners, City of Los Angeles. Location, Temple street. Brick construction except stairways, which will be of reinforced concrete. Interior finish pine with maple floors in class rooms. Central heating system. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

SAN FRANCISCO—School retaining wall, reinforced concrete, \$675. Architect, City Dept. of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractor, John Spargo, S. F. Contract price, \$675.

SAN FRANCISCO—School brick work, plumbing and steel. Cost as follows. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, City and County of San Francisco. Contractor, A. Lettich, plumbing, \$6,376; Golden Gate Iron Works, structural

steel, \$21,000, and Charles Hock, masonry, \$23,585.

SEWERS, STREET WORK & WATER SYSTEMS

OAKLAND, CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Oakland. Owners, City of Oakland. Bids will be received until December 30th for grading, curbing with concrete, guttered with concrete gutters three feet wide, and paved with oil macadam; also cement sidewalks five feet wide of Farnam street, from the southeastern line of Fruitvale avenue to the northwestern line of 34th.

FERRELLY, ALAMEDA CO., CAL.—Park pavement. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. The City Council has rejected all bids received for surfacing the San Pablo Park playground. Three bids were received. The work will now be done by the city.

SAN JOSE, SANTA CLARA CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Sealed bids will be received by the Clerk of the Board of Supervisors of Santa Clara County at his office until 11 o'clock a. m. of Monday, January 3rd, 1916, for improvement of Saratoga avenue in Road District No. 5 in said county. Specifications for this work are on file in the office of the Board, to which bidders are referred.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Street and sewer work. Cost not stated. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. At the last meeting of the City Council, the City Engineer was instructed to prepare plans and specifications for work in King, Kirby, Mill and other streets. Bids on this work will be called for on completion of the plans. The City Attorney was also instructed to prepare an ordinance providing for a sewer in Palm street.

MT. DIABLO, CONTRA COSTA CO., CAL.—Tract development, \$500,000. Engineer's name not given. Owners, Eastern capital. New York capitalists have closed a deal for the purchase of a villa site on the slopes of Mt. Diablo, which will be subdivided and sold. The Eastern capital is represented by R. N. Burgess Co., 712 Market street, and Robert Mash, 712 Market street, S. F., who will have charge of the development work and marketing. About \$500,000 is to be expended in grading, road work, sidewalks, gutters, curbs and sewers.

YUBA CITY, YUBA CO., CAL.—Culvert, etc. Cost not stated. Engineer's name not given. Owners, Sutter Drainage District. At the last meeting of the Board of Trustees of the Sutter Drainage District held at the office of Secretary C. C. Kline, Yuba City, the matter of improvements for the district was discussed. The Board has had about three carloads of rock and sand delivered at the Bailey place near the slough where they will construct a new concrete culvert leading the water from one of the large drainage ditches to the slough, the recent ditch not being large enough. The culvert will be about 1,000 feet long.

MADERA, MADERA CO., CAL.—Road improvement. Cost not stated. Engi-

neer, County Surveyor, Madera. Owners, Madera County. At an adjourned meeting of the Board of Supervisors, specifications for the grading of the Cochrum road in the Fifth Supervisorial District were passed, and bids for the construction of the road ordered advertised, the bids to be received on January 10th at 10 a. m. Plans and full information on this work may be had from the County Clerk at Madera.

SAN LUIS OBISPO, SAN LUIS OBISPO CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. A petition has been presented to the County Supervisors by William Jobe and others, asking the Board to lay out, construct and maintain a public road 10 feet wide in Road District No. 13, the proposed road will be about four miles long. The matter will be taken up by the Board at their next meeting.

SEATTLE, WASH.—Tunnel construction, \$30,000. Engineer, City Engineer, Seattle. Owners, City of Seattle. Bids are now being taken for the construction of the proposed concrete tunnel under City Hall Park from 4th avenue and Yesler to the basement of the new court house. Bids will be opened on December 24th by the Board of Public Works. The tunnel will be 200 feet long and 20 feet wide. Further information may be had from the City Engineer's office at Seattle.

TACOMA, WASH.—Earth fill, \$350,000 to \$100,000. Engineer's name not given. Owners, Waterway District No. 1, Tacoma. Commissioners of Waterway District No. 1 are getting ready to carry out the proposed dredging and filling in the Hylohos Creek tide flats for a distance of two miles, and bids will probably be called for the first of the year. Work will involve over 2,000,000 cubic yards of material.

SAN JOSE, SANTA CLARA CO., CAL.—Furnishing lumber. Cost not stated. Engineer, City Engineer, San Jose. Owners, City of San Jose. The City Council at their last meeting opened bids for furnishing 16,000 feet of lumber for the use of the street department. The bids were rejected and it was decided that the lumber will be purchased in the open market.

OAKLAND, CAL.—Street pavement. Cost not stated. Engineer, City Engineer, Oakland. Owners, City of Oakland. After considerable discussion, plans and specifications for the improvement of San Pablo avenue were ordered prepared. General Manager W. F. Ahlberger of the Oakland Traction Co. has agreed to pave a two-foot strip at each edge of the trackway from Stege to Richmond and to the center of the tracks wherever they are now at the side of the road. Further mention will be made of this work when the plans have been completed and approved.

HAYWARD, ALAMEDA CO., CAL.—Street improvement. Cost not stated. Engineer, Town Engineer, Hayward. Owners, Town of Hayward. Bids were opened by the Town Board for the improvement of the intersection of B and Watkins streets, but were laid over until the next meeting for consideration.

PASADENA, LOS ANGELES CO., CAL.—Sewer work. Cost not stated.

Engineer, City Engineer, Pasadena. Owners, City of Pasadena. A meeting between the County Supervisors and the officials of Pasadena, South Pasadena and Alhambra will be held shortly at Alhambra to study plans and specifications for the proposed sewage disposal plant on the new tri-city farm in the Puente hills. The city officials have inspected the present city farm and the recently purchased tract of 600 acres. The Supervisors exhibited a keen interest in the plans outlined by the commissioners and the city trustees of Alhambra and South Pasadena. Chairman Hamilton stated that he believed the question of treating the sewage with the violet rays should be thoroughly investigated by the engineers. The engineers have recommended that the sprinkling filter system be used. This is said to be used with success in various parts of the country. Chairman Hamilton stated that the cities had not made application to the State Board of Health for permission to establish the new farm, as Alhambra has not voted bonds for the completion of its sewer system, and several other matters must be attended to first.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Paving work. Cost not stated. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Bids will be received by the Board of Supervisors up to 10 a. m. of January 3rd, 1916 for furnishing the county with quantities, to be used in paving a portion of the Santa Maria-Guadalupe road in the Fifth Road District, as follows: 4,500 cubic yards coarse crushed rock; 800 cubic yards of screenings, and 1,700 cubic yards fine crushed rock. Certified check for 10 per cent is required. C. A. Hunt is the Clerk.

SANTA BARBARA, SANTA BARBARA CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Bids will be received by the Board of Supervisors up to 10 a. m. of January 3rd, 1916 for furnishing all labor and machinery, etc., for grading and paving a portion of the Santa Maria-Guadalupe road in the Fifth Road District. Specifications are on file at the office of the Board. Certified check for 10 per cent is required. C. A. Hunt is the Clerk.

PASADENA, LOS ANGELES CO., CAL.—Lighting system. Cost not stated. Engineer, City Engineer, Pasadena. Owners, City of Pasadena. Bids will be received by the City Clerk up to 9 a. m. of December 25th, 1915, for reconstructing the lighting system in Colorado street between Pasadena and Los Robles avenues, the work requiring 1 new cast iron posts, 54 new shafts, 11,337 feet of copper wire, 4 transformers, etc. Certified check or bond of 10 per cent is required. Herman Dyer is the City Clerk.

PASADENA, LOS ANGELES CO., CAL.—Lighting system. Cost not stated. Engineer, City Engineer, Pasadena. Owners, City of Pasadena. Bids will be received by the City Clerk up to 9 a. m. of December 25th, 1915, for reconstructing the lighting system on Raymond avenue, between Payton avenue and Chestnut street, the work requiring 17 new cast iron posts, 31 cast iron

shafts, 300 feet of No. 6 copper wire, etc. Certified check or bond for 10 per cent is required. Herman Dyer is the City Clerk.

SANTA ANA, ORANGE CO., CAL.—Ornamental lighting system. Cost not stated. Engineer, Col. S. H. Finley, Register Bldg., Santa Ana. Owners, City of Santa Ana. Bids will be received by the citizens ornamental light committee at the office of Col. S. H. Finley in the Register Bldg. up to 3 p. m. December 27th, 1915, for the installation of ornamental lights. The lights are to be the single unit, 400-watt condenser Mazda lamps, and the bidders must submit figures for both laying the conduit and furnishing the posts and lamps. Plans and specifications were prepared by Col. Finley.

SANTA MONICA, LOS ANGELES CO., CAL.—Street paving, \$100,000. Engineer, City Engineer, Santa Monica. Owners, City of Santa Monica. Bids for the paving of Ocean avenue from Colorado street to Santa Monica Canyon will be advertised as soon as the engineer can prepare specifications. Of this 5,800 feet will be of asphalt and the remaining 2,00 feet of bituminous paving.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—Light and power distributing system. Cost not stated. Engineer, County Surveyor, San Bernardino. Owners, San Bernardino. Bids will be received by the Board of Supervisors up to 10 a. m. of December 27th, 1915, for constructing, operating and maintaining an electric pole and wire system for the distribution of electricity for light, heat and power on all public roads and highways in the County of San Bernardino outside of incorporated cities wherein the Pacific Light and Power Co. has no lines. Certified check or cash for 10 per cent must accompany each bid. L. R. Patty is the City Clerk.

PASADENA, LOS ANGELES CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Pasadena. Owners, City of Pasadena. Four bids for the improvement of Hillside Terrace in San Rafael Heights were opened by the commission and referred to Commissioner Allin for his recommendations. There is a difference of \$5,000 between the lowest and highest bids. The bids, according to the certified checks for 10 per cent of the total, were: Andrew Holloway, \$5,000; J. E. Haddock, \$6,500; T. C. Breitenstein, \$7,300, and Peter L. Ferry, \$10,000. Further mention will be made of this work when a contract is let.

MARTINEZ, CONTRA COSTA CO., CAL.—Water system. Cost not stated. Engineer, City Engineer Alan C. Brown, Martinez. Owners, City of Martinez. City Engineer Alan C. Brown has been instructed by the Board of City Trustees to engage a water expert to gather data for the proposed municipal water system. The proposition made by W. S. Withers, the rancher who recently uncovered a series of wells on his Concord property, was favorably discussed. Further mention will be made of this work when the plans are complete.

SAN FRANCISCO—Sewer construction, \$42,000. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Tib-

bits-Pacific Co. presented the lowest figure for the construction of sewers in the South Bay District and will probably be awarded the contract.

Contracts Awarded

BERKELEY, ALAMEDA CO., CAL.—Concrete curbs and gutters. Cost not stated. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractors, Schnoor Bros., 5905 Claremont avenue, Oakland. Contract price not stated.

SACRAMENTO, CAL.—Sewer work. Cost not stated. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractor, F. E. Frey, 2526 Q street, Sacramento, and C. D. Vincent, 193 Montecito avenue, Oakland. Contract prices not stated.

ONTARIO, SAN BERNARDINO CO., CAL.—Street paving. Cost as follows. Engineer, City Engineer, Ontario. Owners, City of Ontario. Contractor, James L. Frazer, Long Beach. Contract price, \$21,631.95 and \$22,832.13.

SAN JOSE, SANTA CLARA CO., CAL.—Street pavement. Cost not stated. Engineer, City Engineer, San Jose. Owners, City of San Jose. Contractor, W. M. Painter, San Jose. Contract price not stated.

SAN MATEO, SAN MATEO CO., CAL.—Street improvement, \$6,828.24. Engineer, City Engineer, San Mateo. Owners, City of San Mateo. Contractors, Clark & Henery Construction Co., Ochsner Bldg., Sacramento. Contract price, \$6,828.24.

RICHMOND, CONTRA COSTA CO., CAL.—Excavating and pavement. Cost not stated. Engineer, none. Owners, Southern Pacific Co., Flood Bldg., S. F. Contractors, Ransome-Crummey Co., First Savings Bank Bldg., Oakland. Contract price not stated.

BAKERSFIELD, KERN CO., CAL.—Highway construction. Cost as follows. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractor, J. L. Hooper, Bakersfield, Sec. 3, Caliente-Kernville road, \$2,691.40. Brashear-Burns Co., 420 F. W. Van Nuys Bldg., L. A., \$2,714, Sec. 1-A, Fakersfield-McKittrick road.

LOS ANGELES, CAL.—Road improvement, 19,945. Engineer, County Surveyor, Los Angeles. Owners, Los Angeles County. Contractor, James L. Frazer, Long Beach. Contract price, \$19,945.

ONTARIO, SAN BERNARDINO CO., CAL.—Road improvement, \$22,832.13. Engineer, County Surveyor, San Bernardino. Owners, San Bernardino County. Contractor, James L. Frazer, Long Beach. Contract price, \$22,832.13.

LOS ANGELES, CAL.—Street im-

E. R. Hoerchner

Attorney-at-Law

Phone Garfield 2856

Phelan Bldg.

San Francisco

improvement, \$29,877.91. Engineer, City Engineer, Los Angeles. Owners, City of Los Angeles. Contractor, George H. Oswald, L. A. Contract price, \$29,877.91.

STORES AND OFFICES

SAN FRANCISCO—Stores and lofts, 2 story, mezzanine and base. Class C construction, \$15,000. Architects, Fabre & Pearwald, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location, Mission street, covering an area of 25 by 127 feet. Will contain one store and lofts. Mezzanine floor 5 feet high. Interior finish pine and hardwood. Patent store fronts and elevator service. Exterior faced with marble and cement plaster. Plans complete and figures to be called for shortly.

SAN FRANCISCO—Stores, 1 story and base, brick and steel, \$10,000. Architect, W. H. Weeks, 75 Post street, S. F. Owners, St. Francis Realty Co. Location, Geary and Mason streets. Will contain a number of small stores. Interior finish pine and hardwood. Patent store fronts and marble bases. Exterior faced with pressed brick. Plans complete and figures being taken.

SAN FRANCISCO—Sales rooms and factory, 2 story and base, brick. Cost not stated. Architect, Herbert Maggs, 125 Alpine street, S. F. Owner, Mrs. Helen Otto, leased to Hermann Safe Co. Location, west Fremont south of Howard, covering an area of 92 by 137½ feet. Will contain office and factory. Interior finish pine and hardwood. Metal window sash and frames. Elevator service. Exterior faced with pressed brick. Plans being revised and new figures to be called.

BIGGS, BUTTE CO., CAL.—Publishing office, 1 story, reinforced concrete. Cost not stated. Architect, none. Owner, T. F. Loughran, Biggs. Will cover an area of 24 by 36 feet. Bids being taken by the owner at the office of the Sunshine Valley News, Biggs, Cal., until January 1st.

MARTINEZ, CONTRA COSTA CO., CAL.—Stores, 1 story and base, brick and reinforced concrete. Cost not stated. Architect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, L. M. Lasell. Location, Smith and Castro streets, covering an area of 108 by 108 feet. Interior finish pine. Cement floor. Patent store fronts. Exterior faced with cement plaster. Plans being prepared.

THEATRES

SAN FRANCISCO—Theatre, 1 story and base. Class A construction, \$60,000. Architect, Bernard J. Joseph, New Call Bldg., S. F. Owners, Royal Theatre Co. Location, north California west of Polk. Complete steel frame, reinforced concrete and brick walls. Will seat 1400 people. Interior finish pine and ornamental plaster. Complete systems of heating and ventilating. Exterior faced with pressed brick and cement plaster. Special electric work. Plans complete and contract to be awarded shortly.

Letterheads, (bond) \$2.50 M. Envelopes & cards, \$1.75 M. Statements and billheads, \$2.00 M. Cut prices. CANINE & PETERSON, 560 Mission St.

New Stucco Plaster Is On Market.

Celement Products Co. Well Financed
Opens Branches in all Large Pacific
Coast Cities.

One of the most important developments in late years in building construction is the evolution of a new exterior stucco plaster, known as "Celement," which has just been placed on the market in all the large cities of the Pacific Coast, by the Celement Production Company.

The Company back of this new product is said to be extensively financed and to have made very exhaustive and elaborate tests regarding this new material, before its placing on the market commercially.

Some very strong and logical claims are made for this cement which, if true, will go far in solving the question of securing a durable, non-checking, stainless and watertight stucco with soft, pleasing colorings and artistic finish.

The principal claim for "Celement" is its remarkable plasticity, which works as freely under the trowel as lime mortar; this is not caused by the addition to, or an excess of lime in the cement. On the contrary, an analysis of Celement shows that it contains less lime than most Portland Cement; and tests show that if lime is added to Celement in any considerable quantities it destroys the strength of the plaster.

The plasticity is obtained from the unusual fineness of Celement and a peculiar colloidal silica employed in the process of manufacture.

Another claim they make for Celement which is at variance with the workings of ordinary Portland Cement is that Celement is highly hygroscopic.

For exterior plastering, where it is impractical to keep fresh work covered or wet, this product is said to be highly efficient. It holds moisture tenaciously, permitting the plaster to dry out very slowly, insuring a perfect set or crystallization even in highly exposed surfaces.

Other claims are for toughness or non-checking, freedom from stains and streaks caused by lime leaching out at the surface, and a much superior bond on any masonry foundation or key on metal lath.

Wherever Portland Cement is specified for the plastering of exterior surfaces, walls, pergolas, columns, statuary, garden seats and decorations, retaining walls, interior panels, and wainscoting, for application upon substantial backing of wood, metal lath, brick or concrete, it is claimed by the men back of this new product that it may be used to advantage, and some very convincing tests are advanced to support the claims.

This new product, however, must be mixed and applied in accordance with definite specifications which the Company supplies and it is said that where it is so prepared, it may be applied to any substantial foundation, with the

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assurance that it will outlast any Portland Cement. Its architectural possibilities are said to be unlimited. The surface may be treated in various ways and it can be made any desired color to harmonize with an color scheme.

Architects, contractors, plasterers and owners who have had an opportunity to observe the actual results obtained by the use of "Celement" are said to be wonderfully enthusiastic about its possibilities.

It has distinct advantages over the ordinary plasters, which may be summed up in the fact that its weight is less, it is more easily applied, will not stain, check or crack; has wonderful tensile strength, is subservient to heat and cold, has exceptional insulation qualities, and insures greater permanency of construction.

The Celement Production Company, of 622 Van Nuys Bldg., Los Angeles, are marketing this product through local distributors, Howard Company of Oakland, W. S. McLean, San Francisco; Union Lime Company of Los Angeles, are taking care of California business

OFFICIAL PROPOSALS.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 396—Proposals for Bronze Letters and Numerals, Structural Bronze Work, Cutting-Off Machine, Lathe, Bolts, Rivets, Nuts, Washers, Lag Screws, Lead Sleeves, Cable Terminals, Electric Cable and Wire.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. December 29, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 396) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

NOTICE INVITING SEALED BIDS FOR KITCHEN EQUIPMENT FOR THE NORWALK STATE HOSPITAL.

PURSUANT to resolution directing this notice, the Board of Managers of the Norwalk State Hospital hereby invite bids for said Hospital Kitchen equipment, said sealed bids to be delivered to W. G. McMillin, State Purchasing Agent, at Room 37, Capitol Building, Sacramento, California, on or before **twelve o'clock noon on Monday, December 27th, 1915**.

Specifications may be procured from the said Purchasing Agent, Room 37, Capitol Building, upon application. All bids must be accompanied by a certified check payable to the State of California, for an amount which shall not be less than ten per cent of the aggregate of the bid, which amount shall be forfeited to the State of California, in case the bidder depositing the same does not within ten days after written notice that the contract has been awarded to him, enter into a contract with said State Purchasing Agent for the furnishing of said equipment, the faithful performance of which shall be secured by an undertaking in such penal sum as the State Purchasing Agent shall require, with sureties satisfactory to the said Purchasing Agent and subject to the approval of the State Board of Control.

W. G. McMILLIN,
State Purchasing Agent.

PROPOSALS FOR TELEGRAPH SUPPLIES.

TELEGRAPH SUPPLIES, ETC.—Office of the Quartermaster, Fort Winfield Scott, Cal.—Sealed proposals will be received here until **11 a. m. December 23, 1915**, for furnishing 12 telescope brackets, 120 galvanized crossarm braces, 60 crossarms, 100 guy wire clamps, 500 galvanized insulators, 300 lag screws, 300 machine bolts, 35 white cedar poles, 1,000 pole posts, 50 gallons wood preservative, 200 oak pine, 12 sockets, 20 pounds solder, 10 pounds electric tape, 15 pounds Amazon friction tape, 30 turnbuckles, 100 steel wire thimbles, 14,000 feet No. 6 solid conductor wire, 2,000 feet No. 10 do and 2,000 feet guy wire. For further information address JOHN T. GRAY, captain, coast artillery corps, acting quartermaster.

PROPOSALS.

BUILDING REPAIRS—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be received at this office until **10 a. m. December 27, 1915**, and

then opened, for enlarging drafting room and new skylight in the U. S. post office at Olympia, Wash., in accordance with drawings Nos. 76 and 77 and the specification, copies of which may be had at this office or from the custodian of the Olympia Building, JAMES A. WETMORE, acting supervising architect.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock, noon, Tuesday, December 28, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of a building to be known as "Yard Toilet," Industrial Home for Adult Blind, Oakland, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Ten (\$10.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F. McClure, State Engineer, Sacramento, California, and plainly marked on the envelope, "Proposal for Yard Toilet," Industrial Home for Adult Blind, Oakland, California.

(Signed) W. F. McCLURE,
State Engineer.

NOTICE TO CONTRACTORS.

SEALED BIDS will be received by W. F. McClure, State Engineer, Forum Building, Sacramento, California, up to and including **12 o'clock, noon, Friday, December 31st, 1915**, said bids then and there to be publicly opened and read for furnishing all plant, materials and labor, and doing the work required for the complete construction and erection of buildings to be known as "Domestic Science and Temporary Class Room Buildings," San Jose State Normal School, San Jose, California, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento, California.

Such bids will be received for the Entire Work, and must be submitted on forms prepared and furnished by the State Department of Engineering. Cash, a bidder's bond, or a certified check in the sum of ten per centum (10%) of the amount of the bid must accompany each bid.

A deposit of Fifteen (\$15.00) Dollars will be required on plans and specifications, the deposit to be returned immediately on the return of the plans and specifications to the State Department of Engineering, at Sacramento, California, in good condition.

The State Department of Engineering reserves the right to reject any and all bids and to waive any informality in any bid received.

All bids must be addressed to W. F.

McClure, State Engineer, Sacramento, California, and plainly marked on the envelope, "Proposal for 'Domestic Science and Temporary Class Room Buildings,' San Jose State Normal School, San Jose, California."

(Signed) W. F. McCLURE,
State Engineer.

PROPOSALS FOR BUILDING.

BUILDING—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be opened at this office at **3 p. m. December 29, 1915**, for the extension, remodeling, etc., of the United States post office and court house at Missoula, Mont. Extension is of four stories and basement, stone faced, fireproof construction and composition roof and includes the addition of a fourth story to present building. Drawings and specifications may be obtained from the custodian at Missoula, Mont., or at this office, in the discretion of the supervising architect, JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR SKYLIGHT.

SKYLIGHT—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be received at this office until **10 a. m. December 27, 1915**, and then opened, for enlarging drafting room and new skylight in the U. S. post office at Olympia, Wash., in accordance with drawings Nos. 76 and 77 and the specification, copies of which may be had at this office or from the custodian of the Olympia building, JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR ELEVATOR.

ELEVATOR—Treasury Department, Office of the Supervising Architect, Washington, D. C.—Sealed proposals will be opened in this office at **3 p. m. December 23, 1915**, for the installation, complete, of an electric passenger elevator in each of the following buildings: The United States post office and court house at Pendleton, Ore.; the United States post office and court house at Brattleboro, Vt., and the United States post office and court house at Ardmore, Okla., in accordance with the drawings and specification, copies of which may be had at this office, in the discretion of the supervising architect, JAMES A. WETMORE, acting supervising architect.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 393—Proposals for Motor-Driven Centrifugal Pumps, Cast Iron Bollards, Pinions, Steel Cable, Cold Shuts, Aluminum Pig, Stocks and Dies, Ramers, Twist Drills, Wrenches, Rasps, Whistle Valves, Steam Whistles, Brass Hubs, Potato Mashers, Red Fiber Packing, Alcohol, Muratic Acid, Litharge, Japan Drier, Lard Oil, Fish Oil, Turpentine, Red Lead, White Lead, Orange Shellac, Varnish and Paints.—Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until **10:30 a. m. December 13, 1915**, at which time they will be opened in public, for furnishing the above mentioned articles. Blanks and general information relating to this circular (No. 393) may be obtained from this office or the offices of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. F. C. BOGGS, major, corps of engineers, U. S. army, general purchasing officer.

ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

THEATRE—1 story and base. Class A construction, \$60,000. San Francisco. Architect, Bernard J. Joseph, New Call Bldg., S. F. Owners, Royal Theatre Co. Location, north California west of Polk. Complete steel frame, reinforced concrete and brick walls. Will seat 1,100 people. Interior finish pine and ornamental plaster. Complete systems of heating and venting. Exterior faced with pressed brick and cement plaster. Special electric work. Plans complete and contract to be awarded shortly.

POWER IMPROVEMENT—\$4,000,000. San Francisco. Engineer, Engineering Department of Great Western Power Co., Shreve Bldg., S. F. Owners, Great Western Power Co. Plans for immediate expenditure of \$4,000,000 for improvements have been submitted to the Railroad Commission by the newly organized Great Western Power Co., incorporated for \$60,000,000 to take over the properties of the twelve companies comprising the Great Western Power system operating in San Francisco and ten other counties. Mortimer Fleischacker, president of the company, said \$10,000,000 would be spent in the next ten years. The plans submitted include the following: Two new motor generator sets in Oakland for the Key Route system to cost \$150,000. A hundred and fifty-six mile transmission line from its plant in Plumas County to Oakland, \$1,000,000. A sixth unit for the Plumas County plant, \$500,000. A third cable under San Francisco Bay, \$100,000. New transmission lines in Oakland, Sacramento and in the Sacramento Valley.

RESIDENCES—2, 2 story and base, frame, \$5,000 each. San Francisco. Architects, Fahre & Bearwald, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location, Forest Hill. Each house will contain eight rooms, two baths and sleeping porches. Separate garages will be erected. Interiors will be finished in pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile or brick. Bath rooms tile. Automatic water heaters. Exterior covered with rustic and cement plaster on metal lath. Plans being prepared.

RESIDENCES—2, 2 story and base, frame, \$3,000 each. San Francisco. Architect, none. Owner, Thomas Hamill, 5535 Geary street, S. F. Location, west 19th avenue north of Balboa. Each house will contain seven rooms, bath and sleeping porch. Interiors finished in pine, white enamel and southern gum. Hardwood floors and open fire places. Mantels tile and brick. Tile bath rooms. Automatic water heaters. Exterior covered with shiplap and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, none. Owners, Conservative Building and Investment Co., Phelan Bldg., S. F. Location, southeast Alton and 5th avenue. Will contain eight rooms, two baths and sleeping porch. Interior finished in pine, southern gum and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, 2,800. San Francisco. Architect, none. Owners, Elmer and Mable Clark, 574 26th avenue, S. F. Location, east 25th avenue north of Anza. Will contain six rooms, bath and sleeping porch. Basement garage. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Tile and composition in bath room. Automatic water heater. Exterior covered with rustic and brick veneer. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. San Francisco. Architect, none. Owner, H. P. Otten, 555 25th avenue, S. F. Location, west 25th avenue south of Geary. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile and composition in bath room. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, brick and frame, \$20,000. San Francisco. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owner, Frank B. King. Location, northeast corner of Jackson and Laurel streets. Will contain a large number of rooms besides three baths and sleeping porches. Basement garage. Interior finish pine, white enamel and hardwood. Hardwood and tile floors. Tile wainscot in bath rooms. Central heating system and hot water circulating system. Open fire places and tile and brick mantels. Exterior faced with pressed brick and cement plaster. Plans being prepared.

RESIDENCE ALTERATION—2 story and base, frame, \$2,000. San Francisco. Architect, Charles G. Frye, 20 Montgomery street, S. F. Owner, B. K. Malcomb. Location, 34th avenue. Work will include new plumbing, painting, plastering, electric work, carpentry and interior trim. Exterior will be faced with cement plaster. Plans complete and figures being taken.

RESIDENCE—2 story and base, frame, \$5,000. San Francisco. Architect, J. W. Dulliver, Royal Insurance Bldg., S. F. Owners, Allen Co., 128 Sutter street, S. F. Location, Forest

Hill. Will contain eight rooms, two baths and sleeping porch. Separate garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Open fire places and furnace heat. Tile and brick mantels. Automatic water heater. Bath rooms tile and composition. Exterior faced with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—3 story and base, frame, \$18,000. San Francisco. Architect, O. R. Thayer, 20 Montgomery street, S. F. Owner's name withheld. Location, northwest corner Dolores and 16th streets. Will contain a total of fourteen suites arranged for two, three and four room apartments and a basement garage accommodating five machines. Interiors finished in pine, hardwood and red gum. Hardwood floors. Steam heat and hot water system. Bath rooms monolithic floors. Marble and tile wainscot in entrance lobby. Exterior covered with brick veneer and cement plaster and English half timber. Plans being prepared.

APARTMENT HOUSE ALTERATION—3 story and base, frame, \$6,000. San Francisco. Architects, O'Brien Bros, 210 Montgomery street, S. F. Owner, Mr. Gallagher. Location, south Hayes near Webster. Will consist of altering three flats into six modern three-room apartments. Will require new interior trim, pine and hardwood, plumbing, painting, electric work, plastering and exterior work. Plans complete and figures being taken.

CITY HALL FURNITURE—Cost not stated. San Francisco. Architects, Bakewell & Brown, 251 Kearny street, S. F. Owners, City and County of San Francisco. Bids will be opened by the Board of Public Works on December 24th for furnishing special furniture for the Supervisors' chambers in the new City Hall.

FIRE HOUSE—3 story and base, Class C construction, \$60,000. San Francisco. Architects, Ward & Blohm, Alaska Commercial Bldg., S. F. Owners, City and County of San Francisco. Final approval of plans and specifications for this building have been given and the Board of Public Works has been instructed to advertise for bids. The building will be known as Engine House No. 1, and will be erected on the north side of Howard street between Second and Third streets.

WAREHOUSE AND OFFICES—5 story and base, reinforced concrete. Cost not stated. San Francisco. Architect, George Wagner, 110 Townsend street, G. Albert Lansburgh, advisory architect, 709 Mission street. Owner, L. A. Norris, leased to M. J. Brandenstein Co. Location, Third near Townsend, covering an area of 137 by 160 feet. Fireproof construction, metal window sash and frames and fireproof doors. Special conveying machinery. Steam heat, oil burning plant and elec-

vator equipment. Special trim in office portion. Exterior faced with cement plaster. Plans being prepared.

ASSEMBLING PLANT—3 story and base, reinforced concrete, \$200,000, San Francisco. Architect, Engineering Department Ford Motor Car Co., Detroit, Mich. Owners, Ford Motor Car Co. Location, Treat avenue and 21st street, covering an area of 126 by 139 feet. Fireproof construction, concrete walls, floors and roof slabs. Interior pine and rough. Elevator service. Metal window sash and frames and fireproof doors. Exterior faced with cement plaster. Plans complete and to be forwarded to San Francisco at once.

FACTORY—2 story and base, reinforced concrete, \$2,000, San Francisco. Architect, none. Owner, A. Haus, 425 Potrero street, S. F. Location, rear of 125 Potrero. Concrete floor. No interior trim. Designed for factory for ornamental iron work. Exterior cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2, 2 story and base, frame, \$5,000 each. San Francisco. Architect, none. Owner, O. E. Anderson, 248 18th avenue, S. F. Location, east 10th avenue south of Balboa, covering an area of 25 by 66 feet. Will contain two modern flats of five and six rooms. Basement garages. Interior finished in pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$5,500. San Francisco. Architect, none. Owner, Louis H. Lee, 125 Carl street, S. F. Location, west 9th avenue north of Anza. Will contain two flats of five and six rooms, bath and sleeping porch. Basement garage. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile in bath rooms. Automatic water heater. Exterior covered with rustic and cement plaster on metal lath. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, Michael Cain, 1285 21st avenue, S. F. Location, west 21st avenue north of Irving. Will contain two flats of five and six rooms. Interiors finished in pine and white enamel. Hardwood floors, open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FLATS AND STORE—3 story and base, frame, \$4,000. San Francisco. Architect, none. Owner, Thomas Kelly, 2905 Bush street. Location, southeast Clement and 15th avenue. Will contain one store and three small flats. Interior finish pine throughout. Open fire places and tile mantels. Wall beds. Hardwood floors. Exterior covered with shiplap and cement plaster. Plans complete and work to be done by Day Labor.

GARAGE—2 story and base. Class A construction, \$25,000. San Francisco. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owner's name withheld. Location, Down Town District. Will cover an area of 60 by 120 feet. Complete steel frame, steel roof

trusses and concrete floor. Interior finish pine and rough. Special gasoline tanks. Metal window sash and frames. Exterior faced with cement plaster. Plans being prepared and will be ready for figures in ten days.

SALES ROOM AND GARAGE—1 story and base, brick, \$6,000. San Francisco. Architects, M. C. Bugbee & Co., 619 Washington street, S. F. Owner, John A. McRae. Location, south Golden Gate east of Larkin. Interior finish pine. Some tile floors. Patent store fronts and marble bases. Exterior faced with pressed brick. Plans being prepared.

BRONZE LAMP STANDARDS—Cost not stated. San Francisco. Architect, Supervising Architect, Washington, D. C. Owners, United State Government. Bids will be opened on January 5th for furnishing ornamental bronze lamp standards for the United States Customs House. Plans can be secured from the office of the Supervising Architect or from the Custodian of the building.

HOSPITAL EXCAVATING AND FOUNDATION WORK—\$15,637. San Francisco. Architects, Herman Barth, 12 Geary street, and John Reid, Jr., First National Bank Bldg., S. F. Owners, City and County of San Francisco. O. Monson presented the low bid for excavating and foundation work at the San Francisco Hospital at \$15,637, and will be awarded the contract. A complete list of the bids opened appears under the heading of San Francisco in this issue.

STORES AND LOFTS—2 story, mezzanine and base. Class C construction. San Francisco, \$18,000. Architects, Fabre & Bearwald, Merchants' National Bank Bldg., S. F. Owner's name withheld. Location, Mission street, covering an area of 25 by 127 feet. Will contain one store and lofts. Mezzanine floor 8 feet in height. Interior finish pine and hardwood. Patent store fronts and elevator service. Exterior faced with marble and cement plaster. Plans complete and figures to be called for shortly.

STORES—1 story and base, brick and steel, \$10,000. San Francisco. Architect, W. H. Weeks, 75 Post street, S. F. Owners, St. Francis Realty Co. Location, Geary and Mason streets. Will contain a number of small stores. Interior finish pine and hardwood. Patent store fronts and marble bases. Exterior faced with pressed brick. Plans complete and figures being called.

SCHOOL—3 story and base, brick and steel. Cost not stated. San Francisco. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, City and County of San Francisco. New bids are now being called for on the general construction of the Redding School, southwest corner of Pine and Larkin streets. Bids will be opened on December 24th. Plans can be secured from the Department of Architecture, Temporary City Hall.

Contracts Awarded.

HOSPITAL STEEL—\$60,400 and \$40,975. San Francisco. Architects, Hermann Barth, 12 Geary street, and John Reid, Jr., First National Bank Bldg., S. F. Owners, City and County of San Francisco. Contractors, Dyer Bros., S. F. southeast wing, \$60,400 and northeast wing, \$40,975.

SCHOOL RETAINING WALL—Reinforced concrete, \$675. San Francisco. Architect, City Dept. of Architecture, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractor, John Spargo, S. F. Contract price, \$675.

SCHOOL BRICK WORK, PLUMBING AND STEEL—Cost as follows. San Francisco. Architect, Frederick H. Meyer, Bankers' Investment Bldg., S. F. Owners, City and County of San Francisco. Contractor, A. Lettich, plumbing, \$6,376; Golden Gate Iron Works, structural steel, \$24,000 and Charles Hock, masonry, \$23,585.

SEWER CONSTRUCTION—\$42,000. San Francisco. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Tibbitts-Pacific Co. presented the lowest figure for the construction of sewers in the South Bay District and will probably be awarded the contract.

City Bids Opened.

O. Monson Low For Work at San Francisco Hospital and Golden Gate Iron Works Awarded Steel Work on School.

At the regular Wednesday meeting of the San Francisco Board of Public Works bids were opened for the steel work on the Redding School; furnishing draperies for the Council Chamber and Mayor's office in the new City Hall; for excavating and foundation work for the northeast wing of the San Francisco Hospital and for sewer construction in the South Bay District.

Steel Work, Redding School.

Western Iron Works...	\$24,189	\$19,589
Central Iron Works....	24,400	19,570
Ralston Iron Works....	24,273	19,797
Golden Gate Iron Works	24,000	19,500
Schrader Iron Works...	24,400	19,900

Contract awarded to Golden Gate Iron Works.

Draperies, Council Chambers and Mayor's Office.

D. N. & E. Walter Co.	\$3,306.15	\$3,582.00
W. & J. Sloan.....	3,439.00	3,599.00
Schluter & Beecher.	3,860.00	4,150.00
Rafael Weill Co.....	4,879.25	5,329.25

Excavating and Foundation Work, S. F. Hospital.

A. P. Brady.....	\$21,972
Collman & Collman.....	18,370
Construction & Engineering Co.	21,800
C. L. Wold Co.....	16,296
Foster-Vogt Co.....	17,350
McSheehy Bros.	20,975
John Spargo	18,200
E. S. Mumford.....	21,762
W. A. Newsum.....	19,097
O. Monson	15,637

Tibbitts-Pacific Co. submitted the lowest figure for the construction of sewers in the South Bay District at \$35,000. Nine other firms figured the work, the second low being E. J. Arvedi at approximately \$42,000.

OAKLAND AND ALAMEDA COUNTY

STREET IMPROVEMENT—Cost not stated. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. Bids will be received until December 30th for grading, curbing with concrete, guttered with concrete gutters three feet wide, and paved with

oil macadam; also cement sidewalks five feet wide, Parnum street from the southeastern line of Fruitvale avenue to the northwestern line of 31th.

PAIRK PAVEMENT—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. The City Council rejected all bids received for surfacing the San Pablo Park playground. Three bids were received. The work will now be done by the city.

STREET PAVEMENT—Cost not stated. Oakland, Cal. Engineer, City Engineer, Oakland. Owners, City of Oakland. After considerable discussion, plans and specifications for the improvement of San Pablo avenue were ordered prepared. General Manager W. F. Ahlberger of the Oakland Traction Co. has agreed to pave a two-foot strip at each edge of the trackway from Stege to Richmond and to the center of the tracks wherever they are now at the side of the road. Further mention will be made of this work when the plans have been completed and approved.

STREET IMPROVEMENT—Cost not stated. Hayward, Alameda Co., Cal. Engineer, Town Engineer, Hayward. Owner, Town of Hayward. Bids were opened by the Town Board for the improvement of the intersection of B and Watkins streets, but were laid over until the next meeting for consideration.

RESIDENCE—1½ story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, George H. Hollidge, 5926 Taft avenue, Oakland. Location, east Broadway south of Prospect. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel with some elm panels. Hardwood floors. Open fire place and furnace heat. Tile bath rooms. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,200. Oakland, Cal. Architect, none. Owner, Edward Grandin, 1533 Prince street, Berkeley. Location, north 56th street west Adeline. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior rustic and cement plaster. Plans complete and work by Day Labor.

RESIDENCE—2 story and base, frame, \$3,700. Piedmont, Alameda Co., Cal. Architect, none. Owner, R. E. Stubbe, 1108 Grand avenue, Piedmont. Location, Piedmont Cable Tract. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors. Open fire places and furnace heat. Mantels tile and brick. Bath rooms tile and composition floors. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,500. Oakland, Cal. Architect, Merrill Newsom, 1718 Broadway, Oakland. Owner, E. L. Higgins. Location, Thomas street. Will contain seven rooms, bath and sleeping porch. Interior finished in pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath room tile and composition. Automatic water heater. Exterior covered with cement plaster on metal lath. Plans being prepared.

RESIDENCE—1 story and base, frame, \$2,000. Oakland, Cal. Architect, none. Owner, E. H. Strang, 3741 Elston avenue, Oakland. Location, east 23rd avenue north of East 30th street. Will contain five rooms and bath. Interior finish pine and redwood with some white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$6,500. Berkeley, Alameda Co., Cal. Architect, W. H. Ratcliff, Jr., First National Bank Bldg., Berkeley. Owners, Alameda County Home Builders. Location, Spring street. Will contain eight rooms, three baths and sleeping porches. Separate garage. Interior finish pine, white enamel and southern gum. Hardwood floors. Open fire places and furnace heat. Hot water circulating system. Tile bath rooms. Mantels tile and brick. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, W. A. Pryal, 6602 Chabot Road, Oakland. Location, east Harne south of Chabot Road. Will contain six rooms, bath and sleeping porch. Interior finish pine and hardwood with

white enamel in the bed rooms. Furnace heat and open fire places. Mantels tile or brick. Bath rooms tile and composition. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—2 story and base, frame, \$7,500. Berkeley, Alameda Co., Cal. Architect, W. H. Ratcliff, Jr., First National Bank Bldg., Berkeley. Owners, Alameda County Home Builders. Location, Benvenue avenue. Will contain a number of two, three and four room suites with wall beds and private baths. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat and hot water system. Bath rooms composition. Exterior covered with rustic and cement plaster. Plans complete and figures being taken.

APARTMENT HOUSE—2 story and base, frame, \$4,500. Berkeley, Alameda Co., Cal. Architect, none. Owners, F. R. Penke Co., 2127 University avenue, Berkeley. Location, Hopkins east of The Alameda. Will contain eight room suites. Interior finished in pine and red gum with hardwood floors. Furnace heat. Open fire places and tile mantels. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and figures being taken.

FACTORY PLANT—1, 3 story and 2, 1 story, reinforced concrete, \$200,000 to \$240,000. Oakland, Cal. Architect's name not given. Owners, Chevrolet Co., represented by Norman De Vaux, 1600 Van Ness avenue, S. F. Location, Foothill Boulevard. Plans have been prepared in the east and will be forwarded to San Francisco shortly when complete details of construction can be given. A local supervising architect will be appointed.

FLOUR MILL—1 and 4 story, reinforced concrete. Cost not stated. Oakland, Cal. Engineer's name not given. Owners, Albers Bros. Milling Co., 343 Pine street, S. F. Location, Key Route Hill. Details of the buildings have not been made public. The selection of an architect will be announced within a week or ten days, when further mention will be made of the work.

HOSPITAL DAIRY BUILDING—Frame, \$5,400. Berkeley, Alameda Co., Cal. Architect, State Architect George H. McDougall, Sacramento. Owners, State of California. L. G. Bergren & Son, Hearst Bldg., S. F., were the low bidders on this work and will be awarded the contract. A complete list of the bids appears under the heading of Oakland and Alameda County in this issue.

Contracts Awarded

CONCRETE CURBS AND GUTTERS—Cost not stated. Berkeley, Alameda Co., Cal. Engineer, City Engineer, Berkeley. Owners, City of Berkeley. Contractors, Schnoor Bros., 5903 Claremont avenue, Oakland. Contract price not stated.

GARAGE—1 story and base, \$8,000. Oakland, Cal. Architect, none. Owner, John Incha. Contractor, C. A. Seoville, 5216 Claremont avenue, Oakland. Contract price, \$8,000. Contractor now taking subletters.

GARAGE—1 story and base, brick, \$8,318. Oakland, Cal. Architect, none. Owner, C. P. Kiel, San Leandro. Con-

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tractors, Latmer & Muller, 470 Boulevard Way, Oakland. Contract price, \$8,318. Contractor is now taking sub-figures.

Alameda Exchange In New Location.

Fine New Quarters For Alameda County Builders' Exchange Opened at 1515 Franklin Street.

The Builders' Exchange of Alameda County has moved to their new location at 1515 Franklin St., Oakland. The new quarters have just been completed for them by the Hawley Investment Co., and needless to say, Secretary Davis has seen that everything that would add to the comfort and convenience of the members of the Exchange has been installed in the new quarters.

An extensive membership campaign is to be launched at once, and before building starts up in the Spring, it is confidently expected that the membership will be doubled. The "Builder" wishes them much prosperity in their new location.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

TRACT DEVELOPMENT—\$500,000. Mt. Diablo, Contra Costa Co., Cal. Engineer's name not given. Owners, Eastern capital. New York capitalists have closed a deal for the purchase of a villa site on the slopes of Mt. Diablo, which will be subdivided and sold. The Eastern capital is represented by R. N. Burgess Co., 742 Market street, and Robert Mash, 712 Market street, S. F., who will have charge of the development work and marketing. About \$500,000 is to be expended in grading, road work, sidewalks, gutters, curbs and sewers.

BRIDGE—Reinforced concrete, \$1,250. Sonoma, Sonoma Co., Cal. Engineers, Leonard & Day, Rialto Bldg., S. F. Owners, City of Sonoma. At the last meeting of the City Council plans and specifications were ordered prepared for the construction of a bridge on Washington street. Further mention will be made of this work when the plans are complete.

RAILROAD WORK—Cost not stated. Martinez, Contra Costa Co., Cal. Engineer's name not given. Owners, represented by Judge Clifford McClellan. Judge Clifford McClellan of San Francisco has finished traversing the route of a proposed electric car line to connect this city with Concord, and according to a statement issued by him the line will soon be in course of construction. While Mr. McClellan, who is a capitalist, asserts that the line will not be owned or operated by the Oakland and Antioch, he admits that men connected with that company may be with him in the enterprise and that the proposed line will connect with the present electric road at Concord, and passengers taken to San Francisco and Sacramento from there. Further mention will be made of this work.

WATER SYSTEM—Cost not stated. Martinez, Contra Costa Co., Cal. En-

gineer, Sily Engineer Alan C. Brown, Martinez. Owners, City of Martinez. City Engineer E. C. Brown has been instructed by the Board of City Trustees to engage a water expert to gather data for the proposed municipal water system. The proposition made by W. S. Withers, the rancher who recently uncovered a series of wells on his Concord property, was favorably discussed. Further mention will be made of this work when the plans are complete.

RESORT HOTEL—1 and 2 story and base, frame, \$35,000. Agua Caliente, Sonoma Co., Cal. Architects, O'Brien Bros., 240 Montgomery street, S. F. Owners, Agua Caliente Hot Springs Hotel Co. There will be one two-story hotel and two bath houses, each of one story. The design is in the Mission style. Interior will be finished in pine and redwood with some hardwood floors. Steam heat and a hot water circulating system will be installed. Exterior will be covered with cement plaster on metal lath. Plans are complete and figures will be called for in about ten days.

SAN JOSE AND THE SANTA CLARA VALLEY

ROAD IMPROVEMENT—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, County Surveyor, San Jose. Owners, Santa Clara County. Sealed bids will be received by the Clerk of the Board of Supervisors of Santa Clara County at his office until 11 o'clock a. m. of Monday, January 3, 1916, for improvement of Saratoga avenue, in Road District No. 5 in said county. Specifications for this work are on file in the office of the Board, to which bidders are referred.

STREET AND SEWER WORK—Cost not stated. Santa Cruz, Santa Cruz Co., Cal. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. At the last meeting of the City Council, the City Engineer was instructed to prepare plans and specifications for work on King, Kirby, Mill and other streets. Bids on this work will be called for on completion of the plans. The City Attorney was also instructed to prepare an ordinance providing for a sewer in Palm street.

FURNISHING LUMBER—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, City Engineer, San Jose. Owners, City of San Jose. The City Council at their last meeting opened bids furnishing 16,000 feet of lumber for the use of the street department. The bids were rejected and it was decided that the lumber will be purchased in the open market.

BRIDGE—Reinforced concrete. Cost not stated. Santa Cruz, Santa Cruz Co., Cal. Engineer, County Surveyor, Santa Cruz. Owners, Santa Cruz County. Bids will be opened on January 3rd for the construction of a bridge across Branciforte Creek; just below the junction with Granite Creek.

Contracts Awarded.

STREET PAVEMENT—Cost not stated. San Jose, Santa Clara Co., Cal. Engineer, City Engineer, San Jose. Owners, City of San Jose. Contractor, W. M. Painter, San Jose. Contract price not stated.

STREET IMPROVEMENT—\$6,828.24. San Mateo, San Mateo Co., Cal. Engi-

neer, City Engineer, San Mateo. Owners, City of San Mateo. Contractors, Clark & Henery Construction Co., Ochsner Bldg., Sacramento. Contract price, \$6,828.24.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

IRRIGATION FILL—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, Chief Engineer Herrmann, Modesto. Owners, Modesto Irrigation District. Bids will be received until January 4th for the construction of an earthen fill along the line of lateral No. 1 of the Modesto Irrigation District on the site of the present fill.

ROAD IMPROVEMENT—Cost not stated. Madera, Madera Co., Cal. Engineer, County Surveyor, Madera. Owners, Madera County. At an adjourned meeting of the Board of Supervisors, specifications for the grading of the Cochrum road in the Fifth Supervisorial District were passed, and bids for the construction of the road ordered advertised. The bids will be received on January 10th at 10 a. m. Plans and full information on this work may be had from the County Clerk at Madera.

RESIDENCE—2 story and base, brick and frame, \$8,000. Visalia, Tulare Co., Cal. Architect, E. A. Mathewson, Forsythe Bldg., Fresno. Owner, Phil Brown. Will contain eight rooms, two baths and sleeping porches. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Tile bath rooms. Automatic water heater. Exterior faced with pressed brick and cement plaster. Plans being prepared.

RESIDENCE—2 story and base, frame, \$4,950. Fresno, Fresno Co., Cal. Architect, none. Owner, S. L. Allen, 3215 McKenzie street, Fresno. Location, Ardenale Addition. Will contain seven rooms, baths and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors and open fire places. Mantels tile and brick. Automatic water heater. Bath rooms tile. Exterior cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$2,000. Fresno, Fresno Co., Cal. Architect, none. Owner, George Brasswell, 3069 Madison street, Fresno. Location, East Fresno. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Bath room tile. Automatic water heater. Exterior covered with cement plaster and rustic. Plans complete and work to be done by Day Labor.

BRIDGES—Reinforced concrete. Cost not stated. Merced, Merced Co., Cal. Engineer, County Surveyor, Merced. Owners, Merced County. Bids will be received on January 4th for the construction of reinforced concrete bridges in Road District No. 4 as follows: Over Quinto Creek on the Cottonwood School House road, to be known as Bridge No. 41; over the lower canal on the Cottonwood road, to be known as Bridge No. 42; also for the construction of a reinforced concrete bridge on the State Highway about one

mile south of Dubach Station in Road District No. 3, to be known as Bridge No. 13.

LODGE HALL AND OFFICES—2 story and base, brick, \$20,000. Tolare, Tulare Co., Cal. Architect, Ernest J. Kump. Rowell Bldg., Fresno. Owner, E. J. Ryan. Contractor, James J. Daley. Fresno. Contract price, \$20,000.

HOTEL ADDITION—2 story and base, brick. Cost not stated. Fresno, Fresno Co., Cal. Architects, Swartz & Swartz, Howell Bldg., Fresno. Owners, Brix Estate. Location, J street. The proposed addition will be made to a two-story brick store building. The new portion will contain in the neighborhood of 83 rooms and a number of public and private baths. Interior finish pine. Steam heat and a hot water system. Exterior faced with pressed brick. Plans being prepared.

LATERALS AND DIOPS—Concrete. Cost as follows. Modesto, Stanislaus Co., Cal. Engineer, Chief Engineer Herrmann, Modesto. Owners, Modesto Irrigation District. At the last meeting of the board of directors of the Modesto Irrigation District bids were opened for constructing four concrete structures, drops, in laterals Nos. 3 and 4. Of nine bids, the lowest was that of Geo. A. Bos, Hearst Bldg., S. F., \$7,481.50, and the second lowest was the Ross Construction Co., Forum Bldg., Sacramento, at \$7,658. These two bids were retained, and Bos was given until the 15th to file proper bonds and workmen's compensation insurance. The second bid is retained as a protection to the district in case Bos should fail to meet the requirements. The other bids for the work were: M. Blumenkranz, \$8,404.24; Tieslaus Bros., \$8,912.50; March Bros. & Gardner, \$8,260.75; W. B. Westerly, \$8,234.75; H. J. Ulrich, \$8,665.25; Barrett & Hilp, \$8,735, and Thurston Co., \$8,290.

Contracts Awarded

BRIDGES—2, reinforced concrete, \$5,232. Modesto, Stanislaus Co., Cal. Engineer, County Surveyor, Modesto. Owners, Stanislaus County. Contractors, Moore & Tabor, San Francisco. Contract price, \$5,232.

BRIDGES—2, reinforced concrete, \$6,427 and \$1,550. Merced, Merced Co., Cal. Engineer, County Surveyor, Merced. Owners, Merced County. Contractors, Angel & Bibler, Dos Palos. Contract price, \$6,427. West Side Construction Co., Dos Palos. Contract price, \$1,550.

BRIDGE—Timber construction, \$484. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractors, Currie & Duigan, Bakersfield. Contract price, \$484.

EXCAVATING AND PAVEMENT—Cost not stated. Richmond, Contra Costa Co., Cal. Engineer, none. Owners, Southern Pacific Co., Flood Bldg., S. F. Contractors, Ransome-Crummey Co., First Savings Bank Bldg., Oakland. Contract price not stated.

HIGHWAY CONSTRUCTION—Cost as follows. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractor, J. L. Hooper, Bakersfield, Sec. 2, Caliente-Kernville road, \$2,691.40. Brashear-Burns Co., 420 F. W. Van Nuys Bldg., L. A., \$27,914. Sec. 1-A, Bakersfield-McKittick road.

COURT HOUSE ALTERATIONS—Cost not stated. Merced, Merced Co., Cal. Architect's name not given. Owners, Merced County. Bids will be received on January 4th for placing of hardwood flooring in the lower corridor of the Court House, and also for the remodeling of the upper floor.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

IRRIGATION PROJECT—Cost not stated. Sacramento, Cal. Engineer's name not given. Owners, Consumes Water District. A plan for the formation of an irrigation district, which will bring under intensive cultivation some 10,000 acres of land in Sacramento County, has been made known through the Consumes water contest, which is now pending in the United States Land Office. The plans of the Consumes Irrigation Co. to store water at Becker's Ford and other places along the Consumes River and by means of ditches to carry it to Sacramento County will be carried out.

CULVERT, ETC.—Cost not stated. Yuba City, Yuba Co., Cal. Engineer's name not given. Owners, Sutter Drainage District. At the last meeting of the Board of Trustees of the Sutter Drainage District held at the office of Secretary C. C. Kline, Yuba City, the matter of improvements for the district were discussed. The board has had about three carloads of rock and sand delivered at the Bailey place near the slough where they will construct a new concrete culvert leading the water from one of the large drainage ditches to the slough, the present ditch not being large enough. The culvert will be about 1,000 feet long.

BRIDGE—Reinforced concrete, \$8,000. San Andreas, Calaveras Co., Cal. Engineer, County Surveyor, San Andreas. Owners, Calaveras County. Two sets of plans were received by the County Board of Supervisors at their last meeting for a reinforced concrete bridge over the Calaveras River between San Andreas and North Branch. Jenkins & Wells, Sacramento, "Gilder Concrete bridge." Estimated cost, \$8,000. Commonwealth Engineering Co., San Francisco, "Arch Reinforced Concrete bridge." Estimated cost, \$9,500. The plans and specifications received will be forwarded to the Highway Commission for approval or rejection. Further mention will be made of this work when the Highway Commission takes action on the plans.

BRIDGE—Reinforced concrete and steel. Cost not stated. Auburn, Placer Co., Cal. Engineer, County Surveyor, Auburn. Owners, Placer County. The Supervisors have agreed to pay one-third of the cost of constructing a bridge across Bear River on the Dutch Flat and Yuba Bet road, providing the County of Nevada and the Pacific Gas and Electric Co. pay the other two-thirds. The proposition of the counties and the electric company each paying a third of the cost was put up to the Placer Supervisors about a month ago. The Supervisors spent much time in seeking rights of way along the line of the proposed State Highway Interlateral leading from Auburn to Roseville. The Board has appropriated \$500 to be used

in repaving the road leading from Auburn to the American River where the bridge crosses.

BRIDGES—Steel and reinforced concrete. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Plans and specifications having been completed, the Clerk of the Supervisors has been instructed to advertise for bids until January 4th at 10 a. m. for the construction of a steel and concrete bridge across Brileykard Creek on the Red Bluff and Corning road. Further information may be had from the County Clerk at Red Bluff.

RILEY TRAIL LINE EXTENSION—Cost not stated. Chico, Butte Co., Cal. Engineer, Engineering Dept. of Western Pacific Co., Owners, Western Pacific Co. According to word received from this city, a branch line from Oroville to Chico will be constructed as soon as the Western Pacific Company emerges from the present receivership, according to statements made by General Manager C. M. Levy. Funds for this work are available. Other proposed ten miles San Francisco to San Jose, along the peninsula, 49 miles, Oakland to Sacramento through Alameda, Contra Costa, Solano, Yolo and Sacramento counties, 35 miles. Point Richmond to a point on Oakland and Sacramento branch, 27 miles; Martinez to a point on the same branch, 9 miles. Stockton to Fresno, 115 miles. Spanish Creek to Big Meadows, 30 miles; Beckwith Pass to Truckee River, 26 miles.

RESIDENCE—1 story and base, frame, \$1,500. Sacramento, Cal. Architect, none. Owner, S. A. Boltz, 2216, 23rd avenue, Sacramento. Location, 446 Carmella avenue. Will contain five rooms, bath and sleeping porch. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

HOSPITAL ADDITION—2 story and base, frame and plaster, \$15,990. Eureka, Humboldt Co., Cal. Architect, E. J. Burke, Eureka. Owners, Humboldt County. Louis Halvorsen, Eureka, presented the lowest figure for the new addition to the County Hospital and will be awarded the contract. A complete list of the bids received will be found under the heading of Sacramento, Stockton and Northern California.

Contracts Awarded

DITCH—Cost not stated. Yreka, Siskiyou Co., Cal. Engineer's name not given. Owners, Butte Valley Land Co., Macdonald. Contractors, Chapman & Co., Klamath Falls, Ore. Ten miles of ditch. Cost not stated.

SEWER WORK—Cost not stated. Sacramento, Cal. Engineer, City Engineer, Sacramento. Owners, City of Sacramento. Contractor, F. E. Frey, 254 Q street, Sacramento, and C. D. Vincent, 197 Montecito avenue, Oakland. Contract prices not stated.

BRIDGES—1, timber construction. Cost not stated. Red Bluff, Tehama Co., Cal. Engineer, County Surveyor, Red Bluff. Owners, Tehama County. Contractor, Stevens, Red Bluff, two bridges and Dohn & Lanning, Red Bluff, two bridges. Contract prices not stated.

BRIDGE—Timber, \$4,095. Auburn, Placer Co., Cal. Engineer, County Sur-

voyer, Auburn. Owners, Placer County. Contractor, H. C. Nolte, Colfax. Contract price, \$5,095.

LOS ANGELES & SOUTHERN CALIFORNIA.

ROAD CONSTRUCTION—Cost not stated. San Luis Obispo, San Luis Obispo Co., Cal. Engineer, County Surveyor, San Luis Obispo. Owners, San Luis Obispo County. A petition has been presented to the County Supervisors by William Johe and others, asking the Board to lay out, construct and maintain a public road 40 feet wide in Road District No. 13. The proposed road will be about four miles long. The matter will be taken up by the Board at their next meeting.

SEWER WORK—Cost not stated. Pasadena, Los Angeles Co., Cal. Engineer, City Engineer, Pasadena. Owners, City of Pasadena. A meeting between the County Supervisors and the officials of Pasadena, South Pasadena and Alhambra will be held shortly at Alhambra to study plans and specifications for the proposed sewage disposal plant on the new tri-city farm in the Puente hills. The city officials have inspected the present city farm and the recently purchased tract of 600 acres. The Supervisors exhibited a keen interest in the plans outlined by the commissioners and the city trustees of Alhambra and South Pasadena. Chairman Hamilton stated that he believed the question of treating the sewage with the violet rays should be thoroughly investigated by the engineers. The engineers have recommended that the sprinkling filter system be used. This is said to be used with success in various parts of the country. Chairman Hamilton stated today that the cities had not made application to the State Board of Health for permission to establish the new farm, as Alhambra has not voted bonds for the completion of its sewer system and several other matters must be attended to first.

PAVING WORK—Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Bids will be received by the Board of Supervisors up to 10 a. m. of January 5, 1916, for furnishing the county with quantities, to be used in paving a portion of the Santa Marie-Guadalupe road in the Fifth Road District, as follows: 4,500 cubic yards of coarse crushed rock, 800 cubic yards of screenings, 1,700 cubic yards of fine crushed rock. Certified check for 10 per cent is required. C. A. Hunt is the Clerk.

ROAD IMPROVEMENT—Cost not stated. Santa Barbara, Santa Barbara Co., Cal. Engineer, County Surveyor, Santa Barbara. Owners, Santa Barbara County. Bids will be received by the Board of Supervisors up to 10 a. m. of January 5, 1916, for furnishing all labor and machinery, etc., for grading the Santa Maria-Guadalupe road in the Fifth Road District. Specifications are on file at the office of the Board. Certified check for 10 per cent is required. C. A. Hunt is the Clerk.

LIGHTING SYSTEM—Cost not stated. Pasadena, Los Angeles Co., Cal. Engineer, City Engineer, Pasadena. Owners, City of Pasadena. Bids will

be received by the City Clerk up to 9 a. m. of December 28, 1915, for the reconstruction of the lighting system in Colorado street between Pasadena and Los Robles avenues, the work requiring 6 new cast iron posts, 54 new shafts, 11,337 feet of copper wire, 4 transformers, etc. Certified check or bond of 10 per cent is required. Heman Dyer is the City Clerk.

LIGHTING SYSTEM—Cost not stated. Pasadena, Los Angeles Co., Cal. Engineer, City Engineer, Pasadena. Owners, City of Pasadena. Bids will be received by the City Clerk up to 9 a. m. of December 28, 1915, for the reconstruction of the lighting system on Raymond avenue between Payton avenue and Chestnut street, the work requiring 17 new cast iron posts, 31 cast iron shafts, 910 feet of No. 6 copper wire, etc. Certified check or bond for 10 per cent is required. Heman Dyer is the City Clerk.

ORNAMENTAL LIGHTING SYSTEM—Cost not stated. Santa Ana, Orange Co., Cal. Engineer, Col. S. H. Finley, Register Bldg., Santa Ana. Owners, City of Santa Ana. Bids will be received by the citizens ornamental lighting committee at the office of Col. S. H. Finley up to 3 p. m. December 27, 1915, for the installation of ornamental lights. The lights are to be the single unit, 400-candlepower Mazda lamps, and the bidders must submit figures for both laying the conduit and furnishing the posts and lamps. Plans and specifications were prepared by Col. Finley.

STREET PAVING—\$100,000. Santa Monica, Los Angeles Co., Cal. Engineer, City Engineer, Santa Monica. Owners, City of Santa Monica. Bids for the paving of Ocean avenue from Colorado street to Santa Monica Canyon will be advertised as soon as the engineer can prepare specifications. Of this 5,500 feet will be of asphalt and the remaining 2,900 feet of bitulithic paving.

LIGHT AND POWER DISTRIBUTING SYSTEM—Cost not stated. San Bernardino, San Bernardino Co., Cal. Engineer, County Surveyor, San Bernardino. Owners, San Bernardino County. Bids will be received by the Board of Supervisors up to 10 a. m. December 27, 1915, for constructing, operating and maintaining an electric pole and wire system for the distribution of electricity for light, heat and power on all public roads and highways in the county of San Bernardino outside of incorporated cities whereon the Pacific Light and Power Co. has no lines. Certified check or cash for 10 per cent must accompany each bid. L. R. Patty is the County Clerk.

STREET IMPROVEMENT—Cost not stated. Pasadena, Los Angeles Co., Cal. Engineer, City Engineer, Pasadena. Owners, City of Pasadena. Four bids for the improvement of Hillside Terrace in San Rafael Heights were opened by the commission and referred to Commissioner Allin for his recommendation. There is a difference of \$5,000 between the lowest and highest bids. The bids, according to the certified checks for 10 per cent of the total, were: Andrew Holloway, \$5,000; J. E. Haddock, \$6,500; T. C. Breitenstein, \$7,500 and Peter L. Ferry, \$10,000. Fur-

ther mention will be made of this work when a contract is let.

PACKING HOUSES—2, 1 story, frame and concrete, \$40,000. Ontario, San Bernardino Co., Cal. Architect's name not given. Owners, San Antonio Growers' Association. The San Antonio Growers' Association has decided to erect two packing houses and dry yards. Funds will be raised by a pro rata acreage assessment. One will be erected in Ontario and the other at Chino. Judge C. M. Whitney of Ontario is the secretary of the board of trustees.

PACKING PLANT—2 story, hollow tile construction. Cost not stated. Uplands, Orange Co., Cal. Architects, Foss Designing and Building Co., 100 East Colorado street, L. A. Owners, California Fruit Products Co. Will cover an area of 60 by 80 feet. No interior finish. Exterior faced with cement plaster. Plans are being prepared and the building will probably be erected by the Foss Designing and Building Co.

WAREHOUSE—4 story and base. Class C. Cost not stated. Los Angeles, Cal. Architects, Morgan, Walls & Morgan, Van Nuy Bldg., L. A. Owner, Los Angeles Soap Co. Location Banning street, covering an area of 100 by 100 feet. Pine and rough interior finish. Electric freight elevator, automatic sprinkler system throughout the building. Metal window sash and frames and fireproof doors. Exterior faced with selected common brick. Plans complete and figures being taken.

AUTOMOBILE SCHOOL AND GARAGE—1 and 2 story and base, brick. Cost not stated. Los Angeles, Cal. Architects, Morgan, Walls & Morgan, Van Nuy Bldg., L. A. Owner, Mrs. S. H. Van Nuy, leased to National Automobile School. Location, Figueroa south of 8th, covering an area of 60 by 155 feet. Will contain offices, shop rooms, garage and assembly hall on first floor and class rooms above. Interior finish pine. Cement floors. Metal window sash and frames. Exterior faced with pressed brick. Plans complete and figures being taken.

HOSPITAL LAUNDRY BUILDING—1 story and base, reinforced concrete, \$14,672. Norwalk, Los Angeles Co., Cal. Architect, State Architect George B. McDougall, Sacramento. Owners, State of California. L. B. Burgen & Son, Hearst Bldg., S. F., presented the low bid for the construction of the laundry building at the Norwalk State Hospital and will be awarded the contract. A complete list of the bids received will be found under the heading of Los Angeles and Southern California.

SCHOOLS—3, 1 story and base, Class C, \$212,580. Los Angeles, Cal. Architects, Norman F. Marsh and Herbert C. Howard, Broadway Central Bldg., L. A. Owners, City of Los Angeles. The low bidder for the construction of a school group at the corner of 38th and Hooper streets was J. and F. Atkinson, Story Bldg., at \$212,580. Bids have been taken under advisement.

SCHOOL ADDITION AND ALTERATION, brick. Cost not stated. Los Angeles, Cal. Architect, Architectural Dept. Board of Education, L. A. Owners, City of Los Angeles. Bids will be received until December 30th for the addition of two stories, 60 by 70 feet,

and for extensive alteration to two old buildings. Plans can be had from the secretary of the Board of Education.

SCHOOL—2 story and base, brick, \$27,500. Los Angeles, Cal. Architect, Architectural Dept. Board of Education, L. A. Owners, City of Los Angeles. Location, Temple street. Brick construction except stairways, which will be of reinforced concrete. Interior finish pine with maple floors in class rooms. Central heating system. Exterior faced with pressed brick. Plans being prepared.

Contracts Awarded.

STREET PAVING—Cost as follows. Ontario, San Bernardino Co., Cal. Engineer, City Engineer, Ontario. Owners, City of Ontario. Contractor, James L. Frazer, Long Beach. Contract price, \$21,631.95 and \$22,832.13.

STORAGE BUILDING—1 story and base, reinforced concrete, \$21,300. Camarillo, Ventura Co., Cal. Architect, Alfred P. Priest, Fay Bldg., L. A. Owners, J. L. Lewis & Son. Contractor, J. A. Crook, Byrne Bldg., L. A. Contract price, \$21,500.

ROAD IMPROVEMENT—\$19,915. Los Angeles, Cal. Engineer, County Surveyor, Los Angeles. Owners, Los Angeles County. Contractor, James L. Frazer, Long Beach. Contract price, \$19,915.

ROAD IMPROVEMENT—\$22,882.13. Ontario, San Bernardino Co., Cal. Engineer, County Surveyor, San Bernardino. Owners, San Bernardino County. Contractor, James L. Frazer, Long Beach. Contract price, \$22,882.13.

STREET IMPROVEMENT—\$29,877.91. Los Angeles, Cal. Engineer, City Engineer, Los Angeles. Owners, City of Los Angeles. Contractor, George H. Oswald, L. A. Contract price, \$29,877.91.

S. F. Firm Low On Norwalk State Job.

L. G. Hurgren & Son Will Probably be Awarded Contract for Laundry Building Near Los Angeles.

(By Special Wire.)

SACRAMENTO, CAL., Dec. 13th, 1915.—Seven sets of figures were submitted today for the construction of a reinforced concrete laundry building to be erected at the Norwalk State Hospital in Los Angeles County. L. G. Hurgren & Son, Hearst Bldg., San Francisco, submitted the low bid at \$14,672 and will probably be awarded the contract. Following is a complete list of the bids received:

Laundry Building, Norwalk.

L. G. Hurgren & Son.....	\$14,672
A. Daniels	16,750
John Monk & Co.....	16,917
John Smith & Co.....	17,968
Willis Brent Co.....	18,200
Cresmer Mfg. Co.....	18,454
Lepper & Laisey.....	18,984

PORTLAND AND OREGON

PAPER MILL—2 story and base, reinforced concrete, \$500,000. Oregon City, Ore. Architect's name not given. Owners, Hawley Pulp & Paper Co. The special committee appointed to investigate the proposition to sell a piece of property to the Hawley Pulp and

Paper Co., filed their report which favored the action and the Council in turn passed an ordinance permitting the sale. The action of the Council will result in the erection of a \$500,000 plant by the company. The proposed structure will be of reinforced concrete construction and will be modern in every respect, according to W. P. Hawley, president and manager of the company.

Contracts Awarded.

REINFORCED RAILROAD TUNNEL—\$100,000. Portland, Ore. Engineer, Engineering Dept. of O. R. & N. Co. Owners, Oregon Washington Railroad & Navigation Co. Contractors, Guthrie-McBougall Co., Pittock Bldg., Portland. Contract price, \$100,000.

SEATTLE AND WASHINGTON

TUNNEL CONSTRUCTION—\$30,000. Seattle, Wash. Engineer, City Engineer, Seattle. Owners, City of Seattle. Bids are now being taken for the construction of the proposed tunnel under City Hall Park from 4th avenue and Yesler to the basement of the new court house. Bids will be opened on December 21th by the Board of Public Works. The tunnel will be 300 feet long and 20 feet wide. Further information may be had from the City Engineer's office at Seattle.

EARTH FILL—\$350,000 to \$100,000. Tacoma, Wash. Engineer's name not given. Owners, Waterway District No. 1, Tacoma. Commissioners of Waterway District No. 1 are getting ready to carry out the proposed dredging and filling in the Hylebos Creek tide flats for a distance of two miles, and bids will probably be called for the first of the year. Work will involve over 2,000,000 cubic yards of material.

POWER DEVELOPMENT—\$10,000,000. Olympia, Wash. Engineer's name not given. Owners, Hugh L. Copper Co. The granting of a permit to the Hugh L. Copper Co. to overflow the land of the Pend Oreille River for a distance of seven miles on both sides in the "Z" Canyon, coupled with a permit secured a year ago for similar rights and another pending before the land commissioners at Olympia, means the immediate starting of construction on a huge dam about a mile north of Blueside, Wash. The grant now asked extends from Blueside to Ione, Wash. Surveys are now being made by the company's engineers of the proposed power site. The hydro-chemical and power project will involve an expenditure of \$10,000,000.

APARTMENT HOUSE—5 story and base, reinforced concrete and brick, \$35,000. Seattle, Wash. Architects, Lawton & Moldenhour, Alaska Bldg., Seattle. Owner, G. E. Sherwood, 2622 Alki avenue, Seattle. Location, Howard and Melrose. Will cover a considerable ground area and will be arranged for a number of two, three and four room apartments. Interior finish pine and hardwood with some white enamel. Hardwood floors. Steam heat oil burning system, hot water system and vacuum cleaning. Wall beds both rooms tile and composition. Marble and tile wainscot in entrance vestibule. Exterior faced with pressed brick. Plans complete and figures being taken

HOTEL—12 story and base, reinforced concrete, \$100,000. Seattle, Wash. Architect, A. Warren Gould, American Bank Bldg., Seattle. Owners, Arctic Club. Location, corner of 3rd avenue and Cherry street, covering an area of 100 by 120 feet. A portion of this building will be occupied by the Arctic Club and offices, but by far the largest part of the building will be given over to the hotel. Interior will be handsomely finished. Steam heat, oil burning plant, elevator service and hot water system. Bath rooms tile. Exterior faced with terra cotta. Plans complete and figures to be called for shortly.

RAILWAY SURVEY IN COLOMBIA.

[Consul Isaac A. Manning, Barranquilla, Nov. 8.]

The technical commission of engineers in charge of the preliminary survey of the route of the railway from Cúcuta to the Magdalena River, in Colombia, have begun work on the line between Ocaña and Tamalameque. It is thought the survey will be finished by the end of July.—Commerce Reports.

American Packing Complimented.

A Chicago company making stapling wire has sent to the Bureau of Foreign and Domestic Commerce a letter received from one of its foreign customers in which special praise is bestowed upon the firm's method of packing its goods. The letter adds: "We find it difficult to impress upon some of our other American friends the necessity of special care in packing for export shipment."

OBSERVATORY ON SENTINEL DOME.

The observatory to be placed on Sentinel Dome, in the Yosemite, is now finished. It is twenty-four feet high and has been built at an elevation of 8,000 feet. During the summer, forest rangers will use it to watch for fires. During the spring, a second observatory will be built on Mt. Hoffman, at an elevation of 10,900 feet.

CABINET MAKERS.

Hunter, R. J., expert cabinet maker, 2150 Telegraph Ave., dealer in mahogany, antique and all kinds of furniture repairs and polishing. Telephone Oakland 3725.

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Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

SAN FRANCISCO COUNTY.

No.	Owner	Contractor	Am't.
3553	Chippellone	Devenenzi	9600
3554	de Uriste	Michel	2318
3555	O'Donnell	Segurson	3500
3556	Hamill	Hamill	3000
3557	Same	Same	4000
3558	Homestead Bldg.	Grahn	1500
3559	Same	Same	1500
3560	Comyns	Nygren	1000
3561	Marwith	Marwith	1250
3562	Lasky	Stone	400
3563	Frank	Frank	1750
3564	McDonough	Costello	1400
3565	Rosenberg	Olson	1000
3566	Chong Co.	Salomon	400
3567	City & Co of S. F.	Dyer	60400
3568	Same	Same	40975
3569	Wibel	Nilsson	2250
3570	Nilsson	Nilsson	2000
3571	Nilsson	Nilsson	2000
3572	Kearney	Conlan	6265
3573	Pacific Motor	Elvin	400
3574	Combe	Hunseith	400
3575	Halling	Halling	500
3576	Cain	Cain	300
3577	Lee	Lee	3500
3578	Vallon	Madden	125
3579	Gionni	De Martini	2950
3580	Clark	Clark	2800
3581	Allen	Allen	5000
3582	Kelly	Kelly	4600
3583	Otten	Otten	2500
3584	Conserv Bldg.	Owner	5000
3585	Standard Oil	Ralston	7570
3586	Moran	Huhson	790
3587	Rochfort	Barrett	6750
3588	Torre	Torre	6000
3589	Schroeder	Trost	3400
3590	Goger	Koenig	2100
3591	Carlson	Pearson	1500
3592	Anderson	Anderson	5000
3593	Olson	Spence	4800
3595	Caruso	Bonaccorso	1250
3596	Strandlund	Strandlund	1800
3597	Prevost	Cleese	1850
3598	Curllett	Rist	850
3599	Rampone	Ponsero	500
3600	Shell Oil	Gutleben	2350
3601	Hunter	Rounds	1865
3602	de Uriste	W'n Furnace	4913
3603	Siegele	Arnold	1805
3604	Levey	Westerlund	9585
3605	Koenig	Koenig	400
3606	Nilsson	Lindberg	1850
3607	City & Co. of S. F.	Lettich	6376
3608	Same	G. G. Iron	24000
3609	Same	Hock	23585
3610	Cath Archb.	Smith	735
3611	Gerard	Central Iron	9700

FRAME FLATS

(3553) N FILBERT 30 W Gough W 30
x105. All work except gas fixtures,
window shades and finish hardware
for three-story frame flats.

Owner.....Luigi Chippellone and Er-
nesto Vigo, 1860 Lombard,
San Francisco.

Architect...None.
Contractor...Devenenzi Bros. & Co.,
1069 Union, S. F.

Filed Dec. 11, '15. Dated Dec. 6, '15.

Frame up and roof on.....\$2400
Brown coated.....2400
Completed and accepted.....2400

Usual 35 days.....2400

TOTAL COST, \$3600

Bond, \$4800. Sureties, L. Peirano and
Domenico Devenenzi. Limit, 90 days.
Forfeit, none. Plans and specifications
filed.

IRON WORK

(3554) NE VAN NESS AVE AND Mc-
Allister 129x109. Iron work for four-

story and basement reinforced con-
crete Class "C" apartments.

Owner.....Mrs. Hannah de Uriste.
Architect...J. C. Hladik, Monadnock
Bldg., San Francisco.

Contractor...Joseph Michel and W. A.
Pfeffer, Co-partners, 42 Otis
San Francisco.

Filed Dec. 11, '15. Dated Dec. 10, '15.

On 1st of each month.....75%

Usual 35 days.....25%

TOTAL COST, \$2318

Bond, none. Limit, as rapidly as other
work will permit. Forfeit, \$20. Plans
and specifications filed.

FRAME FLATS

(3555) N TWENTY-FIFTH 25 W

Hampshire. All work for two-story
and basement frame (4) flats.

Owner.....Emma R. O'Donnell, 1372
Fulton, San Francisco.

Architect...None.

Contractor...Segurson Bros., 308 Guer-
rero, San Francisco.

Filed Dec. 11, '15. Dated Nov. 20, '15.

Frame up and braced.....1/4

Brown coated.....1/4

Completed and accepted.....1/4

Usual 35 days.....1/4

TOTAL COST, \$3500

Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

FRAME DWELLING

(3556) W NINETEENTH AVE 175 N

Balboa. Two-story and basement
frame dwelling.

Owner.....Thos. Hamill, 5535 Geary,
San Francisco.

Architect...None.

Day's work.....COST, \$3000

FRAME DWELLING

(3557) W NINETEENTH AVE 200 N

Balboa. Two-story and basement
frame dwelling.

Owner.....Thos. Hamill, 5535 Geary,
San Francisco.

Architect...None.

Day's work.....COST, \$3000

FRAME DWELLING

(3558) S HEARST 150 E Hamburg.

One-story and basement frame dwlg.

Owner.....Homestead Realty Co., Mut-
ual Bank Bldg., S. F.

Architect...None.

Contractor...Wm. H. Grahn, 2840 Bry-
ant, San Francisco.

COST, \$1500

FRAME DWELLING

(3559) E SAN BRUNO 213-6 S Paul.

One-story and basement frame dwlg.

Owner.....Homestead Realty Co., Mut-
ual Bank Bldg., S. F.

Architect...None.

Contractor...Wm. H. Grahn, 2840 Bry-
ant, San Francisco.

COST, \$1500

FRAME DWELLING

(3560) S SIXTEENTH 30 W Guerrero.

One-story frame shop.

Owner.....Thos. Hamill, 5535 Geary,
San Francisco.

Architect...None.

Day's work.....COST, \$1500

FRAME SHOP

(3561) S SIXTEENTH 30 W Guerrero.

One-story frame shop.

Owner.....Comyns & Nygren, 427
Valencia, San Francisco.

Architect...John J. Foley, 46 Kearny,
San Francisco.

Day's work.....COST, \$1000

FRAME DWELLING

(3561) NO. 454 NAPLES. One and one

half-story and basement frame dwlg.

Owner.....Constance Marwith, 587
Naples, San Francisco.

Architect...None.

Day's work.....COST, \$1250

GARAGE

(3562) N HILL 75 E Castro. Concrete

garage.

Owner.....M. C. Lasky, 584 Hill, S. F.

Architect...F. B. Wood, 2237 Steiner,
San Francisco.

Contractor...E. W. Stone, 122 Eagle,
San Francisco.

COST, \$400

FRAME DWELLING

(3563) NW PARIS 250 SW Brazil. One

story and basement frame dwlg.

Owner.....A. W. Frank, 4611 Mission,
San Francisco.

Architect...None.

Day's work.....COST, \$1750

FRAME DWELLING

(3564) N ARMY 50 E York. One and

one-half-story and basement frame

dwelling.

Owner.....M. McDonough, 90 St.
Mary's Ave. and L. Costello

93 College Ave., S. F.

Architect...None.

Day's work.....COST, \$1400

ERECT FENCE, ETC.

(3565) EVANS AND QUINT. Erect

fence and hay barn.

Owner.....C. Rosenberg, 1512 Evans,
San Francisco.

Architect...None.

Contractor...Chas. Olson, 1235 Evans,
S. F.

COST, \$1000

ALTERATIONS

(3566) NO. 1531-A GEARY. Concrete

floor and carpenter work for grill.

Owner.....Chong Co.

Architect...None.

Contractor...L. Salomon, 1303 Ellis,
San Francisco.

COST, \$400

STRUCTURAL STEEL

(3567) E POTRERO AVE. bet. 21st and

23rd. Structural steel for southeast

wing addition to San Francisco

Hospital.

Owner.....City & County of S. F.

Architect...Herman Barth, 12 Geary,
San Francisco.

Contractor...Dyer Bros., 17th & Kansas,
San Francisco.

COST, \$60,400

STRUCTURAL STEEL

(3568) E POTRERO AVE., bet. 21st &

23rd. Structural steel for northeast

wing addition to S. F. Hospital.
Owner.....City & County of S. F.
Architect.....Herman Barth, 12 Geary,
San Francisco.
Contractor.....Joyer Bros., 15th & Kansas,
San Francisco.
COST, \$10,975

FRAME COTTAGE

(3549) SE LAIDLAY 100 NW Fair-
mount, Lot 181 Blk 21 Mission and
Third Street Hd. Un. All work for
one and one-half-story frame cottage.
Owner.....Richard H. and E. J. Wibel,
2356 Mission, San Francisco
Architect.....Plans by Contractor.
Contractor.....N. F. Nilsson, 355 Cole-
ridge, San Francisco.
Filed Dec. 13, '15. Dated Nov. 30, '15.
Frame up\$562.50
Brown coated 562.50
Completed and accepted..... 562.50
Usual 35 days..... 562.50
TOTAL COST, \$2250.00
Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications filed.

FRAME COTTAGE

(3570) S RIVERA 120 W 21st Ave. All
work for one-story frame cottage.
Owner.....M. E. Nilsson.
Architect.....None.
Contractor.....N. F. Nilsson, 355 Cole-
ridge, San Francisco.
Filed Dec. 13, '15. Dated Dec. 10, '15.
Completed and accepted.....\$2000
TOTAL COST, \$2000
Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications, none.

FRAME COTTAGE

(3571) S RIVERA 90 W 21st Ave. All
work for one-story frame cottage.
Owner.....M. E. Nilsson.
Architect.....None.
Contractor.....N. F. Nilsson, 355 Cole-
ridge, San Francisco.
Filed Dec. 13, '15. Dated Dec. 10, '15.
Completed and accepted.....\$2000
TOTAL COST, \$2000
Bond, none. Limit, 90 days. Forfeit,
none. Plans and specifications, none.

FRAME FLATS

(3572) E CAPP 290 N 16th E 120xN 30.
All work except painting, plumbing
and wall heds for two-story and
basement frame flats.
Owner.....Thomas J. and Mary
Kearney, 15th & Capp, S. F.
Architect.....John J. Foley, 46 Kearny,
San Francisco.
Contractor.....Conlan Bros., 542 Guerrero,
San Francisco.
Filed Dec. 13, '15. Dated Dec. 11, '15.
Frame up\$1566.25
Enclosed and brown coated..... 1566.25
Completed and accepted..... 1566.25
Usual 35 days..... 1566.25
TOTAL COST, \$6265.00
Bond, \$2132.50. Sureties, Jas. E. Len-
non and William Teseler. Limit, 90
days. Forfeit, none. Plans and speci-
fications filed.

ALTERATIONS

(3573) NO. 1440 MARKET. Alter for
supply store.
Owner.....Pacific Motor & Supply Co.,
Premises.
Architect.....None.
Contractor, Arthur Elvin, 432 Casten-
ada Ave., San Francisco.
COST, \$400

ALTERATIONS
(3574) NO. 1529 NINETEENTH. Raise
and alter garage.
Owner.....W. E. Coombe, Premises.
Architect.....None.
Contractor.....G. Hunseth, 4515 19th,
San Francisco.
COST, \$400

ADDITION

(3575) N WILDE 150 E Rutland. Add
two rooms to dwelling.
Owner.....Mrs. O. Halling, 373 Wilde
Ave., San Francisco
Architect.....None.
Day's work.....COST, \$500

FRAME FLATS

(3576) W TWENTY-FIRST AVE 100
N Irving. Two-story and basement
frame (2) flats.
Owner.....Michael Cain, 1255 21st Ave
San Francisco.
Architect.....None.
Day's work.....COST, \$3000

FRAME FLATS

(3577) W NINTH AVE 125 N Anza.
Two-story and basement frame (2)
flats.
Owner.....Louis H. Lee, 135 Carl,
San Francisco.
Architect.....None.
Day's work.....COST, \$5500

FRAME COTTAGE

(3578) SW QUESADA AVE 318-9 SE
Lane 1st Blk 349 South San Fran-
cisco Hld. and R. R. Ass'n. All work
except fencing and cement basement
floor for four-room frame cottage.
Owner.....Samuel Vallon, 1783 Mc-
Kinnon Ave., San Francisco
Architect.....None.
Contractor.....P. H. Madden, 1527 Jerrold
Ave., San Francisco.
Filed Dec. 14, '15. Dated Dec. 11, '15.
Frame up\$381.25
Brown coated 381.25
Completed and accepted..... 381.25
Usual 35 days..... 381.25
TOTAL COST, \$1525.00
Bond, \$800. Sureties, Leo. W. Hardy
and Thos. R. O'Day. Limit, 60 days
after Dec. 13. Forfeit, none. Plans and
specifications filed.

FRAME STORE BUILDING

(3579) W MISSION 186-S S 29th S 50x
W 100. All work except light fixtures
and shades for one-story frame store
building.
Owner.....Gionni Bros. by Paul Gionni
3310 Mission, S. F.
Architect.....None.
Contractor.....F. De Martin & L. Segale,
558 Greenwich, S. F.
Filed Dec. 14, '15. Dated Jan. 12, '15.
Frame up and rafters on.....\$735
Roof on and floor laid..... 735
Completed and accepted..... 735
Usual 35 days..... 745
TOTAL COST, \$2950
Bond, none. Limit, 60 days from Jan.
16, 1915. Forfeit, none. Plans and
specifications filed.

FRAME DWELLING

(3580) E TWENTY-FIFTH AVE 100
N Anza. Two-story and basement
frame dwelling.
Owner.....Elmer and Mabel Clark,
574 26th Ave., S. F.
Architect.....None.

Contractor Elmer Clark, 574 26th
Ave., San Francisco.
COST, \$2800

FRAME DWELLING

(3581) E NINTH AVE 116-50 N Moraga
Two-story and basement frame dwlg
Owner.....Allen & Co., 128 Sutter,
San Francisco.
Architect.....J. W. Dolliver, Royal In-
surance Bldg., S. F.
Day's work.....COST, \$5000

FRAME FLATS AND STORE

(3582) SE CLEMENT & FIFTEENTH
Ave. Two-story and basement frame
(3) flats and store.
Owner.....Thos. Kelly, 2909 Bush,
San Francisco.
Architect.....None.
Day's work.....COST, \$4600

FRAME DWELLING

(3583) W TWENTY-FIFTH AVE 300
S Geary. Two-story and basement
frame dwelling.
Owner.....H. P. Otten, 555 25th Ave.,
San Francisco.
Architect.....None.
Day's work.....COST, \$2500

FRAME DWELLING

(3584) SE ALTON AND NINTH AVE.
Two-story and basement frame dwlg.
Owner.....Conservative Bldg. & In-
vestment Co., 200 Phelan
Bldg., San Francisco.
Architect.....None.
Day's work.....COST, \$5000

STRUCTURAL STEEL ETC.

(3585) NW SANSOME AND BUSH NW
137-6xW 67-6. Structural steel and
iron work for alterations and addi-
tions to ten-story and basement
Class "A" office building.
Owner.....Standard Oil Co., 200
Bush, San Francisco.
Architect.....B. G. McDougall, Sheldon
Bldg., San Francisco.
Contractor.....Raleston Iron Works, 20th
and Indiana, S. F.
Filed Dec. 15, '15. Dated Dec. 13, '15.
On 1st and 10th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$7570
Bond, \$3785. Surety, Massachusetts
Bonding & Insurance Co. Limit, 45
days. Forfeit, \$50. Plans and speci-
fications filed.

VACUUM CLEANER

(3586) SE HAYES AND OCTAVIA.
Furnish and install 1½-h. p. verti-
cal connected Spencer Turbine clean-
er (vacuum cleaner) for three-story
and basement frame apartments.
Owner.....Daniel M. Moran, Hayes &
Octavia, S. F.
Architect.....Chas. J. I. Devlin, Pacific
Bldg., San Francisco.
Contractor, Hughson & Merton, Inc.,
530 Golden Gate Ave., S. F.
Filed Dec. 15, '15. Dated Dec. 10, '15.
Piping and conduit roughed in \$175
Accepted 417
Usual 35 days 198
TOTAL COST, \$790
Bond, \$400. Surety, Royal Indemnity
Co. Limit, without delay. Forfeit,
none. Plans and specifications filed.

FRAME MARKET

(3587) E TAYLOR 92-6 S Washington
E 100xS 30. All work except electric

fixtures and shades for one-story and basement frame, brick veneer front building (market).

Owner.....Arthur H. Rochfort.
Architect...August G. Headman, New Call Bldg., S. F.
Contractor...Barrett & Hilp, Sharon Bldg., San Francisco.
Filed Dec. 15, '15. Dated Dec. 14, '15.
Concrete foundation completed.....\$1058.25
Frame up, roof on and completed, brick veneer and marquise frame installed.....2000.00
Completed and accepted.....2004.25
Usual 35 days.....1687.50
TOTAL COST, \$6750.00
Bond, \$275. Surety, Fidelity & Deposit Co. of Maryland. Limit, 40 days from recording. Forfeit, \$10. Plans and specifications filed.

FRAME FLATS

(3588) W TAYLOR 37-6 S Lombard. Three-story and basement frame (3) flats.
Owner.....Giovanni Torre, Premises.
Architect...L. Traverso, 534 Union, San Francisco.
Day's work. COST, \$6000

FRAME FLATS & STORE

(3589) SE BRAZIL AND EDINBURGH Two-story and basement frame (2) flats and store.
Owner.....John Schroeder, 1150 Shotwell, San Francisco.
Architect...None.
Contractor...Roth, Trost, 26th & Howard San Francisco.
COST, \$3400

FRAME DWELLING

(3590) E MADRID 175 S France. Two-story and basement frame dwelling.
Owner.....Miss Minna Goger, 520 Church, San Francisco.
Architect...None.
Contractor...Chas. J. Koenig, 520 Church, San Francisco.
COST, \$2100

FRAME DWELLING

(3591) W HOLYOKE 75 S Burrows. One-story and basement frame dwlg.
Owner.....O. Carlson, 324 Holyoke, San Francisco.
Architect...None.
Contractor...Fred Pearson, 348 Holyoke San Francisco.
COST, \$1500

FRAME FLATS

(3592) E TENTH AVE 100 S Balboa. Two-story and basement frame flats.
Owner.....O. E. Anderson, 248 18th Ave., San Francisco.
Architect...None.
Day's work. COST, \$5000

FRAME FLATS

(3593) E TENTH AVE 125 S Balboa. Two-story and basement frame flats.
Owner.....O. E. Anderson, 248 18th Ave., San Francisco.
Architect...None.
Day's work. COST, \$5000

FRAME FLATS

(3594) E TWENTY-FIFTH AVE 100 S Geary. Two-story and basement (2) frame flats.
Owner.....J. Olson.
Architect...E. J. Spence, 537 25th Ave., San Francisco.

Contractor...Spence & Walthall, 537 25th Ave., San Francisco.
COST, \$4800

FRAME STORE AND FLAT

(3595) SE BREWSTER AND FAITH. One-story frame store and flat.
Owner.....M. Caruso, 70 Manchester, San Francisco.
Architect...None.
Contractor...Bonaccorso Bros., 70 Manchester, San Francisco.
COST, \$1350

FRAME DWELLING

(3596) NW MADRID 200 SW Excelsior One-story and basement frame dwlg.
Owner.....Richard Strandlund, 339 Madrid, San Francisco.
Architect...None.
Day's work. COST, \$1800

FRAME DWELLING

(3597) E TWENTY-SECOND AVE 225 Anza. One-story and basement frame dwelling.
Owner.....Albert Jos. Prevost, 2334 Clement, San Francisco.
Architect...None.
Contractor...Geo. F. Cleese, 524 27th Ave San Francisco.
COST, \$1850

ALTERATIONS

(3598) NW PIERCE AND VALLEJO. Alter for garage.
Owner.....Mrs. C. A. Curlett, 2701 Pierce, San Francisco.
Architect...C. E. Gottschalk, Phelan Bldg., San Francisco.
Contractor...Martin J. Rist, 1110 Cole, San Francisco.
COST, \$550

ALTERATIONS

(3599) NO. 2342 THIRD. Alter boarding house.
Owner.....Jos. Rampone, 585 Green, San Francisco.
Architect...None.
Contractor...Ponsero Bros., 3 Stark, San Francisco.
COST, \$500

ALTERATIONS

(3600) SE ARMY AND THIRD. Extend garage building, foundation and some steel work.
Owner.....Shell Co. of California, 343 Sansome, San Francisco.
Architect...Engineer Shell Co.
Contractor...Gutleben Bros., 648 New Call Bldg., S. F.
COST, \$2830

(3601) N MARSTON AVE 300 W Edna N 112-6xW 30 Lot 6 and Ptn Lot 3 Bk 16, Sunnyside. All work for one story frame bungalow.
Owner.....Wm. T. & Ella Hunter, 2133 San Jose Ave., S. F.
Architect...B. R. Christensen, Lick Bldg., San Francisco.
Contractor...Frank C. Rounds.
Filed Dec. 16 '15. Dated Dec. 2, '15.
1st floor joists on.....\$350
Roof on and enclosed.....350
Finished plaster on.....350
Completed and accepted.....350
Usual 35 days.....465
TOTAL COST, \$1865
Bond, \$935. Sureties, W. C. Leverich and Frank F. Burke. Limit, 45 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS AND ADDITIONS

(3603) SE ANDOVER AND OGDEN Ave S 25x40 70. Alterations and additions to one-story and basement frame cottage to make a two-story frame store and flat.
Owner.....Louis and Marie Siegle, Premises.
Architect...Chas. J. Colby, Pacific Bldg., San Francisco.
Contractor...H. W. Arnold 4020 19th, San Francisco.
Filed Dec. 16, '15. Dated Dec. —, '15.
Brown plaster on.....\$676
Completed and accepted.....677
Usual 35 days.....452
TOTAL COST, \$1805
Bond, Guarantee bond in favor of owner, Sureties, J. I. Moriatti and H. T. Anderson. Limits, as fast as required. Forfeit, none. Plans and specifications filed.

FRAME APARTMENTS

(3604) N SEVENTEENTH 285 W Guerrero 25x115. All work for three story frame apartments.
Owner.....Phil Morton Levey, 3550 17th, San Francisco.
Architect...None.
Contractor...John Westerlund, 3159 Folsom, San Francisco.
Filed Dec. 16 '15. Dated Dec. 9, '15.
2nd story joists on.....\$1919
Roof on.....1919
Bown coated.....1919
Accepted.....1919
Usual 35 days.....1919
TOTAL COST, \$9595
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

(3605) NO. 2130 HOWARD. Alter and add to flats.
Owner.....Otto Koenig, Premises.
Architect...Foulkes & Hildebrand, 1118 Crocker Bldg., S. F.
Day's work. COST, \$400

FRAME DWELLING

(3606) N TWENTY-SIXTH 186-6 W Diamond. One-story and basement frame dwelling.
Owner.....M. F. Nilsson, 355 Coleridge San Francisco.
Architect...None.
Contractor...Lindberg Bros., 257 Surrey, San Francisco.
COST, \$1850

PLUMBING

(3607) SW LARKIN AND PINE. Plumbing for two-story and basement brick and steel school (Reading School).
Owner.....City and County of San Francisco.
Architect...Fred H. Meyer, Bankers' Investment Bldg., S. F.
Contractor...A. Lettich, 365 Fell, S. F.
COST, \$6276

(3608) STRUCTURAL STEEL ON ABOVE.

Contractor...Golden Gate Iron Works, 1545 Howard, S. F.
COST, \$24,000
(3609) MASONRY WORK ON ABOVE. Contractor...C. Hock, 1788 Fell, S. F.
COST, \$23,585

CARPENTRY WORK, ETC.

(3610) NE COLUMBUS AVE AND Vallejo E 77-8 1/2 x N 137-6. Carpentry,

Joinery, mill work, painting, etc., for finishing vestibules for Saint Francis Church.

Owner.....Roman Catholic Archbishop of S. F., 1100 Franklin, San Francisco.

Architect...Chas. J. L. Devlin, Pacific Bldg., San Francisco.

Contractor...J. W. Smith.

Filed Dec. 17, '15. Dated Dec. 15, '15.

Wood work done ready for paint.

Ing.....\$500

Completed and accepted.....50

Usual 35 days.....185

TOTAL COST, \$735

Bond, \$100. Sureties, A. Lynch and Jno.

McGuigan. Limit, 45 days. Forfeit,

\$5. Plans and specifications filed.

STRUCTURAL STEEL

(3611) SE GEARY & LEAVENWORTH S 44x E 53-6. Furnishing and erecting structural steel, and all reinforced rods of brick work for six-story and basement steel frame apartment and store building.

Owner.....Gerard Investment Co.

Architect...Rousseau & Rousseau, 110 Sutter, San Francisco.

Contractor...Central Iron Works, 651 Florida, San Francisco.

Filed Dec. 17, '15. Dated Dec. 9, '15.

Completed and accepted, 75%...\$275

Usual 35 days.....2425

TOTAL COST, \$3760

Bond, none. Limit, 35 days from Dec.

9, 1915. Forfeit, none. Plans and specifications filed.

INCORPORATIONS.

California Chrome Company. General Milling, Mining and Smelting business. Capital Stock, \$100,000. Amount, subscribed, \$500; 1000 shares at \$100 each. Place of business, San Francisco Directors—T. W. Farby, M. F. Hullburt, D. A. McLeod, S. W. Molkenhuhr, C. F. Ryan, 1 share each.

The Valencia Street Garage. To rent, hire and sell automobiles. Capital Stock, \$20,000; 2000 shares at \$10 each. Amount subscribed, \$30. Place of business, San Francisco. Directors—T. K. Foley, E. Foley and P. E. Lynch, 1 share each.

The Strand Theatre Co. Capital Stock, \$50,000; subscribed, \$300; shares, \$100 each. Directors—N. A. Elsner, L. W. Manley, H. R. Schulthers, 1 share each. Place of business, S. F.

Keech Incorporated. Capital Stock, \$5000; subscribed, \$30; shares, \$10 each. Directors—A. D. Keech, B. Coleman, G. A. Itagan, 1 share each. Place of business, San Francisco.

Western Bay Co. Capital Stock, \$10,000; subscribed, \$30; shares, \$10 each. Directors—S. J. Oppenheim, E. Levy, O. I. Wise, 1 share each. Place of business, San Francisco.

LEASE.

SAN FRANCISCO COUNTY.

Dec. 14, 1915—NO. 1199 VALENCIA NE Cor. 23rd. Margaretha Christen to W. B. Kearney, 5 years. \$4200.

Dec. 15, 1915—S POST 141-10 W Grant Ave W 34-4½xS 60. Alice Levy to Peter Ross. 20 years. \$175,050.

NOTICE OF NON-RESPONSIBILITY.

Dec. 16, 1915—E HARRISON 26 S 20th S 52x E 100. Chas Nauman as to improvements on leased property

COMPLETION NOTICES

San Francisco

RECORDED

Dec. 16, 1915—N WASHINGTON 137-6

E Laguna E 137-6xN 255-4½. Mary

Louise Phelan to Forderer Cornice

Works.....Dec. 6, 1915

Dec. 11, 1915—W EIGHTEENTH AVE

125 S Geary. Emma and Bertha

Scheib to Nelson Bros.....Dec. 10, 1915

Dec. 11, 1915—W ELEVENTH AVE

225 S Anza S 25x120. A T Morris

to whom it may concern.....Dec. 11, 1915

Dec. 11, 1915—S CALIFORNIA 53 E

18th Ave 26-x36. Luigi and Rose

Rossi to G and P Carrara.....Nov. 27, '15

Dec. 11, 1915—S CHENERY 212 W

Roanoke 25x125. Frank Salvato

to Devencenzi Bros & Co.....Dec. 9, 1915

Dec. 11, 1915—S FILBERT 154 m or 1

W Webster 24x137-6. George Arata

to Devencenzi Bros & Co.....Dec. 7, '15

Dec. 11, 1915—E FORTY-FIFTH AVE

275 N Fulton N 25x E 120. Emil and

Jeanette Mary Schneider to whom

it may concern.....Dec. 9, 1915

Dec. 11, 1915—SE STEINER AND

Hayes S 50x E 106-9. T A McCormick

to J Harold Johnson.....Dec. 10, '15

Dec. 13, 1915—SE GEARY AND

Leavenworth S 44x E 85-6. Gerard

Investment Co to whom it may

concern.....Dec. 13, 1915

Dec. 13, 1915—N ELLIS 77-6 W

Leavenworth 60x137-6. Metropolis

Investment Co to Dunnivant-Oak-

ley Co.....Dec. 13, 1915

Dec. 13, 1915—W SAN BRUNO AVE

60-6 N 18th 25x100. Joe Rauh to

whom it may concern.....Completed—

Dec. 13, 1915—S DAY 105 E Sanchez

E 25xS 114. Patrick Hannon to

Thos McCormick.....Dec. 13, 1915

Dec. 13, 1915—W SIXTEENTH AVE

175 S Lake S 25xW 120. John M

Peters to whom it may concern.....

Dec. 9, 1915

Dec. 13, 1915—W TWENTY-NINTH

Ave 275 S Anza S 25xW 100. Morris

J Jones to whom it may concern.....

Dec. 14, 1915

Dec. 14, 1915—NE GOLDEN GATE AV

and Buchanan E 137-6xN 119-6.

Emma Levison to Harry J Spring.....

Dec. 10, 1915

Dec. 14, 1915—N PINE 77-6 W Grant

Ave W 60xN 60. William A Hench

to A Ratto and David Ratto (as

Ratto & Ratto).....Dec. 13, 1915

Dec. 14, 1915—S POST 137-6 W Polk

27x120. J G Kincannon to whom

it may concern.....Completed—

Dec. 14, 1915—E ELEVENTH AVE

300 N Cabrillo. H E and T W Mac-

Arthur to whom it may concern.....

Dec. 14, 1915

Dec. 14, 1915—THAT PTN BLK "D"

Mission Terrace, being a strip 16.67

wide on SE side Lot 48 and a strip

16.67 wide on NW side Lot 47 de-

scribed as SW Santa Rosa Ave dist

thereon S 55 deg 51 min E 207.40

from intersection of E San Jose

Ave S 55 deg 51 min E 33-4 S 34

deg 09 min W 125 N 55 deg 51 min

W 33.34 N 34 deg 09 min E 125.

Mission Terrace Co to Jos Neal and

D Bermingham.....Dec. 8, 1915

Dec. 15, 1915 E WEBSTER bet Sacramento and Clay The Board of Trustees of the Leland Stanford Junior University to Isaac Penny

.....Dec. 10, 1915

Dec. 15, 1915—LOT 1 BLK 23 Crocker

Amazon Tract. John Bjorkman to

whom it may concern.....Dec. 15, 1915

Dec. 15, 1915—W MISSION 115 N 17th

N 27-6xW 100. Frank H Devlin to

A D Nelson.....Dec. 11, 1915

Dec. 15, 1915—COSMIG 25 SE Madrid

and 64-4½ SW Silver Ave SE 25

NE 98-11½ W 30-4½ SW 31-¾, Ptn

Lot 1 Llk 52 Excel Hld. S Silver Ave

and SE Madrid SW 61 4½ SE 25 NE

31-¾ W 50-4½ Ptn Lot 1 BLK 35.

Excel Hld. Ass'n. Peter N Williams

to whom it may concern.....Dec. 15, 1915

Dec. 15, 1915—E THIRD AVE 229 N

Fulton N 25x E 120. Fannie M

Harnay to Moore & Watson.....

Dec. 9, 1915

Dec. 16, 1915—SW BRODERICK &

Eddy. No. 1059 Broderick. L. Ber-

nard Tr for Louise and Roland

Bernard, minors to K H McKeozie

& Co.....Dec. 8, 1915

Dec. 16, 1915—W TAYLOR 137-6 N

Sutter N 38-9xW 137-6. Biltmore

Realty Co to Chas Holloway Jr.....

Dec. 8, 1915

Dec. 16, 1915—W TWENTY-FOURTH

Ave 100 S California S 25x E 120.

Sarah V Loree to whom it may

concern.....Dec. 16, 1915

Dec. 17, 1915—W ELEVENTH AVE 175

N Fulton N 25xW 120. P H Brooks

to Moore & Watson.....Dec. 16, 1915

Dec. 17, 1915—W CONNECTICUT

154-4½ N 18th N 27-2½xW 100.

George McGruer to whom it may

concern.....Dec. 12, 1915

Dec. 17, 1915—E HYDE 87-6 N Sutter

N 25x E 112-6. Theodore E Rulfs to

whom it may concern.....Dec. 1, 1915

LIENS FILED

San Francisco

Dec. 10, 1915—BLK 51 Salt Marsh & Tide Lands. Scott & Turner vs J B Coryell.....\$6743.95

Dec. 11, 1915—NW WASHINGTON & Webster N 92-4½xW 27-6. Pioneer

Plate & Window Glass Co vs John H Schroder and L C Woodbridge.....

Dec. 11, 1915—NW WASHINGTON & Webster N 92-4½xW 27-6. P G

Norman & Sons vs John H Schroder and L C Woodbridge.....\$62.32

Dec. 11, 1915—NW WASHINGTON & Webster N 92-4½xW 27-6. P G

Norman & Sons vs John H Schroder and L C Woodbridge.....\$44.15

RELEASE OF LIENS

SAN FRANCISCO COUNTY.

RECORDED AMOUNT

Dec. 17, 1915—W JORDAN AVE 100 N

Geary W 120xN 30. W P Goss to

Peck & Dwyer and H B Goldsmith

.....\$118

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Am't.
2645	Stubbs	Stubbs	77.0
2646	Kempkeley	Strang	4000
2647	Eggleston	Strang	4000
2648	Strang	Strang	1500
2649	Carr	Thompson	1400
2650	Marxmont	Corbett	500
2651	Patty	Patls	400
2652	Leopold	Corbett	400
2653	Singer	Vaughn	5600

2654	Bethel Is-Cry's	Owner	500
2655	Payne	Payne	1000
2656	Killam	Brasch	3000
2657	Key Route	Bell	
2658	Klein	Klein	1950
2659	City of Okla.	Thornally	2790
2660	Cook	Brown	1200
2662	Oakland	Oakland	6000
2663	Smith	Stange	2100
2664	Hoyt	Banning	7250
2668	Many	Sommarstrom	2000
2671	Lodge	Lodge	2000
2672	Matisen	Rogers	1000
2673	Christofferson	Stange	1000
2674	Jones	Thunkett	800
2675	Pryal	Pryal	2500
2676	Ragno	Ragno	1100
2677	Davis	Griffin	13500
2678	York	York	1400
2679	Boyn	Boyn	1200
2680	Taylor	Taylor	1750
2681	Same	Same	1750
2682	Same	Same	1750
2683	Churchill	Knight	650
2684	Grandin	Grandin	2200
2685	Hollidge	Hollidge	2500
2686	Kiel	Lamer	8348
2687	Hill	Jedpens	500
2688	Shredded Wheat	Alplons	3450
2689	Pay	Anderson	1538

CEMENT DWELLING

(2645) E GRAND — S Oakland Ave., being Lot 26 Piedmont Cable Tract, Piedmont. Two-story 7-room cement dwelling.
Owner.....R. E. Stubbe, 1408 Grand Ave., Oakland.
Architect...None.
Day's work COST, \$3750

FRAME DWELING & GARAGE

(2646) CRAIG AVE., Piedmont. Two-story 7-room frame dwelling and Garage.
Owner.....Augustus Kempkey, 721 Balboa Bldg., S. F.
Architect...None.
Contractor...F. N. Strang, 805 Pacific Ave., Alameda.
COST, \$4000

FRAME DWELLING

(2647) LOT 56 Nova Piedmont, Piedmont. Two-story 7-room frame dwlg.
Owner.....Mabel Eggleston, 3357 Broadway, Oakland.
Architect...None.
Contractor...V. N. Strang, 1521 Ninth, Alameda.
COST, \$4000

DWELLING

(2648) E TWENTY-THIRD 180 N E-50th, Oakland. One-story 5-room dwelling.
Owner.....E. H. Strang, 3741 Elston Ave., Oakland.
Architect...None.
Day's work COST, \$1800

DWELLING

(2649) N MELROSE AVE 50 W 48th Ave., Oakland. One-story five-room dwelling.
Owner.....L. C. Carr, 48th and Melrose Ave., Oakland.
Architect...None.
Contractor...H. F. Thompson, 2859 E-16th, Oakland.
COST, \$1400

ALTERATIONS

(2650) SE THIRTEENTH AND WASHINGTON, Oakland. Alterations.
Owner.....Marymont & Upright, Prem.
Architect...None.
Contractor...Corbett & Bayliss, 1110 Franklin, Oakland.
COST, \$500

WAREHOUSE

(2651) NW THIRTY-FIFTH AVE & California Rail Road, Oakland. One-story warehouse.
Owner.....S. M. Patty, Box 65 Fruitvale, Oakland.
Architect...None.
Day's work COST, \$400

ALTERATIONS
(2652) NW FIFTEENTH & FRANKLIN, Oakland. Alterations.
Owner.....J. Leopold, 280 11th, Okd.
Architect...None.
Contractor...Corbett & Bayliss, 1110 Franklin, Oakland.
COST, \$400

FRAME DWELLING & GARAGE

(2653) LOT 172 and Ptn Lot 179 Map Nova Piedmont, Piedmont. All work for two-story and basement frame dwelling and garage.
Owner.....Margaret L. Singen, Okd.
Architect...None.
Contractor...M. C. Vaughn, 5833 Ayala Ave., Oakland.
Filed Dec. 11, '15. Dated Dec. 10, '15.
Frame up\$1012.74
Plastered862.72
Completed and accepted.....829.19
Usual 35 days.....900.25
TOTAL COST, \$3600.90
Bond, \$1800.45. Surety, Maryland Casualty Co. Limit, 90 days. Forfeit, \$5.
Plans and specifications filed.

ALTERATIONS

(2654) NO. 5702 SAN PABLO AVE., Oakland. Alterations.
Owner.....Bethel Island Creamery, Premises.
Architect...None.
Day's work COST, \$500

BRICK SHED

(2655) SE TWENTIETH & BROADWAY, Oakland. Brick shed.
Owner.....C. C. Payne, 418 20th, Okd.
Architect...None.
Day's work COST, \$1000

DWELLING

(2656) SE BROADWAY & PROSPECT, Oakland. One and one-half-story 7-room dwelling.
Owner.....J. S. Killam, Central Bank Bldg., Oakland.
Architect...None.
Contractor...M. P. Brasch, 5336 Ocean View Drive, Oakland.
COST, \$3000

JOINT BONDS

(2657) OAKLAND. 1150 joint bonds on 7 miles of track.
Owner.....San Francisco Oakland Terminal Railways, 22nd & Jones, Oakland.
Architect...None.
Contractor...J. A. Bell and R. W. Jamison (Bell & Jamison).
Filed Dec. 13, '15. Dated Nov. 10, '15.
15th day of each month for work installed
TOTAL COST, 80c each for E. T. 5-5 in. 1/2 bond; 85c each for E. T. 6 in. bond.
Bond, \$600. Surety, Southwestern Surety Insurance Co. Limit, as soon as possible. Forfeit, none. Specifications only filed.

(2658) S SIXTY-FIFTH 240 W Shattuck Ave., Oakland. One-story six-room dwelling.

Owner.....Mathew Klein, 6511 Raymond, Oakland.
Architect...None.
Day's work COST, \$1950

OBSERVATORY

(2659) LEONA HEIGHTS, Oakland. Chabot observatory.
Owner.....City of Oakland.
Architect...None.
Contractor...W. G. Thornalley, 566 15th, Oakland.
COST, \$2790

DWELLING

(2660) E NINETY-EIGHTH AVE 145 S Southern Pacific Tracks, Oakland. One-story 5-room dwelling.
Owner.....George Cook.
Architect...None.
Contractor...Tom Brown, 1642 39th Ave., Oakland.
COST, \$1200

OBSERVATORY

(2662) LEONA HEIGHTS, Oakland. Chabot observatory.
Owner.....City of Oakland.
Architect...None.
Day's work COST, \$6000

DWELLING

(2663) S 25 LOTS 9, 10, 11, 12 BLK 55 Map San Antonio, being NW E-21st and 18th Ave., Oakland. All work for one-story 5-room dwelling.
Owner.....Mrs. Susan L. Smith, 2832 Chestnut, Oakland.
Architect...None.
Contractor...D. N. Stange, 896 55th, Oakland.
Filed Dec. 14, '15. Dated Nov. 5, '15.
Frame up 1/4
Plastered 1/4
Completed 1/4
Usual 35 days..... 1/4
TOTAL COST, \$2100
Bond, none. Limit, 60 days after Nov. 5. Forfeit, \$5. Plans and specifications, none.

FRAME DWELLING, ETC.

(2664) LOT 2 BLK "H" Map East Piedmont Heights, being SE Lake Shore Ave 50 SE Walla Vista Ave SE 110xSW 50, Oakland. All work for two-story and basement frame dwelling and garage.
Owner.....Elizabeth M. Hoyt, 3404 Sheffield, Oakland.
Architect...None.
Contractor...Banning & Stewart, 5215 Broadway, Oakland.
Filed Dec. 14, '15. Dated Nov. 6, '15.
Date of agreement.....\$500
1st of each month..... 50
TOTAL COST, \$7250
Bond, none. Limit, 120 days. Forfeit, none. Plans and specifications filed.

DWELLING

(2668) N RICH — W Webster, Oakland. One-story 5-room dwelling.
Owner.....Leo Many, 744 Grand Ave., Oakland.
Architect...None.
Contractor...A. Sommarstrom, 109 Sunnyside Ave. Oakland.
COST, \$2000

DWELLING

(2671) S CLEVELAND 86 E Wesley, Oakland. Two-story 6-room dwlg.
Owner.....Martha E. Lodge, 1615 34th Ave., Oakland.

Architect...A. W. Smith, 1010 Broad-
way, Oakland
Contractor...C. F. Lodge, 1615 34th Ave.,
Oakland.

COST, \$2000

DWELLING
(2672) N SIXTY-FIFTH 100 W Tre-
mont, Oakland. One-story 4-room
dwelling.

Owner.....Mrs. A. Matisen, 780 65th,
Oakland.

Architect...None.
Contractor...Chas. Rogers, 5426 Boyd
Ave., Oakland.

COST, \$1000

ALTERATIONS
(2673) NO. 2333 E-TWENTY-SECOND,
Oakland. Alterations.

Owner.....Mrs. M. Chrestofferson,
Premises.

Architect...None.
Contractor...R. B. Litton 2326 26th Ave
Oakland.

COST, \$1000

STORES
(2674) N E-EIGHTEENTH at O. T.
right-of-way, Oakland. One-story 3-
room stores.

Owner.....M. E. Jones 817 E-21st, Okd
Architect...None.

Contractor...W. L. Plunkett 1518 Broad-
way, Oakland.

COST, \$890

DWELLING
(2675) E HEARNE 100 S Chabot Road,
Oakland. One-story 6-room dwelling
Owner.....W. A. Pryal, 6602 Chabot
Road, Oakland.

Architect...None
Day's work. COST, \$2500

DWELLING
(2676) W LOMA VISTA 75 S Kansas,
Oakland One-story 4-room dwlg.
Owner.....M. Ragno, 5695 Maybelle
Ave., Oakland.

Architect...None.
Day's work. COST, \$1100

FRAME APARTMENTS
(2677) NW FOURTEENTH & LINDEN
N 82xW 100, Oakland. All work for
three-story frame apartments.

Owner.....H. Davis, Oakland.
Architect...J. Henry Boehrer, Delger
Bldg., Oakland.

Contractor...C. M. Griffin, 745 5th Ave.,
Oakland.

Filed Dec. 16, '15. Dated Dec. 14, '15.
Frame up & rough floor laid. \$1687.50
Ready for lathing..... 1687.50
Plastered..... 1687.50
Ready for painting..... 1687.50
Painted and plumbing com-
pleted..... 1687.50
Completed and accepted..... 1687.50
Usual 35 days..... 3375.00
TOTAL COST, \$13,500.00

Bond, none. Limit, 120 days. Forfeit,
none. Plans and specifications filed.

NOTE.—Addenda says deduct \$278
from contract price of \$13,500.

DWELLING
(2678) E SEVENTY-FIFTH AVE 150
S E-14th, Oakland. One-story five-
room dwelling.

Owner.....J. R. York, 1609 51st Ave.,
Oakland.

Architect...None,
day's work, COST, \$1400

DWELLING
(2679) E ADAMS 260 N Main, Albany.
One-story 4-room dwelling.
Owner.....James Boyn.
Architect...None.
Day's work. COST, \$1200

DWELLING
(2680) W ORDWAY 120 N Sonoma, Al-
bany. One-story 5-room dwelling.
Owner.....W. N. Taylor.
Architect...None.
Day's work COST, \$1750

DWELLING
(2681) E PERALTA 170 N Sonoma, Al-
bany. One-story 5-room dwelling.
Owner.....W. N. Taylor.
Architect...None.
Day's work. COST, \$1750

DWELLING
(2682) E PERALTA 120 N Sonoma,
Albany. One-story 5-room dwlg.
Owner.....W. N. Taylor.
Architect...None.
Day's work. COST, \$1750

ALTERATIONS
(2683) N TENTH 130 W Market, Oak-
land. Alterations.
Owner.....Mrs. Alice Churchill.
Architect...None.
Contractor...F. W. Knight, 557 22nd,
Oakland.

COST, \$650

DWELLING
(2684) N FIFTY-SIXTH 300 W Ade-
line, Oakland. One-story 6-room
dwelling.
Owner.....Edward Grandin, 1533
Prince, Berkeley.
Architect...None.
Day's work. COST, \$2200

DWELLING
(2685) E BROADWAY 560 S Prospect
Drive, Oakland. One and one-half-
story 7-room dwelling.
Owner.....Geo. H. Hollidge, 5926 Taft
Ave., Oakland.
Architect...None.
Day's work. COST, \$2500

BRICK GARAGE
(2686) E HARRISON 300 N 11th, Oak-
land. One-story brick garage.
Owner.....C. P. Kiel, San Leandro.
Architect...None.
Contractor...Larmer & Muller, 470
Boulevard Way, Oakland.
COST, \$8248

STORE
(2687) S FOURTEENTH 80 W Filbert
Oakland. One-story 1-room store.
Owner.....E. R. Hill, 975 11th, Okd.
Architect...None.
Contractor...P. M. Jepsen, 3123 Davis,
Oakland.
COST, \$500

BRICK CHIMNEY
(2688) LOTS 8 TO 21 Incl. and ptin
Lots 4, 5, 6, 7 and 25 to 32 Incl. Map
R J McMillan's Shdvn Bk 576, Oak-
land. All work for radical brick
chimney for factory building
Owner.....Pacific Coast Shredded
Wheat Company
Architect...Hobart & Cheney, Crocker
Bldg., San Francisco.
Contractor...Alphons Custodia Chimney
Constr. Co., New York.

Filed Dec. 17, '15. Dated Nov. 4, '15.
Monthly payments of..... 75%
Paid 35 days..... 25%
TOTAL COST, \$3150
Bond, \$1725. Surety, U. S. Fidelity &
& Guaranty Co. Limit, 120 days. Forfeit,
\$10. Specifications only filed.

FRAME DWELLING
(2689) NO. 1092 CLARENDON CRES-
cent, Oakland. Alter two-story
frame dwelling.
Owner.....D. L. Fay.
Architect...W. H. Ratcliff or, 1st Na-
tional Bank Bldg., Okd.
Contractor...C. A. Anderson and B. G.
Larson

Filed Dec. 17, '15. Dated Dec. 16, '15.
Frame up and roof on.....\$565
Completed and accepted..... 565
Usual 35 days..... 103
TOTAL COST, \$1523
Bond, none. Limit, as soon as possible.
Forfeit, none. Plans and specifications
filed.

Building Contracts Awarded

Berkeley.

No.	Owner	Contractor	Amt.
2661	Banks	Woolley	2200
2679	Armstrong	Wiley	2100
2670	Perkins	Tuft	100

DWELLING
(2661) S PRINCE 140 E Dana, Ber-
keley. One-story 5-room dwelling.
Owner.....Eva M. Banks, Piedmont.
Architect...None.
Contractor...Woolley & Rick, 2368 Lusk,
Oakland. COST, \$2200

DWELLING
(2669) E BUENA VISTA AVE 12221
S Greenwood Terrace, Berkeley. One-
story 5-room dwelling.
Owner.....Mrs. Hayes S. Armstrong.
Architect...W. H. Ratcliff Jr., 1st Na-
tional Bank Bldg., Bkly.
Contractor...J. M. Wiley 1718 Hearst
Ave., Berkeley.
COST, \$2100

GARAGE
(2670) NO. 1717 WALNUT, Berkeley.
Garage.
Owner.....Margaret C. Perkins, Prem.
Architect...None.
Contractor...Geo. K. Taft, 2746 Hille-
gass, Berkeley.
COST, \$100

Building Contracts Awarded

Alameda

2665	Hansen	Roth	2000
2666	Shen	Cantrell	1400
2667	Shen	Cantrell	1400

DWELLING
(2665) S BUENA VISTA AVE 273-11
W St. Charles, Alameda. One-story
5-room dwelling
Owner.....S. Hansen, 1532 St. Charles,
Alameda.
Architect...None.
Contractor...Conrad Roth, 2117 Pacific
Ave., Alameda.
COST, \$2000

DWELLING
(2666) NO. 1610 MORTON, Alameda
One-story 1-room dwelling.

Owner.....Miss M. T. Shea, 2516 Pine,
San Francisco.
Architect...None.
Contractor...G. Cantrell, 75 Sutter, S. F.
COST, \$1400

DWELLING
(2667) NO. 1608 MORTON, Alameda.
One-story 4-room dwelling.
Owner.....Miss M. T. Shea, 2516 Pine,
San Francisco.
Architect...None.
Contractor...G. Cantrell, 75 Sutter, S. F.
COST, \$1400

COMPLETION NOTICES.

ALAMEDA COUNTY.

RECORDED **AMOUNT**
Dec. 10, 1915—N JULIA 208 W California W 166.40 N 108.43 E 166.40 S 110.68, Okd. John D Garrettson and Mae Purvine Garretton to whom it may concern.....Nov. 26, 1915
Dec. 10, 1915—E CLAY from 14th to 15th, Okd. H C Capwell Co to J Llewellyn Co.....Dec. 7, 1915
Dec. 10, 1915—LOT 11 AND N 14-2 Lot 10 Blk "D" Map Broadway Terrace, Okd. R H Banning and Jas E Stewart to whom it may concern.....Dec. 10, 1915
Dec. 11, 1915—E SPAULDING AVE 268.7 S Bancroft Way S 37.8xE 129.25, Bkly. John W Hillebrandt to J A Pinkerton.....Dec. 11, 1915
Dec. 12, 1915—PTN LOT 52 BLK "C" Map Ptn Berkeley Property, Bkly. Margaret J Dickinson to Riddell Bldg Service Corporation.....Dec. 10, 1915
Dec. 13, 1915—PTN BLK 123 Map Clinton, being N Co. E-20th and 5th Ave., Okd. Carrie C Penoyar to Paul L Kick.....Dec. 11, 1915
Dec. 14, 1915—LOT 25 Piedmont Cable Tract, being No. 1408 Grand Ave, Piedmont. R E Stubbe to whom it may concern. Dec. 14, 1915
Dec. 16, 1915—E LAKE SHORE AVE at 60 N Rosal Ave Okd. Fernanda N Samps by E W Woodard to E W Woodard.....Completed
Dec. 16, 1915—PTN LOT 52 Map Bowie Fpty Piedmont. Abraham Bloom to Alfred Cords.....Dec. 16, 1915
Dec. 16, 1915—NO. 5652 E side Oak Grove Ave bet. College Ave and Forest, Okd. Mrs Mary May Gray to H S Butler.....Dec. 16, 1915
Dec. 16, 1915—SE REDWOOD ROAD SW 62.16 Galindo SW 62.16xSE 129.50, Okd. Millie M Lowe to whom it may concern.....Dec. 10, 1915
Dec. 17, 1915—LOTS 21, 23 AND 25 BLK 13 Breed & Brandorffs Reshdv'n ptn North Alameda Tract, Ala. William Black by A L Haley to whom it may concern.....Dec. 8, 1915

LIENS FILED

ALAMEDA COUNTY.

Dec. 10, 1915—LOT 20 High Court Tract Shdvn Blk "A" and Lots 7, 8 and 9 Blk "E" Tuohy's 2nd Addition to Town of Berkeley, Berkeley. J J Sullivan vs Jackson and Jane Doe Gregory\$146
Dec. 11, 1915—PTN AUGHINBAUGH Tract, being No. 620 Santa Clara

Ave, Ala. C F Fischer, \$395.75; J H Small, \$215; F C Deetken and J M Ansel (Alameda Elec Co), \$98.70 vs William McDaniel & Anna W Hayes
Dec. 11, 1915—LOTS 10, 11, 12 & 13 Blk 136 Kellersberger's Map City of Oakland. Pacific Fuel & Building Material Co, \$811.95; E L Walter, \$207.06; Oakland Plumbing Supply Co, \$183.05 vs Eugene Schmidt.....
Dec. 11, 1915—S TENTH 100 E Oak E 100xS 100, Okd. Sunset Lumber Co, \$3562.35; John P Maxwell (Maxwell Hardware Co), \$459.70 vs Eugene Schmidt\$586.41
Dec. 11, 1915—N ARLINGTON AVE 231.97 W Grove W 40 N 102.65 NE 40 SE 102.03, Okd. Pacific Mfg Co vs J J Benton.....\$172.10
Dec. 13, 1915—LOTS 10, 11, 12 AND 13 Blk 136; S Tenth 100 E Oak, Okd. Spott Bros vs Eugene Schmidt.....\$586.41
Dec. 13, 1915—S SANTA CLARA AVE being ptn Aughinbaugh 223 acre tract, being No. 620 Santa Clara Ave., Ala. F E Allen vs William McDaniel and Anna W Hayes.....\$145.29
Dec. 16, 1915—LOTS 53 AND 54 Resubdivision Blks 10 and 11 Howe Tract and ptn Lots 1 and 25 Blk "A" Map No. 1, Highland Terrace, Okd. F D Voorhees vs D F O'Connell\$650

RELEASE OF LIENS.

ALAMEDA COUNTY.

Dec. 8, 1915—W BROADWAY 110.81 S Garnet S 50 W 123.59 N 50 E 129.87, Okd. Eureka Mill & Lumber Co to Maria Peres and W G Needham.....\$32.82
Dec. 2, 1915—E COTTAGE 129 N Central Ave N 35xE 50, Alameda. Sunset Lumber Co to W G Le Boyd et al\$355.14
Dec. 2, 1915—S TENTH 100 E Oak E 50xS 100, Okd. Alfred Weber to E A Schmidt\$38.50

COMPLETION NOTICES.

SAN MATEO COUNTY.

RECORDED **AMOUNT**
Dec. 10, 1915—PTN LOT 7 BLK 7, Dimond Tract, Visitation Valley, San Mateo Co. J E Sprague to whom it may concern.....Dec. 7, 1915

LIENS FILED.

SAN MATEO COUNTY.

RECORDED **AMOUNT**
Dec. 9, 1915—PTN LOTS 8 & 9 BLK 14, Western Add'n to San Mateo. San Mateo Planing Mill Co vs L R Huyek and Boswell and Elizabeth Dixon\$134.93
Dec. 9, 1915—PTN LOTS 8 & 9 BLK 14, Western Add'n to San Mateo. Inlaid Floor Co vs Boswell and Elizabeth Dixon\$85.44

BUILDING CONTRACTS.

MARIN COUNTY.

ALTERATIONS
SAUSALITO. Alter residence.
Owner.....N. D. Clausen.
Architect...H. P. Buckingham.

Contractor...A. W. Teather.
Filed Dec. 13, '15. Dated Dec. 3, '15.
On 1st and 10th of each month. 75%
Usual 35 days.....25%
TOTAL COST, \$2050
Bond, none. Limit, 90 working days.
Forfeit, none. Plans only filed.

BUILDING CONTRACTS.

CONTRA COSTA COUNTY.

PAVEMENTS, ETC.
CUTTING BOULEVARD in front of undersigned property in City of Richmond. Excavate surplus earth, construct and install pavements for concrete curb and gutters, cement sidewalks and 2 catch basins.
Owner.....Southern Pacific Co.
Architect...None.
Contractor...Ransome-Crummey Co., 1st Savings Bank Bldg., Okd
Filed Dec. 9, '15. Dated Nov. 19, '15.
All payments made 35 days after completion of work by Assistant Chief Engineer
TOTAL COST, \$—
Bond, \$2000. Surety, Massachusetts Bonding & Insurance Co. Limit, within 60 dty. Forfeit, none. Plans and specifications filed.

FRAME SCHOOL
LOTS 30,39; 19, 20 inclusive Blk 100 of Walls Addition to City of Richmond. All work except heating and ventilating for one-story veneer and frame school building.
Owner.....Board of Education of City of Richmond.
Architect...James I. Narbett, 704 Macdonald Ave., Richmond.
Contractor...Matthew Morton.
Filed Dec. 15, '15. Dated Dec. 8, '15.
Last week of each month certificate issued to contractor of 75% payment to be made at 1st regular meeting of Board
Usual 35 days.....Final payment
TOTAL COST, \$9697
Bond, \$1848.50. Surety, Massachusetts Bonding & Insurance Co. Limit, within 100 working days. Forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS.

FRESNO COUNTY.

DWELLING
LOTS 6 AND 7 BLK 2 Avondale Add'n; Fresno. Dwelling.
Owner.....S. L. Allen, 3215 McKenzie St., Fresno.
Architect...None.
Day's work. COST, \$1950

DWELLING
LOTS 12 AND 13 BLK 54, East Fresno Heights, Fresno. Dwelling.
Owner.....Geo. Braswell, 3069 Madison St., Fresno.
Architect...None.
Day's work. COST, \$2000

LIENS FILED.

FRESNO COUNTY.

RECORDED **AMOUNT**
Dec. 14, 1915—LOTS 14, 15, 16 BLK 23 Arlington Heights Tract, Fresno. Barrett-Hicks Co vs Wm Stahl and O N Leathers.....\$161

BUILDING CONTRACTS.

SACRAMENTO COUNTY.

CONCRETE STORE BUILDING.

NO. 1700 M ST., on W ½ Lot 1 Blk M, N, 17th and 15th Sts., Sacramento. One-story and basement reinforced concrete tile store building.

Owner.....Perkins & Co., 820 J St., Sacramento.

Architect...None.

Contractor...James A. McCullough, 1631 M St., Sacramento.

COST, \$14,000

FRAME RESIDENCE

MAPLE AVE on Lot 15, Tullar Tract, Sacramento. Two-story 7-room and bath frame residence.

Owner.....F. H. Pierce, 21st and 2nd Ave., Sacramento.

Architect...None.

Contractor...Corum & White, 2523 1st Ave., Sacramento.

COST, \$3950

RESIDENCE

NO. 4136 CARMELLIA AVE., on Lot 25, Columbia Terrace, Sacramento. One-story 5-room and bath residence.

Owner.....S. A. Boltz, 2216 33rd Ave., Sacramento.

Architect...None.

Day's work. COST, \$1500

RESIDENCE

NO. 1224 THIRTY-FOURTH ST., on E 60 feet of Lot W, East Sacramento. One-story 3-room and bath residence.

Owner.....E. M. Brown.

Architect...None.

Contractor...Samuel Mackey, 1224 34th St., Sacramento.

COST, \$900

ALTERATIONS

NO. 807 L ST., on E ½ of S ½ Lot 1 Blk K, L 8th and 9th Sts., Sacramento. Remodel and repair interior of residence.

Owner.....Henry Feldhusen, 5th and L Sts., Sacramento.

Architect...None.

Contractor...Bliss & Howe, Lessee, 807 L St., Sacramento.

COST, \$500

ALTERATIONS

NO. 1000 K ST., on Lot 1, K, L, 10th and 11th Sts., Sacramento. New 3-ply felt and gravel flash and counter flash over present asbestos on bldg.

Owner.....Sacramento Hotel Co.

Architect...None.

Contractor...E. S. Warner, 1023 10th St., Sacramento.

COST, \$700

FRAME DWELLING

NO. 510 N ST. (rear) on W 45 feet Lot 2, N, O, 5th and 6th Sts., Sacramento. One-story two-room and bath frame dwelling.

Owner.....John Radnovich.

Architect...None.

Contractor...Chas. Vanina, 2022 M St., Sacramento.

COST, \$600

BUILDING

8 ½ OF E ½ LOT 5, M, N, 5th and 9th Sts., Sacramento. Building.

Owner.....F. B. Smith, 801 N St., Sacramento.

Architect...None.

Contractor...G. E. Harvie, 2212 T St., Sacramento.

Filed Dec. 14, '15. Dated Dec. 9, '15. COST, \$3750

NOTICE OF NON-RESPONSIBILITY.

SACRAMENTO COUNTY.

Dec. 14, 1915—LOTS 16, 17, 19, 21, 23, 24, 75, 39, 19, Dye Chinatown Walnut Grove, Sacramento. Mile E, Sperry W and Corodon Dye and Amy Brown as to improvements on leased property
Dec. 9, 1915—LOT 1415 of Elmhurst. C M Gothe as to improvements on leased property

COMPLETION NOTICES.

SACRAMENTO COUNTY.

RECORDED ACCEPTED
Dec. 10, 1915—N ½ OF E ½, 10x80 Lot 4, C, D, 14th and 15th Sts., Sacramento. G V and M I Watson to Chatterton Bros.....Dec. 3, 1915

BUILDING CONTRACTS.

SAN JOAQUIN COUNTY.

ALTERATIONS
NW HUNTER AND CHANSEL STS., Stockton. All work for remodeling two-story brick building, changing to up-to-date store fronts.

Owner.....Aimee E. Eshbach and Carrie L. Berkley.

Architect...None.

Contractor...O. H. Chain, 511 W-Willow St., Stockton.

Filed Dec. 8, '15. Dated Dec. 7, '15. Work completed\$1000

February 1, 1916..... 500
When all bills are paid..... 400

TOTAL COST, \$1900

Bond, none. Limit, 30 days. Forfeit, \$3 per day. Plans and specifications filed.

STEEL WORK

SE SUTTER AND MAIN STS., Stockton. Steel work for one-story Class "A" bank building.

Owner.....Stockton Savings Bank.

Architect...C. W. Dickey and M. C. Couchot, Central Bk Bldg., Oakland.

Contractor...Fred W. Krenz, 318 E-Lafayette St., Stockton.

Filed Dec. 7, '15. Dated Nov. 20, '15. Monthly payments of..... 75%

36 days afterremainder
TOTAL COST, \$7638

Bond, \$2819. Sureties, T. D. Lewis and T. F. Knutzen. Limit, 15 days. Forfeit, no definite amount. Plans and specifications filed.

CLASS "C" STORE AND CLUB
NE WEBER AVE AND CALIFORNIA ST., Stockton. carpentry work for two-story Class "C" store and club building.

Owner.....P. A. Jordan, Cr. Dodge & Sweeney, Oakland or National Cash Register Co., Stockton.

Architect...F. E. Warner, Room 37, San Joaquin Bldg., Stockton.

Contractor...Pacific Manufacturing Co., 177 Stevenson, S. F.

Filed Dec. 17, '15. Dated Dec. 9, '15. Monthly payments of..... 75%
36 days afterBalance
TOTAL COST, \$2900
Bond, \$1605. Surety, The Fidelity & Casualty Co. Limit, forfeit, none. Plans and specifications filed.

SHEET METAL WORK ON ABOVE.

Contractor...The Pahl-Harry Co., 35 S-Sutter St., Stockton.

Filed Dec. 13, '15. Dated Nov. 30, '15. Payments same as above.....

TOTAL COST, \$2115

Bond, \$1958. Surety, Maryland Casualty Co. Limit, forfeit, none. Plans and specifications filed.

ELECTRICAL WORK ON ABOVE.

Contractor...The Electrical Supply House, 113 S-California St., Stockton.

Filed Dec. 13, '15. Dated Dec. 6, '15. Payments same as above.....

TOTAL COST, \$1307

Bond, \$651. Surety, The Aetna Accident & Liability Co. Limit, forfeit, none. Plans and specifications filed.

BUILDING CONTRACTS

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FRAME FLATS

COR. AMERICAN & HAZELTON STS., Stockton. All work for two-story 7-room frame flats.

Owner.....Niece Segale, Stockton.

Architect...Ralph P. Morrell, Odd Fellows Bldg., Stockton.

Contractor...A. J. McPhee & Totten, N-California St., Stockton.

Filed Dec. 2, '15. Dated Nov. 31, '15. 2nd story joists in place..... \$ 900

Ready for roof..... 1000
Plastering completed..... 1000

Wood trim completed..... 500
Usual 35 days..... 1000

TOTAL COST, \$1400

Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

CLASS "C" HOTEL

LOTS 5 AND 7 BLK 6, West Center, Stockton. All work except roofing and water proofing for two-story and basement 50-room Class "C" hotel 75 x100.

Owner.....Giovanni Sanguinetti, Care Jack Mazzera, W-Main and Commerce Sts., Stockton.

Architect...Ralph P. Morrell, 12-15 I. O. O. F. Bldg., Stockton.

Contractor...A. J. McPhee and Chris Totten, 5 N-California St., Stockton.

Filed Dec. 3, '15. Dated Dec. 9, '15. 1-st story joists in place..... \$2000

Roof sheathed..... 2000
Rough plumbing inspected and roof on..... 2000

Plastering completed..... 2000
Wood trim, plate glass and marble work done..... 2049

Usual 35 days..... 3350

TOTAL COST, \$12,399

Bond, \$7000. Sureties, W. C. Ramsey and A. A. Smallfield. Limit, 90 days. Forfeit, none. Plans and specifications filed.

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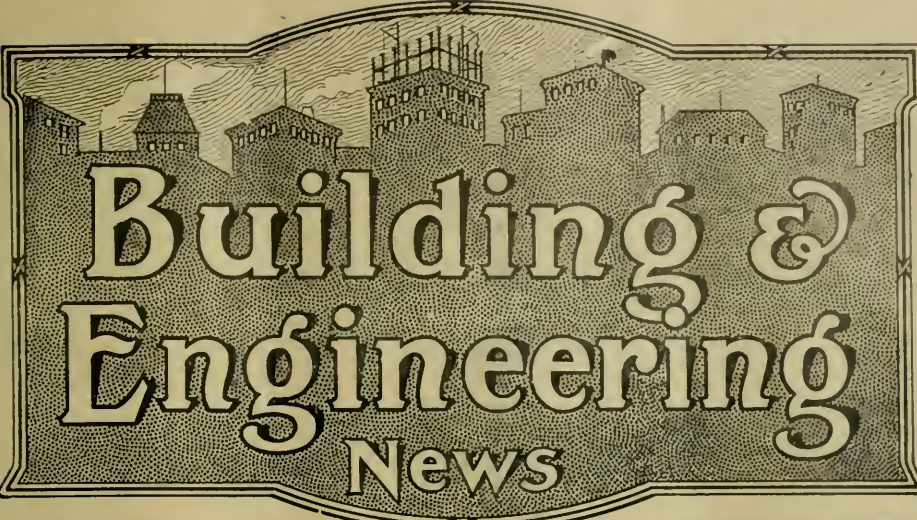
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George Nelson, C. E., Editor.

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W. D. Macville, News Editor.

December 29, 1915

Leading Articles in this Issue:

STREETS.

By George W. Tillson, Mem. Am. Soc. C. E., Consulting Engineer, Office of the President, Borough of Brooklyn, New York City, N. Y.

RICHMOND STREETS.

By H. D. Chapman, City Engineer and Street Superintendent,
City of Richmond, Cal.

Illustrated.

THE USE OF PATENTED PAVEMENTS BY CITIES.

From Lecture by George C. Warren, President Warren Bros. Co., Boston, Mass.

LOS ANGELES DEPARTMENT OF STREET CONSTRUCTION.

By C. S. Pope, Engineer of Street Construction, City of Los Angeles, Cal.

Illustrated.

SAN FRANCISCO'S NEW CIVIC CENTER PAVEMENTS.

By J. M. Owens, Asst. City Engineer, City of San Francisco, Cal.

Illustrated.

WALNUT STREET BRIDGE OVER CODORNICES CREEK

City of Berkeley.

By J. J. Jessup, City Engineer, City of Berkeley, Cal.

Illustrated.

STREET WORK AND CITY PLANNING.

By Nelson P. Lewis, Mem. Am. Soc. C. E., Chief Engineer Board of Estimate and Apportionment, New York, N. Y.

CONCRETE AND STREETS.

By H. S. V. Seayor.

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Delivers the Heat A Complete Answer to the Heating Question.

Instantaneous—Furnishes an instantaneous and continuous supply of Sanitary—fresh warm air free from gas fumes, odors, smoke or dust.

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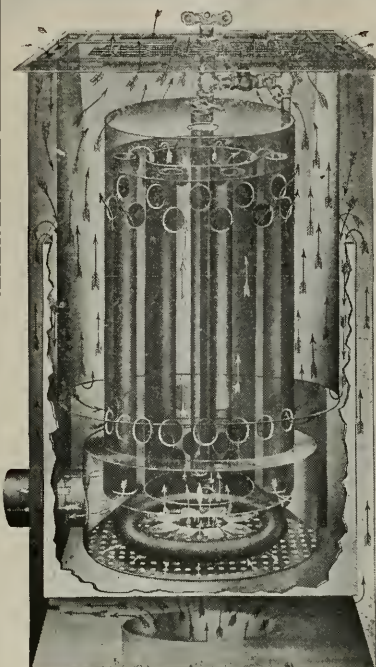
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Retail Prices—Wall Furnace, any style, \$22.50
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Size 14½ in. square by 2 ft. high
Has 8-in. Fresh Air Intake with Damper.
Has 3-in. Outlet Vent
Fits in space between floor joists
Hangs from Register which lays flush with floor.

Style

- Floor Furnace with fresh air intake on side. For use in buildings having sufficient fresh air circulation under same. For artificial gas only.
- Floor Furnace with fresh air intake at bottom. For use in buildings where it is desirable to obtain air directly from outside of cellar or basement. For artificial gas only.
- Wall Furnace with fresh air intake at bottom. For artificial gas only.
- Wall Furnace with fresh air intake at back. For artificial gas only.

NOTE—Style A and B are built alike except for position of fresh air intake.

NOTE—Style C and D are built alike except for position of fresh air intake.

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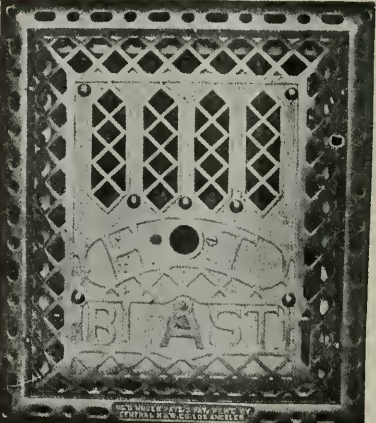
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Benj. G. McDougall, Architect
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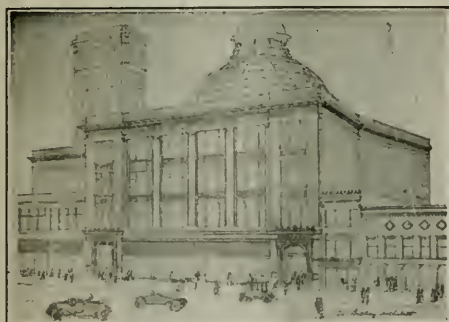
METCALF HOTEL, Geary nr Taylor.
Righetti & Headman, Architects.

Interior walls dampproofed with Imperial Damp Proofing. Exterior walls waterproofed with Imperial Water Proofing. Color effects with Imperial Pigments.



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Wright, Rushford & Cahill, Architects

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C. W. Dickey, Architect

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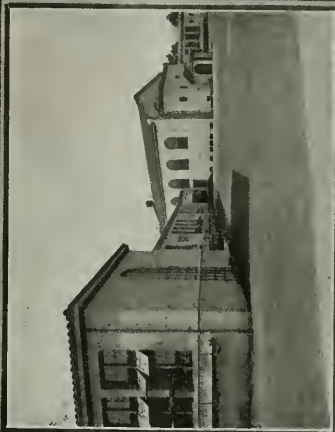
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Frederick H. Meyer, Architect

Stone and terra cotta work treated with Imperial Water Proofing preserving and to prevent discoloration

A Few of the Buildings on which IMPERIAL WATER PROOFING and IMPERIAL WALL FINISHING Products are used

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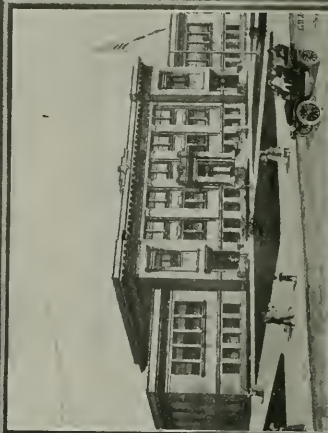
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Building and Engineering News

Devoted to the Architectural, Building, Engineering and Industrial Activities
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Issued Weekly, \$3.00 per year

San Francisco, December 29, 1915

Fifteenth Year, No 52

STREETS*

By Geo. W. Tilton, Mem. Am. Soc. C. E., Consulting Engineer, Office of the
President, Borough of Brooklyn, New York City, N. Y.

Introductory.

Public streets are to a city what the veins and arteries are to an individual—they provide for its circulation, and it is extremely important to all cities how their streets are laid out and improved and how maintained.

The provinces of streets are to furnish light and air to the occupants and to provide proper means for intraurban traffic. As regards light and air, it makes no difference how the width of the street is treated, but as regards traffic it is very material.

Light and Air.

What the width of a street should be to furnish light and air depends upon the character of the buildings that are erected upon it, and upon their height. If the street is in a residential section, where the houses are detached and built on good sized lots, sufficient light and air will be provided, no matter what the width of the street may be. If, on the contrary, the street is in a business section, where every foot of frontage is covered with buildings and where these buildings are high, the width of the street is an important consideration as regards both light and air.

Traffic.

When traffic is taken into consideration, however, different principles prevail. In the first place, the width of the street must be subdivided into roadway and sidewalks, and just what should be the relative proportions of these widths must be determined by circumstances. Different cities have different rules.

As a general proposition, a street in a wholesale district is not a thoroughfare, and a roadway width that will fill local requirements is ordinarily sufficient. If, then, a minimum width of a wholesale street is taken as 40 feet, the question is to subdivide this width so that it will be best adapted for the traffic.

But one row of trucks can be loaded in front of any building at one time. If the opposite side of the roadway be similarly used, 27 feet in all will be blocked to transient travel on the street. If the roadway of the street be made 40 feet, there will be an unoccupied space in the center of 13 feet, which would allow trucks going in opposite directions to pass without difficulty.

On retail business streets different conditions govern, as pedestrian traffic is much greater, compared to vehicular traffic, than on wholesale streets.

On residential streets the questions that have been discussed are determined more by sentimental than by utilitarian principles, as a great deal depends upon whether the lots are built up solidly, or whether the houses are detached. If a street is so narrow that it will not admit of a 40-foot roadway, but one track could be allowed on the same, with one-way traffic, the return traffic being provided for on an adjacent street.

Grades.

The question of grades of streets is extremely important, and great care must be used in establishing them. Maximum and minimum grades should be adopted for general guidance, to be varied only in extreme cases. Before the days of cable and electric cars, the maximum grade in a street-car street was determined by the ability of the horses to draw a car up a hill. This was, in some cases, decided to be 5 per cent. The advent of the different powers, however, in street-car work has changed this principle, as the trolley cars easily negotiate a 10 per cent grade, and cable cars even steeper ones, but it would seem that 10 per cent is a maximum limit, unless very exceptional conditions are encountered. As a minimum, 0.5 per cent is a good standard, but that can be reduced to 0.25 per cent on special streets and for short distances.

Treatment of Roadway.

Having determined upon the width of the roadway and the grade of the street, the next thing to determine is the treatment of the roadway. For hundreds of years pavements have been laid of different materials and many experiments made to determine which made the best pavement.

Just what particular material shall be used upon any street is a question to be decided only after careful study and reflection, as one must know not only the requirements of the street itself, its users and those doing business upon it, but the character of the different paving materials. Not enough study has been given in this country to this question, and pavements, as a rule, have been arbitrarily laid of certain materials without any scientific determination. As a general proposition, however, it can be said that for

heavy-traffic streets stone is the most desirable material, but brick can be used in localities where stone is not available. On a retail business or a residential street a bituminous, wood block, or brick pavement can be used. Wood is the most expensive of the three, the brick the most noisy, and, in some cases, the asphalt the cheapest. Any one of the three will make a satisfactory pavement, wood probably the most so if the property owners are able to stand the extra expense.

In considering the question of cost of any pavement, however, the ultimate and not the first cost must be determined upon, as a pavement which is expensive to lay down may be so much easier to keep in repair that in the end it will be the least expensive.

Foundation.

No matter what the character of the pavement, it is absolutely necessary that it be laid upon a solid foundation. It has generally been accepted by engineers that concrete makes the best foundation, as a general proposition. The common practice is to mix the concrete in the proportion of one part of cement to three parts of sand and six parts of broken stone of a size ranging from 2 inches downward. The thickness to which it shall be laid depends upon the character of the traffic on the street, but, as a general proposition, 6 inches has been accepted as the right depth, but in special cases it has been laid 8, or even 10 inches deep.

In the city of Glasgow, Scotland, however, where loads weighing one hundred tons are moved along the streets, the foundations are only 6 inches thick. The mixture, however, is 1:2:4 instead of the 1:3:6 previously given.

Stone Block Pavements.

In deciding upon the special material for stone-block pavements, both hardness and toughness are to be taken into consideration. If a stone be too hard, it will wear smooth under heavy traffic and, consequently, be slippery. If, however, it be too soft, it will wear quickly and unevenly, soon becoming rough.

The old practice with stone pavements was to lay the blocks with a joint about $\frac{1}{4}$ inch wide. This allowed the blocks to wear at the edges, soon becoming round on top under heavy traffic, so that even when the blocks themselves maintained their position the pavement was nearly as rough as

*A paper presented at the International Engineering Congress, San Francisco, September, 1915.

one of cobblestone. The later practice, however, has been to make the blocks smaller, have them cut better, so that they can be laid with narrow joints, and to fill the joints with cement grout, pitch, or some other enduring material.

Bituminous Pavements.

Under this head should be considered sheet asphalt, asphalt block and bitulithic pavements.

Sheet asphalt pavements have been in general use for thirty years and have come into favor more rapidly than any other material. This pavement is smooth, pleasing to drive over, easily cleaned, and easily repaired. It is, also, comparatively cheap. It is especially adapted for residential and light retail-business streets.

Asphalt itself, while originally coming from the Island of Trinidad and Venezuela, has lately been produced in large quantities in California by the distillation of petroleum oil. This has materially reduced the cost of the pavement.

Upon the concrete foundation, is first laid a binder course, consisting of stone from 1 inch in diameter down to dust in size mixed with the asphaltic cement. If necessary, sand should be mixed with the broken stone and dust so as to fill the voids in the stone almost completely, but not to such an extent that the wearing surface will not easily form a bond with it. The wearing surface is composed, roughly, of 10 per cent of bitumen and 90 per cent of sand and stone-dust, the bitumen being considered that part of the asphalt that is soluble in carbon disulphide. It is, too, the part of the asphalt that is of value in the pavement on account of its cementing properties.

The grading of the sand that is used in the pavement is important, as the function of the bitumen is simply to hold the particles of the sand and dust together; and the smaller the voids in the sand, the harder, more dense, and more stable will be the resulting mixture. As to the exact size, there is some question in the minds of different engineers, the maximum ranging from 1-10 to 1-4 inch in diameter; but, whatever the maximum size, the grading should be gradual and complete, as before outlined.

The different ingredients are mixed at a central plant and taken upon the street and spread in such quantities that it will have, when rolled, a thickness of 1½ inches or 2 inches, according to the requirements of the specifications. The binder, previously referred to, should have a depth of 1 inch.

Great care should be taken in spreading the material on the street, so that it will be even and free from lumps and, when rolled, the entire surface will have a uniform density.

Bitulithic.

This is a patent pavement, and consists of stone from 1½ inch downwards so graduated that the voids shall be less than 20 per cent. These voids are filled with either asphalt or some coal tar preparation. The idea of the patentee, originally, was to construct an improved macadam pavement, but, after certain experiments, it was ascertained that it would be possible to

construct a durable and substantial pavement of this character. The pavement has come into very general use during the past ten years, and undoubtedly its use would have been more extensive had it not been a patented article. The first pavement of this character was laid in Pawtucket, R. I., in 1901, where the grades range from 4.9 to 12 per cent. This pavement, even on these excessive grades, has given satisfaction.

Repairs.

It is extremely difficult to obtain accurate and valuable information concerning repairs to any kind of pavement. This is true for two reasons: First, because the different cities have not kept their accounts in such a way that it is possible to determine how much money has been expended on each or any street, even when the total amount is known; and, second, because few cities have money enough to keep their pavements in good condition, and too often the amount expended means simply that fact rather than the amount which was necessary to keep the pavements in repair.

Sidewalks.

Sidewalks are constructed of stone, cement, and brick, according to the availability of the different materials, and the cost varies in accordance with the distance the material has to be transported.

When sidewalks are not laid the full width of the sidewalk space, as often occurs in residential districts, the question comes up whether it should be laid next to the curb or some distance back from it. If there is left a space of three or four feet between the outer edge of the walk and the curb, this can be sodded and used for planting trees.

In most American cities it has been the practice to allow property owners, in the business section of the city, to construct vaults under the sidewalk space out to the curb line, and sometimes even beyond. This is a practice, which is not advisable. The street belongs to the public from property line to property line, and should be reserved to the public for its use. In modern times, when so many public utilities are placed under ground, it would seem that the sidewalk space should be used for this purpose wherever possible. In foreign cities it is the practice to lay the sewer and the large water and gas mains in the roadway, but, whenever possible, to lay the others under the sidewalks. In this country, however, that practice has been followed to but a very slight extent, although at the present time the feeling in New York City is that it is advisable to do this.

The one thing which causes the most damage to American pavements is the constant disturbance by digging in the streets for the construction or repair of these underground utilities, and anything that will reduce this work will not only add to the life of the pavement, but materially reduce the cost of repairs. In many cases it will doubtless necessitate the construction of two lines for each utility in the street, but the connections to the property will be so much shorter and the cost of repairs so much less that undoubtedly it

will be an economical proposition in the end. It may be somewhat difficult to bring about this in the business part of the cities where the utilities are already constructed under the roadways and vaults exist under the sidewalks, but in the outlying districts it is not only practicable but advisable to place these utilities in the sidewalk area.

Street Cleaning.

The cost of cleaning streets, whether measured by the square yard of surface cleaned or the cubic yard of material removed, depends upon the character of the pavement, how well it is kept in repair, and how often it is cleaned; also, whether the work has been done by machinery or by hand.

In 1907, a commission was appointed by the Mayor of the City of New York to investigate this matter, and the following is quoted from the report of the commission:

"There is a very marked difference between the quantity of dust left upon the pavements of various kinds. Thus, if we call the average volume and weight collected from the sheet asphalt pavement 100, the relative quantities from other kinds of pavements were:

	Volume	Weight
From sheet asphalt....	100	100
From block asphalt....	130	182
From wood block (old)	332	145
From granite block....	1,081	912

LOS ANGELES CITY INSPECTORS DUE FOR SHAKEUP.

Radical changes in the system of inspection for street, sewer and other public improvements will be put into effect by the board of public works as the result of a long and careful investigation of alleged abuses in that department of the city government.

That the board has been keeping a careful check on its inspectors, and that changes will be made both in the personnel and the system of conducting such inspections, within the near future, was the statement of Lorin A. Handley, president of the board.

The investigation is said to have shown that inspectors on certain work were too lenient with certain contractors and too strict with others, and that work of an inferior nature was passed through the neglect, or worse, of officials in charge of the job.

Recent disclosures of rotten paving and repeated failures of contractors to rectify the paving after they had assured city officials that they would do so are responsible for the thorough investigation being made by the board.

In addition to a shaking up of the inspection department of the city engineer's office the public works board also plans to call a number of contractors before it and demand a show-down as to why contracts are being taken at prices which would not pay for work done under the specifications.

Contractors who underbid and then skimp the work are to be haled before the board and declared irresponsible bidders, thereby barring them from future bidding.

Richmond Streets*

By H. D. Chapman, City Engineer and
Street Superintendent.

Street Work in General

By far the most important improvement of a city, so far as the general public is concerned, is street improvement, and this city has a reputation for the large mileage of streets paved. The matter of obtaining good streets at a reasonable cost is a problem that demands a great deal of study and experiment, and the building of cheap streets is still in an experimental stage. The city of Richmond has as good oiled macadam streets as any other city of which the writer has any knowledge, and it has some that are as bad as any, and we are endeavoring to evolve a pavement that is at once cheap and durable. Our latest efforts in this line, with asphalt as a binder instead of oil, is meeting with marked success, and while we have not gotten the matter down to a nicety, I believe we are approaching perfection.

There are a great many points to be considered in the use of oil or asphalt in paving work, such as temperature, dampness of the rock, nature of the subsoil, temperature of the oil and other minor details, such as the proper working of the sprayer, speed of walking horses, skill of the workman, etc., etc. The laying of an asphalt or bitulithic street has the advantage in that the paving mixture is mixed at one place under the same circumstances at all times, with proper facilities for testing, heating and mixing, and is always in view.

By the penetration method, on the other hand, there is no way of telling whether or not the oil is penetrating sufficiently, whether it is being spread in sufficient quantities, or whether it is of the proper consistency. None of these things can be discovered until the job is done. Another condition that works against the durability of an oiled macadam street is a poor foundation. Inasmuch as there is little cohesion within an oiled macadam street, the effect of a heavy truck load is transmitted to the sub-grade. If this sub-grade gives, it disturbs the whole structure of the street and breaks up the paving. This may be remedied by cutting the sub-grade to, say, twelve inches below the base of the pavement, and filling this space with quarry waste.

When you consider that the contractor must discount his bonds, must collect his accounts, and stand all loss by accident, carry liability insurance, etc., etc., it will be seen that at the present prices bid for paving there is little chance of the contractor making large profits on this particular branch of the work, and he is prone to cut into the specifications.

I do not think that Richmond Standard Macadam in itself can be laid for

less than 6½ cents per square foot, not including interest charges, discounts, overhead expenses, etc., and we are getting bids at 7 and 7½ cents. This gives only a very small margin of profit. I would rather see the prices advanced to a fair profit than to see the contractor try to make his money by close work.

On our "Richmond Standard Specifications" we are endeavoring to build up a wearing surface of about ¾ inch in thickness, which as nearly as possible approaches a bitulithic mixture. The streets which we have put in under these specifications, viz.: Twenty-second street, Clinton avenue, Thirteenth and Fourteenth streets, Santa Fe and Nicholl avenues, and Piedmont Place, have been in for a year or more, and seem to be in first-class condition at this date.

We are trying an experiment with a road gravel on the easterly end of Macdonald avenue. This gravel is a mix furnished by the Niles Sand, Gravel and Rock Company of Niles, and is "made," or rather, it is built up in the plant and is composed of rock, gravel and clay, in a proportion that is thought to give good results under traffic. This is my first experience with this material, and I am greatly interested in the results. It will be a very easy paving to repair.

In connection with street improvements, I would make the following recommendations, viz.: That San Pablo avenue over its entire length in the city be improved with a permanent paving at least to correspond with the paving now being put in by the Highway Commission, and I have asked the Commission to furnish specifications for this work.

Richmond Avenue.

The failure of Richmond avenue is a matter to be greatly regretted by everyone concerned, and particularly by this office. It was caused, as stated in the hearing, not by the fault of the contractor, but by the nature of the foundation, which foundation had not been examined. The break was not caused by settlement, but by the fill slipping from the underlying rock, which in this place appears to lie with a large dip to the north. Added to this, the unstable condition of the marsh gave no resistance to the toe of the slope. The city will probably have to repair this street, and the contractor, the California Street and Road Improvement Company, will undoubtedly aid us. I would suggest that nothing be done until next summer, when the slip will probably have reached a permanent foundation. The sidewalks and curbs can probably all be saved and jacked into proper position, but considerable paving must be relaid.

Street Openings.

The only street opening now under way is the widening of Tenth street, Lucas avenue and Kearney street, from Tenth and Pennsylvania avenue to the city limits. Maps are out for this work, and the resolution of intention descriptions are being prepared and all will be submitted shortly.

Since the removal of the city hall to its present location, it would seem expedient that the plan for an opening under the Santa Fe fill be revived, and I would suggest that the City Engineer be authorized to reopen this matter. If the Council remembers, these openings were dropped some time since on account of the cost. If one opening only is put in, it should go at Sixteenth street, as this street is half way between the Tenth street and Twenty-third street openings. If two openings are to be put in, one at Twentieth street is recommended, as leading directly to the City Hall.

The widening of Tenth street and Twenty-third street, north and south, are still in the hands of the commissioners. The opening of Thirteenth and Fourteenth streets has been completed, and is unique in the annals of street openings in this city. In that every assessment was paid, and there were no sales for delinquency. Scenic avenue deeds have not yet been turned into the city, and the opening of Third, Fifth and Eighth streets across the Santa Fe Railway await a hearing before the Railroad Commission. The opening of Seventh street under the Santa Fe Railway is complete, or rather, I understand that the deed to the property taken has been handed to the commissioners. Although the deed has not yet been given to the city for recording, the railroad company is proceeding with the construction of the authorized crossing. Cutting Boulevard and Tenth street north were successfully carried through.

The Council will note that of eleven openings started, only four have been completed. Of the remaining seven, there are three which depend upon the action of the Railroad Commission, notably antagonistic to grade crossings, such as these will be.

Cutting Boulevard.

The improvement of this street, which has just been completed, is by far the most important piece of street work undertaken by the city of Richmond as yet. Cutting Boulevard is a 11½ foot street running from the east city limits to the center of the west side of town and meeting the northerly approach of the new municipal tunnel. Portions of the street had previously been covered with crushed rock and rolled.

*From Annual Report 1914-15 of City Engineer of Richmond, Cal.

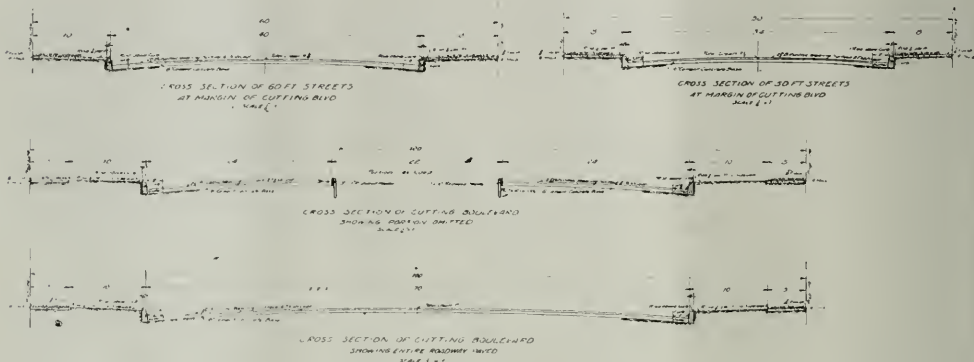
The present improvement covers the entire length and width of the street and opens up direct communication from the west side to San Pablo avenue. All traffic to the Standard Oil Company, Marin County ferry, municipal tunnel and all of the west side, which formerly had to go around via Macdonald avenue can now use this route. It opens Marin County to all of Alameda and Contra Costa Counties, and will give direct communication to the proposed State highway on San Pablo avenue, from San Pablo to Oakland.

The work was done in four sections and four different contracts let as follows:

CONTRACT 221-2

CUTTING BOULEVARD—Pullman Avenue to City Limits. Ransome-Crummey Co.

326,101.12	sq. ft. Bitulithic Pavement (4-inch broken rock base, 2½-inch bitulithic wearing surface)	\$0.175	per sq. ft.
49,588.47	sq. ft. Cement Concrete Sidewalk	.14	per sq. ft.
9,583.38	lin. ft. Cement Concrete Curb	.400	per lin. ft.
18,656.94	cu. yds. Excavating	.80	per cu. yd.
2,501.00	cu. yds. Filling	.90	per cu. yd.
275.10	lin. ft. 10-inch Corrugated Iron Pipe Culverts	1.50	per lin. ft.
516.30	lin. ft. 8-inch Corrugated Iron Pipe Culverts	1.00	per lin. ft.
1,252.40	lin. ft. 6x30-inch Corrugated Iron Culverts	2.90	per lin. ft.
806.19	lin. ft. 8-inch Sewer Pipe	.60	per lin. ft.
7,447.79	lin. ft. 6-inch Sewer Pipe	.55	per lin. ft.
25.00	8x4-inch Y Branches	.50	each.
277.00	6x4-inch Y Branches	.45	each.
20.00	Manholes	40.00	each.
13.00	Lampholes	7.50	each.
Contract price, \$94,175.49. Total Cost, \$95,610.87.			



Contract 221-2, easterly city limits to S. P. R. R., \$94,175.49.

Contract 242-2, S. P. R. R. to 23rd street, \$17,621.59.

Contract 243-2, 23rd street to Tenth street, \$71,583.88.

Contract 244-2, Tenth street to Ashland avenue, \$134,907.87.

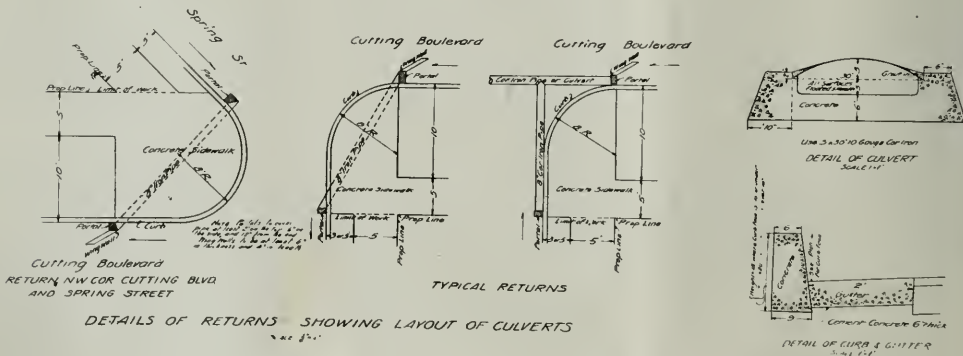
Plans were gotten out under the direct supervision of the writer and W. W. Hughes, Assistant Engineer; and the field work was done by parties under Messrs. Calfee, Carnahan and Prouty, on the different divisions.

CONTRACT 242-2

CUTTING BOULEVARD—23rd Street to S. P. Ry.

Ransome-Crummey Co.

131,884.21	sq. ft. Bitulithic Pavement (6-inch Cement Concrete Base, 2½-inch Bitulithic Wearing Surface)	\$0.215	per sq. ft.
18,700.74	sq. ft. Cement Concrete Sidewalk	.14	per sq. ft.
8,440.46	sq. ft. Cement Concrete Gutter	.200	per sq. ft.
4,642.40	lin. ft. Cement Concrete Curb	.400	per lin. ft.
4,007.06	lin. ft. Redwood Header	.10	per lin. ft.
15,607.30	cu. yds. Excavating	.70	per cu. yd.
71.80	cu. yds. Filling	.40	per cu. yd.
618.00	lin. ft. 10-inch Corrugated Iron Pipe Culverts	2.25	per lin. ft.
91.00	lin. ft. 8-inch Corrugated Iron Pipe Culverts	2.00	per lin. ft.
54.40	lin. ft. 8-inch Iron Pipe Culverts	2.00	per lin. ft.
Contract price, \$47,621.59. Total Cost, \$49,030.34.			



CONTRACT 243-2.**CUTTING BOULEVARD—10th Street to 23rd Street.****Ransome-Crammey Co.**

123,282.72 sq. ft. Bitulithic Pavement (6-inch Cement Concrete Base, 2½-inch Bitulithic Wearing Surface)	\$0.215	per sq. ft.
34,385.82 sq. ft. Cement Concrete Sidewalk	.14	per sq. ft.
11,107.40 sq. ft. Cement Concrete Gutter	.26	per sq. ft.
6,662.40 lin. ft. Cement Concrete Curb	.40	per lin. ft.
6,653.68 lin. ft. Redwood Header	.10	per lin. ft.
15,093.26 cu. yds. Excavating	.70	per cu. yd.
1,872.30 cu. yds. Filling	.40	per cu. yd.
1,025.00 lin. ft. 10-inch Corrugated Iron Pipe Culverts	2.25	per lin. ft.
382.00 lin. ft. 8-inch Corrugated Iron Pipe Culverts	2.00	per lin. ft.
217.80 lin. ft. 8-inch Iron Pipe Culverts	2.00	per lin. ft.
110.00 lin. ft. 5x30-inch Culverts	3.50	per lin. ft.
6,187.80 lin. ft. 6-inch Sewer Pipe	.60	per lin. ft.
232.00 6x4-inch Y Branches	.50	each.
10.00 Manholes	50.00	each.
10.00 Lampholes	8.00	each.
Contract price, \$71,582.88. Total cost, \$74,288.14.		

CONTRACT 244-2.**CUTTING BOULEVARD—10th Street to Ashland Avenue.****Municipal Improvement Co.**

354,666.2 sq. ft. of Bitulithic Pavement (6-inch Cement Concrete Base, 2½-inch Bitulithic Wearing Surface)	\$0.247	per sq. ft.
65,565.5 sq. ft. of Cement Concrete Sidewalk	.14	per sq. ft.
24,543.5 sq. ft. of Cement Concrete Gutter	.21	per sq. ft.
12,956.6 lin. ft. of Cement Concrete Curb	.40	per lin. ft.
11,186.7 lin. ft. of Redwood Header	.08	per lin. ft.
8,101.1 cu. yds. of Excavating	.57	per cu. yd.
7,081.7 cu. yds. Filling	.70	per cu. yd.
1,017.0 lin. ft. of 10-inch Corrugated Iron Pipe Culverts	2.50	per lin. ft.
90.9 lin. ft. of 8-inch Corrugated Iron Pipe Culverts	2.00	per lin. ft.
240.5 lin. ft. of 8-inch Iron Pipe Culverts	2.00	per lin. ft.
1,367.5 lin. ft. of 12-inch Sewer Pipe	1.05	per lin. ft.
763.0 lin. ft. of 10-inch Sewer Pipe	1.00	per lin. ft.
8,332.0 lin. ft. of 8-inch Sewer Pipe	.80	per lin. ft.
770.0 lin. ft. of 6-inch Sewer Pipe	.75	per lin. ft.
40.0 12x4-inch Y Branches	.50	each.
24.0 10x4-inch Y Branches	.50	each.
260.0 8x4-inch Y Branches	.50	each.
18.0 6x4-inch Y Branches	.50	each.
27.0 Manholes	49.00	each.
4.0 Lampholes	6.00	each.
Contract price, \$134,907.87. Total Cost, \$140,665.53.		

THE USE OF PATENTED PAVEMENTS BY CITIES.

Many laws, city charters and city ordinances have been enacted forbidding the use of patented materials or machines in municipal work. These laws have had their origin partly in some notable cases in the past where patented devices have been used at exorbitant cost to the taxpayers as a result of dishonest collusion with city officials, and partly in cases where suits for very heavy damages have been brought against cities because of some use of a patented device without consent of the owner of the patent. Such laws, however, have proved impracticable of complete enforcement. The progress of the arts is largely reflected by the use of patents, and to wholly prevent a city from using any patented device until the patent had expired, 17 years from the date of its issue, would place the city hopelessly behind the times.

An interesting review of the status of the laws covering the use of patented paving materials by cities was recently given in a lecture delivered before the highway engineering class of Columbia University, by George C. Warren, President of Warren Brothers Co., Boston, Mass. Mr. Warren, is of course, an interested party, but his wide experience in litigation over the use of patent paving should make his summary authoritative.

Cases involving the legality of the adoption of patented pavement by municipalities have been decided within the past twenty years by the highest courts in the States of New York, New Jersey, Ohio, South Carolina, Oregon, Missouri, Maryland, Louisiana, Kentucky, Michigan, Kansas, Iowa, Indiana, Idaho, Oklahoma, Pennsylvania, Tennessee, Massachusetts, California, Montana, Washington, Wisconsin and Illinois.

With the exception of the last two States, the final decision in all of the States is to the general effect that, where the owner of the patent voluntarily surrenders his exclusive rights and agrees to allow any contractor to use the patent, on the payment of a reasonable price, all the competition which the law requires is provided. Under such regulations, patented pavements may be laid and contracted for by municipalities; and any State law which prohibits the adoption of a patented pavement by municipalities is unconstitutional, because it attempts to prevent the exercise of the Federal patent franchise, which is based on the United States Constitution.

Of the two States in which decisions of the final courts have been adverse to patented pavements, the Wisconsin legislature promptly amended its law so that patented pavements may be used; and Illinois stands alone as the only State in which there is practically a prohibition of the use of patented

materials in municipal assessment work.

The courts of most of the States above referred to have declared that the competition required by the State laws is provided if the owner of the patent files with the municipality a binding agreement under which, at a certain price, he will sell the patented portion of the pavement, which patented portion is generally confined to the wearing surface, to any responsible bidder so that all such bidders may compete with the patentee or his agent complete with the patentee or his agents for the construction of the whole pavement.—Editorial, Engineering News, March 11, 1915.

OAKDALE CITY ENGINEER INVESTIGATES STREET PAVING TYPES.

City Engineer Harlowe is at work on the specifications for the paving of F street. He intends to visit Stockholm a few days to study the four-inch pavement used in that city.

The city trustees are about agreed upon a four-inch asphalt and concrete foundation with a Topeka top, although not altogether certain that it will be heavy enough. This is what the city engineer expects to determine before the trustees take final action.

Engineer Harlowe has advised the trustees that the macadam paving as proposed with only a water cement, would not stand the traffic on Oakdale's streets, and that idea has been practically abandoned. Mr. Harlowe does not believe that it would last more than four or five years, and says that most of the larger cities have abandoned the macadam idea.

TRUSTEES OF HANFORD, KINGS COUNTY REFUSE TO ACCEPT PAVING.

S. W. Knowles, a representative of the Worswick Street Paving Co., received a refusal from the city board as an answer to his request that the board accept the paving done in the alley running from Irwin to Phillips street between Sixth and Seventh streets.

The job of paving has had quite a stormy history, private contracts having been first taken from the property owners along the alley by Contractor Simpson, and when he was unable to complete the work the contract was taken over by the Worswick Company. The specification for the work had been prepared by Engineer Max Enderlein, and called for a cement concrete base of five inches, with a top surface of two coats of oil and sand or screenings.

According to the statements of Engineer Enderlein, the contracting firm had been allowed to change the surface to one coat of asphaltum and sand. This top surface is now the cause of the friction, having proved inadequate, and on the grounds that no paving had been ordered by the city, and no specifications had been made, the board refused to accept the alley paving.

There is apparently no complaint with the five-inch base, but the fact that there has been no successful surface provided seems to make the job incomplete.

Los Angeles Department of Street Construction.*

Ily C. S. Pope, Engineer of Street Construction.

Engineers and Inspectors.

During the past year the duties of the assistant engineers and inspectors of this department have been more definitely specified. The organization is now as follows:

Engineer of paving in charge of department; assistant engineers assigned to office administration, paving and railroad construction, storm drain construction, general grading and culvert work, paving in Wilmington District, and paving in San Pedro District; one general inspector; one sample collector; two asphalt chemists; one cement tester; two assistant cement testers.

The Vrooman Act Inspectors are employed as much as possible on the class of work in which their training, experience and ability especially fits them.

At present they are divided about as follows:

Twelve asphalt inspectors, 6 cement base inspectors, 20 cement curb, walk and gutter inspectors, 14 storm drain inspectors, 2 oiling inspectors.

Total cost of inspection during the year, \$16,000; expense of supervising and office engineers, \$13,512; cost of testing laboratories, \$5,060; value of work handled, \$3,971,826.57.

Inspection expense per \$100, \$1.70; supervision expense per \$100, 34 cents; laboratory expense per \$100, 16 cents; total expense per \$100, \$2.20.

*From Annual Report 1914-15 of the City Engineer of Los Angeles.

Record of Paving Completed.

Type	Sq. Yds.	Miles	% of Paving
Sheet Asphalt, heavy	925,142	43.27	62.4
Sheet Asphalt, light	151,486	7.01	10.6
Bitulithic	87,784	3.52	5.1
Vitrified Brick	3,534	.14	0.2
Granite Block	13,227	.55	0.8
Concrete Plain	33,711	2.24	3.2
Concrete Protected	39,452	1.92	2.7
Oiled Macadam			
Oiled Gravel	30,017	1.38	2.0
Oiled Natural Soil	170,946	9.25	13.3
Total	1,455,289	69.08	100.0

Light traffic pavement is considered as that having a base 4 inches or less in thickness.

Heavy traffic pavement is considered as that having a base 5 inches or more in thickness.

Summaries of Storm Drains.

Catch Basins	1109
Outlet Chambers	11
Manholes	355
Special Structures	64
Total Length Sewer (ft.)	177,028
Contract price	\$962,952

Record of Railroad Paving.

Following is a tabulation of the various kinds of work, track mileage and estimated costs based on unit costs obtained from the Board of Public Utilities, and other reliable sources.

Los Angeles Ry., dry ballast, 2.66 miles double track, \$60,560 per mile; Los Angeles Ry., grouted, 8.33 miles double track, \$71,121 per mile; Los An-

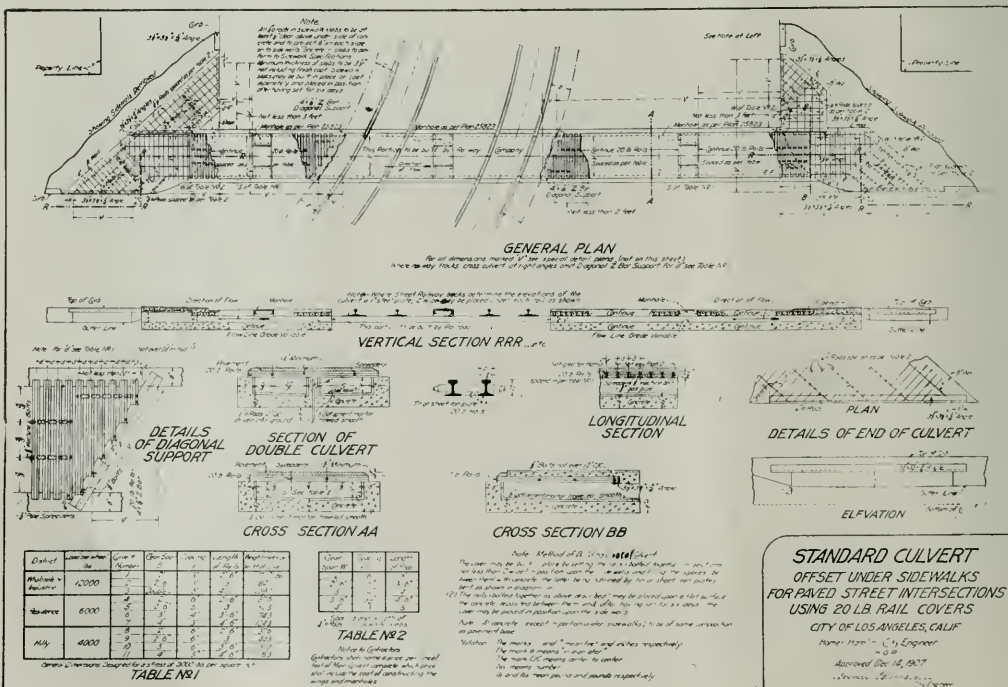
geles Ry., T-rail (rails not included), ballast, 1.85 miles double track, \$48,945 per mile; Pacific Electric grouted ballast, 2.88 miles double track, \$76,887 per mile; same grouted ballast, 1.02 miles single track, \$34,015 per mile; steam road grouted ballast, 1.23 miles double track, \$100,000 per mile; same grouted ballast, 1 mile single track, \$50,000 per mile. Total reduced to single track miles, 38.02.

Record of Laboratory Tests.

Surface Mixtures—Regular, street department, old samples off street, Topeka, bitulithic, Warrenite, Asphaltic cements—Regular, street department, miscellaneous, Binder, bituminous bases, sands, dusts, miscellaneous chemical analyses. Total number of samples tested, 7,469. Total tests made on 7,469 samples, 14,191.

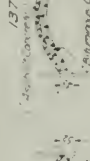
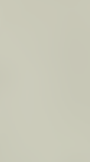
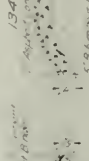
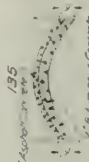
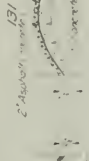
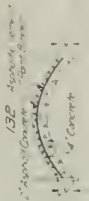
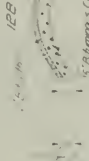
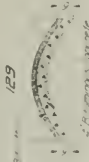
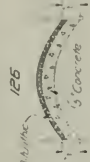
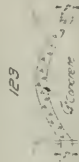
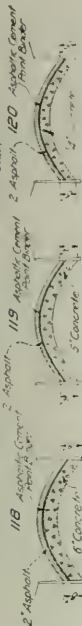
Average Cost of Tests.

Surface Mixture—Sheet asphalt, \$0.247; bitulithic, \$0.37; Topeka, \$0.323; Asphaltic cement, \$0.21; binder, \$0.299; base, \$0.314.



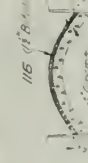
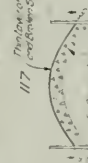
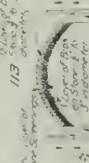
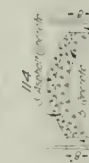
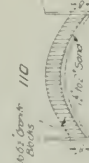
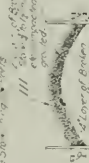
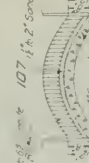
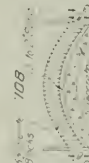
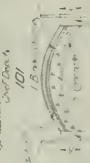
CROSS SECTIONS

See Sheet 181 for notes



CROSS SECTIONS SHOWING THICKNESS OF PAVEMENTS

See Sheet 181 for notes



See Sheet 181 for notes

Cement Laboratory.

Cements, complete tests, \$61, \$2.02 per test; cements, boiling and settling time tests, 1277, 25c per test; sand, sieving and washing tests, 230, 50c per test; rock, abrasion tests (De Val), 5, \$5 per test; paving, brick rattle tests, 62, \$1 per test; sewer brick, absorption tests (Lab.), 94, 20c per test; concrete cylinders, compression tests, 30, \$1 per test.

Culverts Constructed.

The construction of culverts has decreased slightly during the year, due probably to the rapidly increasing area of the city drained by adequate storm sewers. A total of sixty-nine culverts were constructed during the year, of which eight were vitrified pipe, three were reinforced concrete pipe and the remainder steel-concrete construction. No corrugated iron culverts were installed during the year. The total contract price of culverts constructed during the year was \$15,212.85 against \$16,841 during the preceeding year.

Asphalt Paving.

The methods of laying and requirements in asphalt work have not greatly changed during the year.

The specific gravity of street samples of sheet asphalt laid during the year shows a very much higher average than ever before, owing to several changes made possible by specification No. 96. The use of a hot hand-roller has been abandoned, and as one result, much less trouble is now experienced with cracking and checking in the surface. The pavement seems to be smoother without the hand-roller and

good gravities are no harder to secure.

All asphalt pavements are now laid on a basis of a definite number of pounds per square foot and "sticking" is resorted to only for the purpose of insuring a uniform spread of the paving materials.

Paint binder has been used to a considerable extent, and seems to give good results. The most satisfactory mixture consists of equal parts of asphalt and No. 1 engine distillate. The paint binder should be applied at least twenty-four hours before surface is laid. Samples of surface cut after several months, have invariably brought away portions of the cement concrete beneath.

A number of streets have been paved with a one- and one-half inch wearing surface on a three inch bituminous concrete base. Owing to the fact that trenching of a street for pipes nearly always immediately precedes paving, it is practically impossible to get a smooth pavement of this type. The cost is as great as the same surface with a four-inch cement concrete base which is much easier to construct, more satisfactory to property owners, and probably more durable.

Railway Paving and Reconstruction.

During the year grooved girder rails have been used on all reconstruction work done on steam and electric railways, with a single exception of Vernon avenue between Main street and Alameda street. The use of "T" rails

on this particular street was provided for by ordinance.

The various types of construction used by the different street and steam railways operating in this city are as follows:

Electric Railways.

L. A. Ry. Corp. uses both dry and grouted ballast, a 6-inch cement concrete base with 2-inch asphalt surface and 4½-inch bituminous header blocks, a 6-inch cement concrete base with 2-inch asphalt surface and 5-inch granite Pac. Electric Ry. uses grouted ballast, header blocks.

Steam Railways.

So. Pac. Co., Santa Fe Ry. and San Pedro, L. A. and Salt Lake Ry. use grouted ballast, 6-inch cement concrete base, with 2-inch asphalt surface and 5-inch granite header blocks.

The total number of miles (single track) of all roads in the city is approximately as follows: Los Angeles Ry. Electric narrow gauge, 310.50; Pacific Electric Ry. Electric standard gauge, 152.30; Southern Pacific, steam, 22.50; Atchison, Topeka and Santa Fe, Southern Pacific and Salt Lake Railways (estimated), 27.50; total, 512.80.

No adequate provisions have been made for city supervision or inspection of railway paving and reconstruction work in city streets. With the present organization an occasional visit to each job by an assistant engineer or inspector is all that can be done in the way of inspection.

Oakland Street Construction.

By Commissioner of Streets William J. Baeus and City Engineer Perry F. Brown.

Macadam Used.

For residence streets, we are using oil-macadam exclusively. The type now being constructed is the two-course oil-macadam described in the report of two years ago. This pavement consists of a layer of stone four inches thick at the gutter and five inches at the crown, measured before rolling, thoroughly compacted as water bound macadam. A poorer grade of rock is permitted in this course than heretofore specified for water-bound macadam, as this rock receives no direct abrasion and the use of a rock that is cheaper to quarry and compact has materially lowered the cost to the property owners. The department has gone farther and encouraged the use of soft rock in the base, for the reason that it compacts better into a firm, dense foundation without ruining the sub-grade through excessive rolling.

On top of the base is spread three inches of high grade rock. This is oiled, harrowed, oiled again, then screened and rolled. After filling the voids, it is oiled again, screened and rolled to completion. One-half gallon of oil is used for each of the three applications.

Wear Is Good.

This class of construction has generally given excellent satisfaction. In

some cases, where excessive hard rock was used for the top course, the property owners have been disappointed in the soft and rough appearance of the surface when completed, but experience shows that these defects are usually cured by warm weather, time and traffic. Only one street gives evidence of requiring more attention. This street may need another oiling. In this connection, a curious fact has been observed, namely, that streets built of soft rock become hard and compact much sooner than those built of hard rock. It is not clear that soft rock surfaces will last as long as hard rock surfaces, but their solidity and fine appearance during their first years, is notable.

Autos a Factor.

The use of oil-macadam has been forced upon us by the heavy increase in auto vehicles. Water-bound macadam will not stand, even with the best of maintenance, under rapid-moving rubber tires. These kick the small stones and dust off the surface of the street, destroying the bond and cause the road to ravel and become rough and full of holes. Therefore, we not only build no more water-bound macadam streets, but are treating those already constructed with oil or tar. Thirty-four miles of old streets have

been so treated by the department during the past year, and since July 1, 1911, we have reduced the amount of water-bound surface from 254 miles to 126 miles. Fortunately, this enforced use of oil has its compensations, for it has cut our sprinkling bills enormously, reduced the cost of repairs and enabled us to give better service on the remaining water-bound macadam.

MAINTAIN TO PREPARE FOR EXTENSIVE STREET IMPROVEMENTS.

That steps be taken at once by the city trustees to make plans for the various civic improvements which must be made before the building of permanent streets can begin is the desire of Trustee J. E. Colton, who will probably ask for a special meeting of the board within a short time to consider these matters.

Colton is anxious that the street work be started, but the trustees have thus far failed to make any move in this direction. Colton urges that building and curb lines be established, provision made for the building of conduits for water, gas, telephone and electric light lines all underground, that proper sewers be provided and then start the paving of the streets and rush it to completion.

San Francisco's New Civic Center Pavements.*

By Jas. M. Owens, Assn. Mem. Am. Soc.
C. E., Assistant Engineer, San Francisco.

Undoubtedly one of this city's most noticeable civic achievements has been that of the selection and improvement of its Civic Center. It was only in 1905, the year previous to the fire and earthquake, that Mr. Burnham, the well known expert on city planning, presented his plan for the improvement of this center. At that time the realization of the project seemed to be hopelessly in the future. In the light of these facts, probably the most prominent thing about it, when we compare it with our civic achievements of other days, is the evident efficiency displayed in the prosecution of the construction of its buildings and its street pavements.

With its spacious Auditorium, which has housed many world congresses during the year just ending, with its City Hall, whose classic lines and resplendent dome, now nearing completion, and with its Library, well under way and with its completed pavements and attractive plaza, it is apparent to even the most skeptical, that the fulfillment of this, our city's long cherished dream, is something that is not far distant. The Civic Center as planned has an area of 24 acres. The City Hall covers an area of 116,480 square feet and will cost \$3,400,000 when completed. The Auditorium covers an area of 100,252 square feet and costs \$1,200,000. This was the gift of the P. D. L. E. to the city. A State building costing \$1,000,000; Library costing \$300,000; a Public Health building; Fire and Police building, and other structures as needed. This will give a fair idea of the cost and plan of the Civic Center.

The purpose of this paper is to describe in a general way, only, the pavements and some of the details incident to their construction.

The clearing away of the site, the realignment of the streets within it, and the planning of the grades to suit the conditions required in the construction of such large buildings, were problems that were expeditiously handled by the Board of Works, the City Engineer's office and the Consulting Architects. In this way the present plan of improvement was evolved. The first survey for the street improvements within the Civic Center were made by the bureau of surveys during the latter part of 1911.

Preliminary to the construction of the pavements in and about the Civic Center, sewers had to be reconstructed and the existing tracks of the P. D. R. Co. on both Larkin and McAllister streets had to be reconstructed to the new alignment agreed upon by the city authorities and the railroad company. Those tracks, the westerly track of Larkin street and the southerly track of the McAllister street line, were each swung out five feet from their original position, thus making the new track center 15 feet instead of 11 feet 6 1/2



Concrete Mixer at Work Near Polk and Grove Streets.

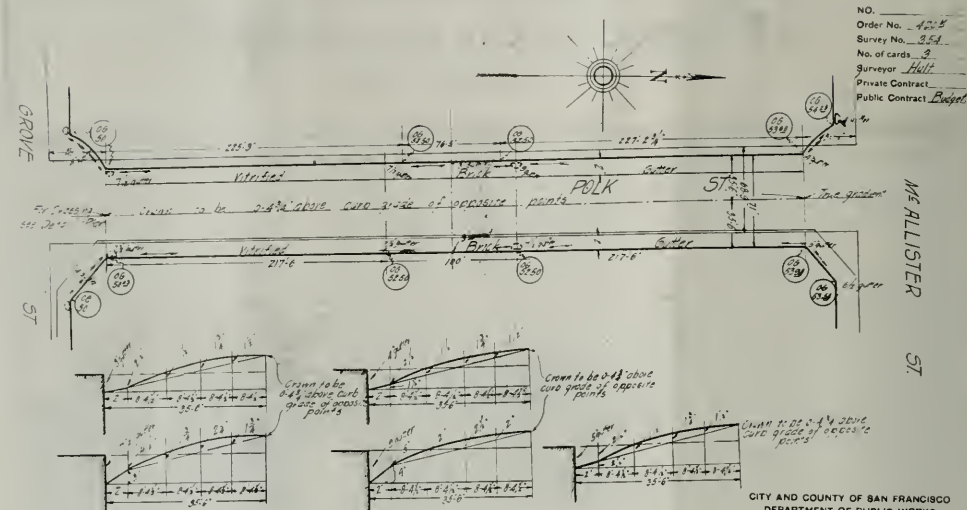
inch. This was done so as to afford sufficient room for the installation of center trolley poles instead of side poles. At the end of the new work, connection was made with the old tracks by means of 100 feet reverse curves.

On McAllister street, the new arrangement of tracks gives a clear width of roadway of 15 feet on the north side and 23 feet on the south side, this variation being due to the fact that the old existing north track is only 15 feet from the curb line throughout. In designing the curve for the pavement of this particular section, owing to the fact that the track centers did not coincide with the center of the roadway, it was found necessary to elevate the southerly track 3.0 inches above the north track which remained undisturbed, so that the cross section would be uniform, a variable gutter depth

was used, the north gutter being made 1 1/4 inches deep and the south gutter 7 inches deep. A slight change was made near the easterly end of this work at Larkin street, where the southerly track had to be raised slightly in grade to meet the grade of the newly installed special work at the crossing. The gutter depth on the south side adjoining was varied so as to parallel as near as possible the grade of the track, thus insuring a uniformity of cross section in the pavement. In the reconstruction of the tracks on Larkin street, it was found necessary to raise the easterly tracks to grade, but maintain its original alignment, the westerly track was moved out 5 feet west, making the new track center 15 feet. There was nothing specially noticeable in the reconstruction of this track work, excepting the attempt of the railroad



Brick Gutter Construction on Corner Polk and McAllister Street.



NOTICE TO CONTRACTORS AND INSPECTORS.

All street monuments found along the line of the work must be capped with iron frames.

Frames will be furnished by Engineering Department upon application.

Street monuments shall not be disturbed until permission is given by this office.

CITY AND COUNTY OF SAN FRANCISCO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING

M. M. O'Shaughnessy, City Engineer

Surveyed for ST. REPAIR DEPT.

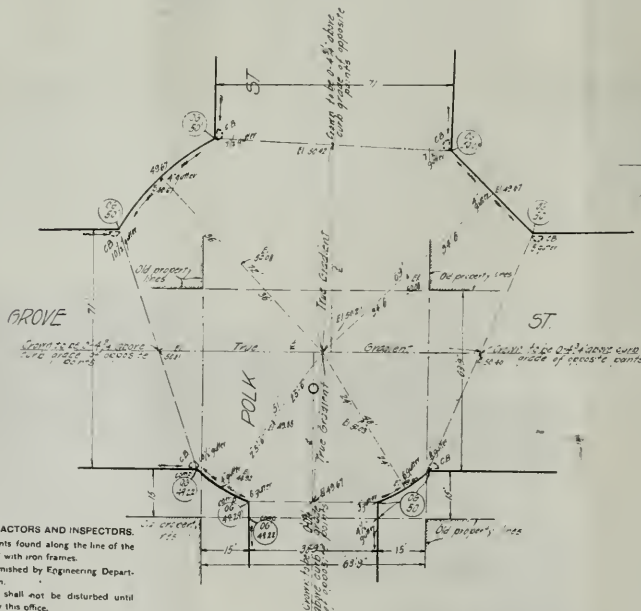
Date DECEMBER 14

Drawn by HULL Checked by DUNSTON

Date 12-15-14

Date 12-14

Plan and Cross-section of Polk Street.



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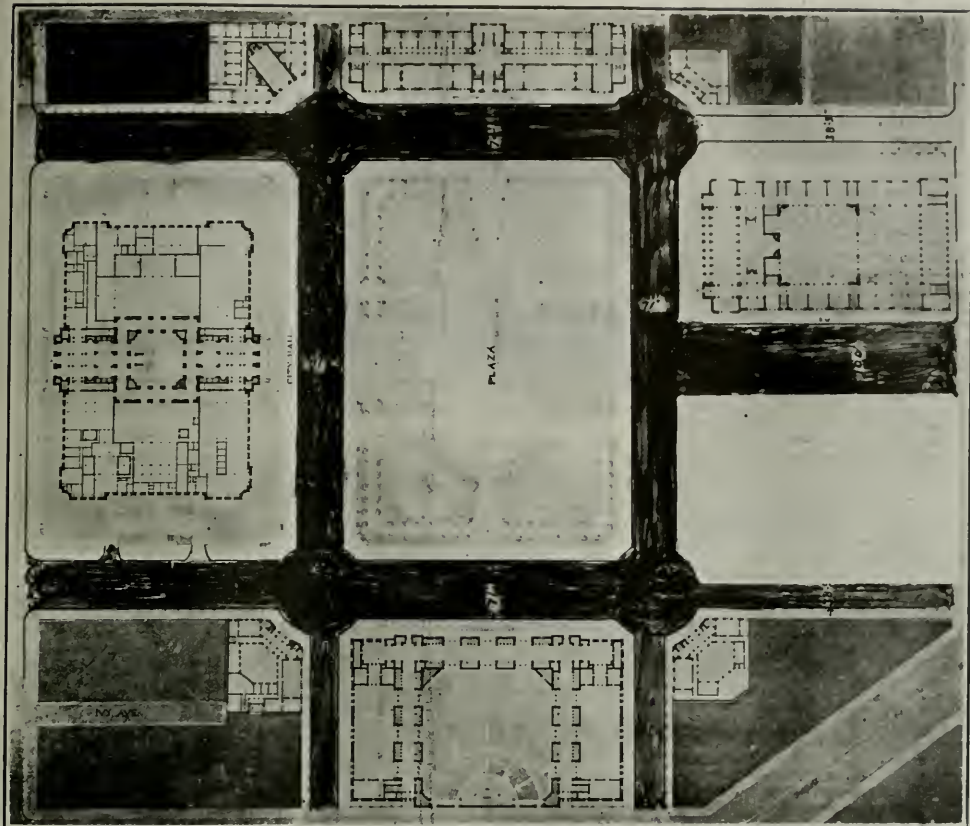
Date OCTOBER 21-14

Drawn by HULL Checked by DUNSTON

Date 12-12-14

Date 12-15-14

Plan of Polk and Grove Street Intersection, San Francisco.



PLAN OF SAN FRANCISCO'S NEW CIVIC CENTER, Showing Streets improved in Black. Street North of Plaza is McAllister; Street South of Plaza is Grove Street; Street Through Center of Plaza is Fulton Street. Street West of Plaza is Polk Street. Street East of Plaza is Larkin Street.

company to save and move its tracks without disturbing any appreciable amount of the pavement between rails. They were partially successful in doing this. The west track was cut loose at the ends and moved to its new position by means of jacks, it was then brought to grade and the material sluiced underneath by means of a fire hose.

The construction of sewers, and removal of the ruins of the old City Hall, delayed the paving operations a little longer than was expected.

The original width of roadway on old streets within the area now occupied by the Civic Center, was 38.75 feet, these under the new plan were widened considerably, for instance Polk street was made 71 feet, Grove street, 71 McAllister street, 71; Larkin street, 71, and Fulton street extension, 100. Each block presented a problem in itself, owing to the difference in gradients, presence of railroad tracks and other existing conditions. The unusual plan of the crossings, as laid out by the bureau of architects, called for a little

different treatment than is given to the ordinary street crossings.

Owing to the varying width of the streets making up their intersection and the truncated corners of same, a special scheme for crowning it had to be devised. This is illustrated partially by appended diagram. (Fig. 4.) An intersection of such unusual dimensions can easily be made unsightly by the use of either too large or too small a crown. A somewhat different treatment had to be given to the crowning of the intersection of McAllister and Polk and McAllister and Larkin streets on account of the tracks of the U. R. R. Co. not being centrally located.

On Larkin street, from McAllister street to Grove street, where the west-erly track was moved west 5 feet from its original position, and center poles installed, special treatment had to be made for drainage owing to the variations in the gradients in the two blocks, and the wide intersection of Larkin with Fulton street extended.

Fulton street from Larkin to Hyde street having the unusual width of roadway of 100 feet, called for a little

more care in the handling of the construction of the pavement than in the other cases cited. The work was under the supervision of Superintendent McCoy and his assistant, Mr. King. Here quarter point stakes were driven to grade along the length of the block, to elevation shown on the template. It was decided to make the crown light on this block as it had a very generous gradient longitudinally. Then the construction gang placed the concrete in the following manner: Starting from the edge of the gutter, a strip of concrete was laid for a distance of 22 feet from the gutter line for the entire length of the block. The mixer was then turned and another strip of concrete 24 feet width was laid, then a strip of 24 feet and finally another of 22 feet, this completed the concrete foundation. The binder course and the top surface were laid in a similar manner. A small Foote concrete mixer with a batch capacity of about 11 cubic feet was used on this job, and some very good results were gotten from same. Some 9,500 feet being put out for an eight hour day. The proportion used in the concrete mix was

1:22:57. The thickness of the binder coat was about $1\frac{1}{2}$ inches and that of the top surface about the same. The crown on this street, as I have before mentioned, was made purposely light, and the result has been very satisfactory. The section adopted affording very good drainage. In fact flat crowns prevail throughout the Civic Center on all the pavements. This undoubtedly is more suitable for an asphalt pavement than the usual crowns given by the different crown formulae. Probably a large part of the rolling of this material under traffic and temperature, is due to excessive crowning. Another thing worthy of note is that of the arrangement of catch basins at the intersections. Instead of placing the catch basins in the center, as is usually done on most of our intersections, they were placed on either end of the arc and a summit placed in the center, doubling the drainage. This scheme has worked out very well in practice. The improvement of the Plaza was under the jurisdiction and according to the plan of the bureau of architecture, and was handled outside this department.

The very effective color scheme and artistic result gained is due particularly to Mr. John Galen Howard of the Consulting Board of Architects, while to Mr. John McLaren, Superintendent of Parks, credit must be given for his skillful handling of that part of the plan having to do with the landscape gardening. There is not the slightest doubt but that when all of the buildings have been constructed in and around the Civic Center, and all other projected improvements made, that this city will have one of the finest Civic Centers to be found anywhere in the United States.

RIVERSIDE PREPARES TO IMPROVE FAIRMOUNT BOULEVARD.

The first definite step toward the permanent improvement of Fairmount Boulevard, from First street to Whittier Place, the north boundary of White park, has been taken on the petition from a majority of the abutting property owners filed with the council, and instructions given to the city engineer to prepare the necessary maps and sections.

This successful issue of a much desired improvement has only come through the hardest kind of work on the part of members of the Fairmount Boulevard Improvement Association. They have been compelled to give up their ambitious plan for a center parking space, distinctive street tree planting, and unique lighting system, and are now asking only for the regulation macadam roadway, 34 feet in width, standard curb and gutter, cement sidewalk and the standard one-light concrete post ornamental lighting system.

The distance to be improved is seven full blocks, and the short block between Eighth street and Whittier Place, representing a total frontage of about 5,200 feet. Of this frontage the signers of the petition represent 2,780 feet, a safe majority, which does not include the Pacific Electric frontage at the warehouse, between Fifth and Sixth, or at the depot between Seventh and Eighth.



Concrete Base, Binder and Top Surface on McAllister Looking East, S. F.

PASADENA STREET WORK. By H. V. Orbison, City Engineer.

Nearly a quarter of a million dollars has been expended in 1915 in street work through the city engineer's office. During the past twelve months a great amount of important work has been done. The year that is drawing to a close has been one of the big years in the engineer's department.

During the year eight and one-third miles of paving of all classes have been laid. This does not come up to the 1913 total when an extra large amount of work was done in Oak Knoll. The total improvements and costs as compiled by the City Engineer are as follows:

Grading, 3 miles; cost, \$7,907.
Curb, 35.6 miles; cost, \$46,966.
Gutter, 64,064 sq. ft.; cost, \$8,620.
Walk, 82,172 sq. ft.; cost, \$6,918.
Paving, 8.4 miles; cost, \$92,500.
Storm drains and culverts cost \$11,356.
Sanitary sewers, 2.2 miles; cost, \$9,354.
Lighting systems, 3.75 miles; cost, \$34,722.
Underground conduits, 1.2 miles; cost, \$23,517.

The largest job the department has under way is the northwest storm drain, the contract for which was recently let. The work will cost \$25,000 and will be completed during the next year. Some of the largest paving contracts were Pasadena avenue, cost, \$11,000; West Walnut street, cost, \$7,000; South Wilson avenue, cost, \$15,000; Terrace and Eleventh drives, cost, \$13,000; Arroyo drive, cost, \$18,000, and Worcester avenue, cost, \$5,800.

The El Molino avenue conduit contract was one of the largest to be awarded. The price was \$14,876. More ornamental lighting systems have been installed this year than in any previous year. The largest ones have been South Lake avenue, South El Molino avenue, Bellefontaine street, Mentor court, Waverly drive, Marengo avenue, North and South Fair Oaks avenue, Terrace and Eleventh drives, Colorado street and South Raymond avenue.

POOR MATERIAL CAUSE OF SPOKANE BRIDGE COLLAPSE.

The most probable cause of the collapse of the Division street bridge at Spokane, Wash., in which five men were killed, was the breaking of the lower chord eye bars, due to poor material, according to a report made to the Coroner by John W. Cunningham of Portland, Ore., who examined the wreckage for the Coroner.

The report states the material was inferior at the time the bridge was built in 1892, and its use would have been improbable under proper engineering inspection.

After the erection, however, says the report, no reasonable inspection could have shown the cause of the failure.

Damage suits aggregating \$100,000 are being prepared as the result of the disaster when five persons were killed and ten injured. Both the city of Spokane and the Washington Water Power Co., owners of the street cars in which the killed and injured were riding, will be made defendants. Both have disclaimed responsibility.

CITY ENGINEER OF PORTERVILLE DISMISSED.

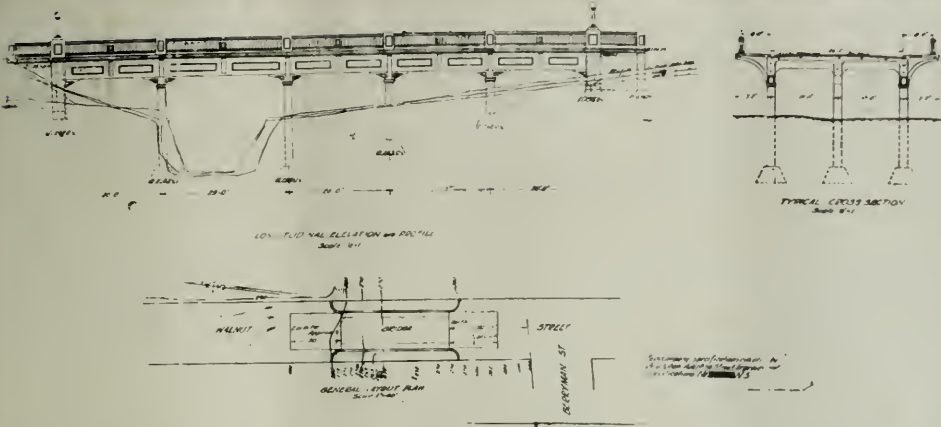
As a development of the charge that the street paving recently completed in Porterville by the Federal Construction Company, at a cost of approximately \$160,000, was not in accordance with specifications, I. H. Althouse, City Engineer and Superintendent of Streets of Porterville, Tulare Co., Cal., was asked for his resignation by the City Council. When Althouse refused to give it, the office was declared vacant.

Protests against the paving bonds issued to pay the Federal people, have been filed with the Council by taxpayers, and charges of improper work will be aired in the courts.

The Municipal Bond Market is looking up, and the Bond Buyers are looking the *Building and Engineering News* up. A proposal ad for your hands in our columns will bring competition.

Walnut Street Bridge Over Codornices Creek, City of Berkeley

By J. J. Jessup, City Engineer.



The City of Berkeley has just completed the Walnut street bridge over Codornices Creek. The structure is of reinforced concrete as shown in the accompanying diagram, and the class of work done on this bridge is best described by quoting from the specifications, which were rigidly enforced.

**Extract from Specifications,
Materials.**

Sand:
Sand shall be designated as that portion of the aggregate which passes a No. 4 standard sieve. The grains shall be of hard sound rock of siliceous, granite or igneous origin. It shall not contain any appreciable amount of organic matter, and shall not show more than five (5) per cent by volume, of silt, when shaken in water and allowed to stand for an hour.
In mesh composition it shall approximate a parabola when plotted with the mesh area as abscissae and the per cent passing as ordinates and fall within the following limits: Not less than five (5) per cent nor more than twenty (20) per cent shall pass a No. 80 standard sieve, not less than twenty (20) per cent nor more than thirty-five (35) per cent shall pass a No. 50 standard sieve, not less than thirty (30) per cent nor more than fifty (50) per cent shall pass a No. 30 standard sieve, not less than thirty-five (35) per cent nor more than sixty (60) per cent shall pass a No. 20 standard sieve, not less than forty (40) per cent nor more than seventy (70) per cent shall pass a No. 10 standard sieve and none shall be retained on a No. 1 standard sieve. A mixture of two or more sands in the proper proportions may be required to produce a sand of the requisite composition.
Stone:
Stone shall be designated as that portion of the aggregate retained on a No. 1 standard sieve and passing a

one (1) inch screen. It shall be of hard, tough stone of uniform quality, and free from disintegrated stone. It may be either crushed quarry rock or recrushed gravel and shall be a mixture of fine and coarse material within the following limits. Not less than thirty-five (35) per cent nor more than fifty (50) per cent shall pass a one-half (1/2) inch screen, not less than sixty (60) per cent nor more than eighty (80) per cent shall pass a three-quarter (3/4) inch screen and none shall be retained on a one (1) inch screen.
Cement:
The cement shall be a first quality Portland cement of a brand that has been in continuous and successful use for the last three (3) years.
It shall be furnished in original packages of uniform weight bearing the brand and manufacturer's name.
In determining the proportion of cement for use in concrete and mortar, one bag shall weight ninety-four (94) pounds and will be considered a cubic foot.
The cement shall meet the requirements of the standard specifications for cement adopted by the American Society for Testing Materials.
All tests shall be made in accordance with the methods outlined in the final report of the Special Committee on Uniform Tests of Cement of the American Society of Civil Engineers, presented to the annual meeting of the Society, January 15th, 1912.
Steel Bars:
Steel for reinforcing shall be new stock delivered without rust other than may have accumulated in prompt transportation to the work.
All steel for reinforcement shall consist of deformed open hearth bars, and shall conform to all the requirements of the Manufacturer's Standard Specifications for medium steel.
Round mechanical bond bars may be

substituted for square, provided they have equivalent net sections.
If twisted steel bars are used, they shall be twisted cold so that each bar shall have one complete turn in a length of not less than eight (8) nor more than twelve (12) times the nominal size. The steel shall have no tendency to crack in twisting.
Forms:
All forms shall be of the correct shape and dimensions. They shall be of two (2) inch shiplap Oregon pine lumber, dressed and sized, and free from rough knots. They shall be so braced and supported that no distortion can occur. Especial care will be required on all suspended members to obviate any possibility of deflection. The inside surface of the forms shall be thoroughly coated with oil to prevent adhesion of the concrete.
Placing Reinforcing Steel:
The reinforcing steel shall be bent to the shape shown on the drawings, and shall be placed in the exact position and with the spaces shown on the drawings, and it shall be so securely wired or otherwise fastened in position as to prevent its becoming displaced during the placing of the concrete. It shall, at all times, be thoroughly protected from moisture until placed in final position. Furthermore, after placing in position, if the concreting be interrupted for any considerable number of days, any steel that is not covered by concrete shall be painted with a heavy coat of cement grout. Any steel which shows scale rust before the concrete is placed shall be satisfactorily cleaned.
Whenever necessary, the bars shall be lapped, the lap not being less than 36 diameters.
No allowance will be made for wire or additional steel bars required to hold the reinforcing steel shown in the drawings, in place

Water:

Water used for mortar and concrete shall be fresh and clean.

Concrete:

All concrete used in the work shall be composed of Portland cement, sand and stone in the proportion approximately of one (1) cubic foot of cement to two and one-half ($2\frac{1}{2}$) cubic feet of sand and four (4) cubic feet of stone.

The proportion of sand to stone may be varied as required by the City Engineer in order to obtain an aggregate of maximum density.

A mechanical batch mixer shall be used in mixing the concrete, and the work must result in a thorough and uniform mixture of the several ingredients of such consistency that there shall be no tendency for the stone to become separated from the mortar.

The whole operation of preparing each batch of concrete is to be performed as expeditiously as possible, by the aid of machinery and a sufficient number of skilled men. No greater quantity is to be prepared than is required for immediate use.

When a fresh layer of concrete is to be put on one which is set, the entire surface shall be previously cleaned, made thoroughly wet and covered with a layer of cement mortar composed of Portland cement and sand, and in the proportion of one (1) cubic foot of cement to two and one-half ($2\frac{1}{2}$) cubic feet of sand.

All girders and floor slabs shall be poured continuously. If absolutely necessary to make a joint it shall be vertical and on the line indicated by the City Engineer.

Face Finish:

The exposed vertical faces below the level of the top of the sidewalk and the bottom of the outside girders shall be a splash coat consisting of one (1) part cement, two (2) parts sand of approved quality, and sufficient mineral coloring matter to give a reddish color of the proper shade.

The face of the posts and railing above the level of the top of the sidewalk shall be rubbed to a uniform finish with carborundum brick and given a paint coat of cement and sufficient mineral coloring matter to give a reddish color of the proper shade.

Roadway Pavement:

The concrete surface of the roadway shall be formed with a template of the proper shape, floated to a uniform surface and just after initial set has taken place, shall be swept with coarse fiber street brooms to give a striated surface. It then shall be kept wet down for seven (7) days.

After the concrete of the bridge has set sufficiently to permit loads to go upon the structure, and in no case, less than twenty-eight (28) days after the roadway floor slab has been placed, the surface of the concrete shall be thoroughly cleaned of all loose and foreign material and thereon shall be applied the paint coat to bind the surface close to the foundation.

The paint shall consist of a solution of asphaltic cement, of the quality elsewhere herein specified, in commercial gasoline. The asphaltic cement shall be dissolved, while warm and soft, in the gasoline in such proportions that the resulting paint shall give a glossy surface after the evaporation of the

solvent, but at the same time can be applied so as to form the thinnest possible coating.

The paint coat shall only be applied when the concrete foundation is absolutely dry and free from the slightest dampness to insure adherence to the concrete. No more of the surface of the foundation shall be painted than can be covered with the asphaltic surface course within five (5) hours after the application. Under no circumstances shall the paint coat be allowed to become in any way dirty, nor shall the surface course be applied to such coat more than five (5) hours after the painting has been done.

Upon the paint coat, laid as above specified and swept free of all loose fragments and rubbish, shall be laid an asphaltic wearing surface, composed of asphaltic cement, stone and stone dust, and the materials shall be mixed in such proportions that the percentage composition (by weight) of the wearing surface shall be within the following specified limits:

	Per cent
Pure Bitumen (in asphaltic cement) between	10 and 14
Sand, between	70 and 80
Stone Dust, between	10 and 18

The asphaltic cement and the sand are to be heated separately in suitable appliances to a temperature not less than 300 degrees nor more than 325 degrees Fahrenheit, and the stone dust is to be added, and mixed with the hot sand before the asphaltic cement is added. The mixing of all ingredients is then to be continued within the temperature limits before indicated until every particle of sand and stone dust is thoroughly coated with this asphaltic cement.

The wearing surface mixture, thus produced, shall be brought to the work in suitable trucks or dump-wagons, and shall not be colder than two hundred and fifty (250) degrees Fahrenheit when it reaches the street. It is to be uniformly spread over the concrete base with hot shovels and rakes to such a depth that after ultimate compression, the finished wearing surface shall have a thickness of one and one-half ($1\frac{1}{2}$) inches. After being spread, the mixture shall at once be compressed with hand rollers weighing at least two hundred and fifty (250) pounds to the foot width of roller, and these shall be immediately followed by a steam roller having a weight of between one hundred and twenty-five (125) and one hundred and fifty (150) pounds to the inch of roller, after which, while the pavement is still hot, it shall be rolled with a steam roller having a weight of not less than two hundred and fifty (250) pounds to the inch width of roller.

The steam rolling is to be done by first running the roller across the roadway at right angles to its direction, then crossing diagonally first from one side and then from the other, the direction of the two diagonal rollings being approximately at right angles to each other, and finally by rolling parallel with the direction of the street.

The rolling with the steam roller shall be continued for five (5) hours for every thousand square yards of surface. Such portions of the wearing surface as it may be impossible to roll

shall be thoroughly tamped with hot tampers and smoothed with hot smoothing irons, care being taken not to burn the surface.

A small amount of hydraulic cement or infusorial earth shall be swept over the pavement after the rolling.

The resulting surface of the finished pavement must show an even and smooth surface, must be thoroughly compressed and shall be true to grade and cross section.

No asphaltic wearing surface shall be laid in rainy weather or when the paint surface is wet.

Hand-mixing with shovels or other tools and the use of open kettles for mixing the ingredients for the wearing surface will not be allowed.

Storm Water Inlets and Drain Pipe:

Concrete storm water inlets shall be placed where shown on the plans and fitted with cast iron frame and grating as shown.

The drain pipe shall consist of eight (8) inch diameter wrought iron pipe of the quality specified placed in the column beneath the inlet to the depth shown on plan. The bend shall be connected to the straight pipe with standard sleeve.

From the face of the column to the outlet end, as shown on the plans, the drain shall consist of vitrified iron-stone pipe of the quality specified, laid true to line and grade, with joints fully cemented with mortar consisting of one (1) part cement and two and one-half ($2\frac{1}{2}$) parts sand.

Electric Conduit:

The electric conduit shown on plans shall be one-half ($\frac{1}{2}$) inch diameter galvanized duct or equivalent quality with standard outlet boxes at the points noted on the plans, of sufficient size to admit of the installation of a hard switch and fuse. The lid shall be held in place with brass machine screws.

Electroliners:

The lamp post shall be of metal with cast iron base and cap. They shall be of standard type and shall conform to the dimensions shown on the plan within the limits given.

The post castings shall have a thickness of not less than three-eighths ($\frac{3}{8}$) of an inch.

The steel shafts, if used, shall be of two ply, medium steel plates free from flaws, or irregularities of shape.

After erection the posts shall receive two (2) coats of best weatherproof paint of olive green shade.

Each post shall be fitted with one fourteen (14) inch with six (6) inch base, rough inside, sanded glass globe. It shall be held in place with round head brass machine screws.

Electric Wires and Fixtures:

The posts shall be wired complete to connect with outlet box on electric light pole nearest the southeast corner of the bridge. The wire shall be a Duplex No. 10 size N. E. Code.

Each post shall be fitted with one one hundred (100) watt standard Mazda Tungsten lamp. The sockets shall be weather-proof, standard General Electric No. 9411 or equal.

The cutout shall be a combination two-way switch and fuses, Hart & Hegemann or equal.

Street Work And City Planning.*

By Nelson P. Lewis, Mem. Am. Soc. C.
E., Chief Engineer Board of Estimate
and Apportionment New York, N. Y.

What City Planning Is.

The attention lately given to the subject of City Planning all over the world indicates that it is one in which the people generally are interested; not only those living in large cities, which may undertake costly and pretentious schemes of improvement, but the dwellers in the small towns, and even villages, all of whom are eager for information upon the subject and are ready to devote their time and energy to the study of plans to make their communities more orderly and attractive. Engineers have not been as active as might be expected and have heretofore seemed disposed to leave city planning to others. Mr. R. Verstraete, engineer of bridges and roads at Bruges, has described the attitude of the engineer in the following words:

"Throughout all ages, mankind has done its utmost for the embellishment of cities. The remains handed down to us from antiquity and from the Middle Ages testify to this point. Few works, however, appear to have been written on the subject, and of these the most important are of comparatively recent date. They are mostly the works of art enthusiasts. Engineers appear to take little interest in the subject. If their apparent indifference continues much longer, they will find that this natural branch of their profession will pass into other hands, which would be much to be regretted. The dominating desire for the picturesque, for variety and for originality which ever guides art enthusiasts will never lead to the possibility of a natural solution of a problem such as is the outcome of utility linked with good taste."

Mr. George McNaney, President of the Board of Aldermen of New York City, who is not only a close student of municipal problems but has had unusual experience as a city officer, says:

"City Planning simply means getting ready for the future in city growth. It is the guidance into proper channels of a community's impulses towards a larger and broader life. On the face it has to do with things physical,—the laying out of streets and parks and rapid transit lines, but its real significance is far deeper. A proper city plan has a powerful influence for good upon the mental and moral development of the people. It is the firm base for the building of a healthy and happy community."

Other definitions might be quoted, definitions of architects, artists, lawyers, publicists, but few engineers have stated what they understood city planning to be. The definition of the author, first used in a paper before the Municipal Engineers of the City of New York in 1911, is this:

"City Planning is simply the exercise of such foresight as will promote the orderly and slightly development of a city and its environs along rational lines, with due regard for health, amenity and convenience, and for its commercial and industrial advancement."

The Elements of a City Plan.

A French writer gives four divisions of the city which require special study and treatment: the business, the industrial, the administrative, and the residential quarters.* He also notes that "the climatic conditions of each country must necessarily determine the type of dwellings selected by the inhabitants." He might have added that the same conditions affect the positions of dwellings and other buildings with respect to each other, the width of streets, and various other features of the city plan.

Without regard to the various municipal activities and administrative details, the convenience and attractiveness of a city will depend upon four features of its plan:

1. The transportation system, or the means provided for getting in and out of the city, and for quick movement of passengers from one part of the town to another. It is obvious that transit needs cannot be accurately foreseen, but provision should be made for improving and extending them when needed. A large part of the transportation will always be in the streets themselves, and its adequacy and efficiency will be largely determined by the location and dimensions of the streets in which the intra-urban transit lines are located.

2. The street system in and through which the daily business is done and by which the people gain access to their homes and pass from these homes to their work, recreation and amusement. A street system once adopted and developed must remain indefinitely. While some streets may be widened and an occasional new street may be cut through existing improvements, the general street plan, once established and constructed, is fastened upon the city as long as the city itself lasts. A catastrophe such as the great fire of London in 1666 or the San Francisco fire in 1906 may afford an opportunity for a reconstituting of the plan for a considerable area, but it is seldom availed of.

3. The park and recreation facilities upon which the comfort and health of the community are to a large degree dependent.

4. The location of public buildings, which may render the conduct of public business convenient or difficult and may give a favorable or unfavorable impression to visitors.

While there may be other elements

which go to make up the complex organism called the modern city, those enumerated are the ones which are likely to give the town its character, to make it convenient or inconvenient, dignified or commonplace. Upon the skill and foresight exercised in providing for them will depend to a large degree the orderliness of the city's growth, and the facility with which individual and corporate activities can be carried on.

In every city there are large areas not yet developed and not even planned, where opportunities are presented to design a street system, the different parts of which will be properly located with respect to each other and to such modification of the system of the existing town as may ultimately be carried into effect. Too often these undeveloped sections are planned as if they were so many different urban areas unrelated to each other or to the original city, and too often the obvious blunders of the older sections are recreated in the new additions. While a city cannot often be planned from the beginning, there are certain general principles which should be regarded in the laying out of the street system of a portion of a town as well as of a complete city. These were outlined in a paper presented by Mr. Raymond L'win at the London Town Planning Conference in 1910 in the following words: "Having settled the purpose of the different areas, determined the general character of the growth and the approximate direction desirable for main and subsidiary highways the town planner finds himself with the following component parts out of which to make his design, namely: The main center point, or climax, dominating the whole; the secondary centers in definite proportion and relation to it; and the main highways linking them up; the whole giving the bones or main framework of the design. Within the space defined by this framework, having special relation to the secondary centers and proportion to the primary highways, we have the network of secondary highways, while within the areas which these leave, for the purpose almost solely of giving access to the buildings, we have the minor roadways or drives, which should be in relation to any subsidiary center point, and both in relation and proportion to the framework of the secondary highways. . . . In town planning it is essential to avoid being carried away by the mere pattern of lines on paper. Order, definiteness of design there must be, but there must first be grasped an understanding of the points where order is important and will tell of those where it matters little."

In nearly all cases where a street plan is to be devised, whether it be for a large area which can be treated almost as an entire city in itself, or for a smaller tract contiguous to the built-

*A paper presented at the International Engineering Congress, San Francisco, 1915.

*Mr. A. Augustin Rey in a paper on "The Growth and Development of Towns" presented at the London Town Planning Conference, 1905.

up portion of an important city, the first essential is an accurate plan of the existing roads showing their widths and the buildings fronting upon them. These roads will be of two kinds,—old highways which served to connect villages or centers of population, some within and others without the area to be platted, and roads and streets which may have been laid out as parts of real estate developments and according to which property may have been sold, but along the lines of which there has been little or no building. The former class of roads have a good excuse for their existence and they serve a useful purpose; they lead where people want to go and are likely to be fairly direct. Their alignment may be somewhat faulty, their grades may be excessive in some places, and their widths will be inadequate in view of the fact that they will naturally become the main lines of traffic for the urban district which will include them. With such straightening and widening as may be deemed necessary, and such changes in line as will reduce excessive grades, these old roads will be the logical basis of the street plan which is to be prepared. When they have been platted, it will be obvious that additional roads will be needed, some to establish cross connections, others to give greater directness to the roads traversing the entire territory, others as by-passes around groups of buildings so located as to render the widening of some portions of the old roads unduly expensive, and still others to furnish lines of main drainage along the valleys through which the lateral sewers and subsidiary trunks must ultimately find their outlets.

Lastly will come the minor streets which will serve almost entirely for access to dwellings. As all of these streets will connect directly with either the secondary or main highways, their alignment and grades are of little importance, as they will be used almost exclusively by private vehicles or those delivering supplies to the abutting houses. The chief concern is that they should be so laid out as to furnish ample light and air and discourage, if not prevent, a too intensive development with rear buildings in case the city ordinances do not prohibit this menace to health and decent living. To plan far in advance the precise location of these minor streets is not necessary, if it be not unwise.

While directness is desirable in the main and even the secondary streets, it does not follow that such streets should be perfectly straight; in fact, straight streets are seldom interesting. Neither need circumferential or curved streets be laid out with perfect symmetry. The great boulevards of Paris consist of a series of eboids of varying length with deflections at different angles, yet their pleasing effect is in no wise diminished. Symmetry on a plan and symmetry on the ground are very different things. In studying a plan the slightest departure from such symmetry is noticeable, but on the ground it cannot be detected. One can ride or walk along a boulevard following a sweeping curve and be unconscious of the fact that its radius is frequently changing, while if examined on a plan

these changes are at once apparent. Even if such a boulevard were broken into short straight sections, the utility of the street and even its beauty, so long as its general direction is preserved, are practically as great as if its lines were perfectly straight or symmetrical, and it undoubtedly acquires added interest from the fact that important buildings located at the points where the direction is changed will show to excellent advantage, and interesting street pictures may thus be formed. In the case of the minor streets there is still less reason for straightness or even directness.

Adaptation to Topography.

That the various elements of a city plan as heretofore outlined should be adapted to the topography of the site seems so obvious as to need no special emphasis, yet there are numerous instances where there has been done only to a limited extent. The topography should, in fact, be the first thing to be considered in determining the general features of the comprehensive plan. Upon it will especially depend the system of main drainage, provision for which must be kept in mind from the beginning, and the transportation system which, while it will naturally be designed to carry people where they want to go, should be able to follow the lines of least resistance, excessive and sharp curves involving not only heavy operating expenses but a certain amount of danger. A street plan prepared in the office without sufficient information as to the topography of the ground upon which it is to be laid out may look very well on paper but is likely to be found entirely unsuited to actual conditions, and if persisted in may impose a heavy initial burden for the construction of the streets and a perpetual handicap upon traffic by reason of the unnecessarily heavy grades. The first step, therefore, is to secure a good topographic survey of the territory to be platted. Sometimes this initial survey is made in far more detail than necessary, the idea being that a complete street plan is to be made at once. The folly of doing this has already been emphasized; the time and expense of doing so could be used to better advantage in a study of the larger aspects of the problem or in working out only the skeleton plan. Topographic surveys are expensive and the work of planning the street system should not be loaded up with needless cost at the start. The survey required for the first study should show existing roads with the location of buildings fronting on them, the actual drainage areas, the existing railroads and routes suitable for additional lines, the waterfront, if there be one, and the localities best adapted to the accommodation of water borne commerce and the places which, from their picturesque features, are most suitable for park reservations. Further details are not required for the first study of the plan; they will come later. A contour map or a model will be of great help in laying out the first skeleton plan. When this has been determined and the time comes to fill in the details, further surveys will be necessary, but they can be taken up in one section at a time as each of the areas lying

between the arterial streets can and should be studied separately. In this connection, proper drainage should be the first consideration, while the location of property lines will be of great assistance in so planning the minor streets as to avoid damages, caused by leaving unusable remnants, wherever it is possible to do so, and still secure a rational and convenient plan.

The first step in the physical creation of a street system is the grading, and as this comes at a time when the value of the abutting property is small, the cost should be kept down to the lowest figure consistent with a reasonable plan. The preference for rectangular blocks which will produce the greatest possible number of right-angled lots is so general that excessive grading and needless step grades are frequently the price paid to secure them. This policy often defeats its own purpose, as the grading up or down of the abutting lots is likely to involve a cost greater than the value of the few lots gained by a rectangular system over those which would result from one conforming more closely with the natural surface, while the latter would be far more attractive. There is something of a reaction against the rigid rectangular plan evidenced by the introduction of curves and deflections, even where there is no obvious reason for them. A long sweeping curve may be a pleasing feature of a street plan on level ground; diagonal streets to afford direct access from one part of the tract to another are always desirable; but a series of sharp curves and frequent abrupt changes of direction are as inappropriate for a level site as are straight lines regardless of natural contours for a rugged site.

The sites for public and semi-public buildings should receive consideration in the first topographic survey. Such buildings should not only be placed where they can be seen from the streets approaching them, but, wherever possible, they should be placed at grade summits.

There may be some precipitous hillsides or deep ravines in the area to be platted and, while these are of little value for other purposes, they will make admirable parks. They should be located in the topographic survey and the main roads should be so fixed as to afford easy access to them when they become public pleasure grounds. The general plan should be adapted to the topography. Attempts to create on a level plain a city having the picturesque features of a hillside town will result in failure, while to lay out on a rugged site a plan suited to a level or gently sloping tract will not only involve needless expense, but will sacrifice opportunities for charming effects and produce a result which is palpably commonplace.

Street Details.

While the general plan for the streets and roads of a city and its environs may have been well thought out, while the streets may be of generous width and of good alignment, and may have been skillfully located with respect to the topography, their traffic capacity may be less than it might be, owing to improper proportion of roadways and sidewalks. The roadway pavements

may be unsuited to the character of the traffic or to the grades. Injudicious tree planting or the entire absence of planting may make them bare and unattractive. Lamp posts and street signs may be conspicuously ugly, and inadequate lighting at night may render the streets gloomy, if not dangerous. There are many details of street arrangement and design which are worthy of the most careful study, and even when these details have been carefully worked out for one street, or even for streets of different classes and widths, a standard cannot safely be adopted for every street of the same class and width.

While the great number of our underground structures may be one of the contributing causes of the constant disturbance of street pavements in American cities, and the condition of disrepair which is so frequently found, it is not the only reason. It will be difficult to find two cities where the street pavements are in better general condition than in Liverpool or Berlin, the former conspicuous for its excellent stone-block, and the latter for its good asphalt pavements; yet neither of these cities has built pipe subways, and the reason for the admirable condition of their streets is probably due to efficient administration and also to definite regulations covering the precise location of pipes and other structures of different classes beneath the roadways and sidewalks, avoiding thereby the exploration beneath the surface for the purpose of finding what is wanted, when repairs are necessary.

CONCRETE AND STREETS.*

By H. S. V. Scoyoe.

The use of concrete as a paving material is fast passing the experimental stage. Although it is doubtful if there is as yet sufficient information at hand to permit of a close approximation as to the life of concrete pavements under varying conditions of traffic, soil and climate there are particular cases of record showing the economy of this type of pavements after periods of actual use ranging from five years to ten years.

There are at least a few streets today in good condition after twenty years of service which would seem to show that if there were failures in the earlier work they could likely be traced to the same causes that will produce failures now. It is a fact, however, that there was more reason for attempting mixtures weak in cement than, for a barrel of cement cost from three to four times as much as now. In addition the remarkable increase in motor traffic during the last ten years has made it much more difficult to maintain those types of paving in which the various separate units are not held together by a positive binder as is the case with concrete. It has also greatly increased the life of concrete or similar surfaces because of the decrease in wear from rubber-tired vehicles as compared with that from horse-drawn, steel-tired traffic.

If it is granted that there must be some merit in a paving material the

total yardage of which in Canada and the United States increased in 1913 from 5,000,000 square yards to 18,000,000 square yards and of which 16,000,000 square yards were laid during 1913, it ought to be worth while to note some of the facts that have been established by experience more particularly during the last five years.

Sub-Grade.

The fundamentals in road-building hold good for concrete just as for other types. A system of drainage must be provided which will keep the water level well below the sub-grade. This is especially true where frost has to be contended with. Where the natural soil is heavy clay or other material that is not self-draining there are certain advantages in placing the concrete upon several inches of gravel or other pervious material. If surface water does get beneath the concrete it then has a better opportunity to get away. In addition especially in hot dry climates there will be no trouble from cracks developing in the concrete slab due to the drying out and cracking of the sub-base material. This may occur when the concrete is laid directly on the natural soil. The sub-grade should be constructed with the idea of having it evenly compacted to the full width of the road section. This means special care where the concrete is replacing a highly crowned macadam road which was likely as not of as great a width as the new road will be.

Materials.

There is some difference of opinion as to whether it is the mortar composed of the fine aggregate and cement or whether it is the coarse gravel or broken stone that have to resist the wear on the road surface. With ideal materials both fine and coarse aggregates should be tough and uniformly tough, for it seems almost axiomatic that if construction is properly carried out the life of the pavement will depend directly upon the quantity and character of the traffic and the wear-resisting qualities of the aggregates. Materials that show uniform wear are certainly to be preferred over those containing some very tough and some very soft particles.

Proportioning.

While the proportions may be varied slightly according to the nature of the aggregates used in most of the work now being undertaken a mixture of about one part of cement to one and one-half parts of fine aggregate to three parts of coarse aggregate is specified. It seems strange that in road work there have been so few attempts made to get away from wheel harrow or bottomless box proportioning. It is one part of the work in which less progress has been made than in most of the others. There have been some exceptions notably one road in Oregon where the proportioning was done by him at a central plant and three charges for the drum of the mixer carried in each car of the Industrial Railway train that was used to convey the material to the road.

Mixing.

There has been wide variation in practice as to the time and speed required for mixing, but it is now realized that the number of revolutions

per minute of the drum may vary with the type of mixture, the size of the drum and the nature of the mixture. For satisfactory results it is usually necessary to keep the batch in the drum for at least one minute. It is very desirable that a uniform mixture be secured. The concrete should be of such a consistency that it will stand without flowing when deposited. It should not be sloppy, but it should be wet enough to settle in place with the tamping that it receives from the strike-board.

Reinforcing.

No concrete road or street will be injured by the addition of reinforcing. It is almost certain, however, that all cracks of such a width as to be visible to the eye will not be prevented by the addition of the weight of reinforcing usually specified for concrete roadways.

Where subsoil conditions are bad, due either to the nature of the material or to the openings that may have been made for pipe lines there is value in reinforcing. Where the appearance of a road or street is of major importance reinforcing should be used. It is a question, however, if it has as yet been shown that reinforcing is economically justified for the usual widths of country roads where an occasional crack cannot be considered a serious fault.

Maintenance.

It has been said that the justification for the use of concrete lies in the low maintenance costs. With proper materials and workmanship the annual charge for repairs to the concrete surface should be small. There may be some surface pitting—there may be some cracks requiring attention; there likely will be some joints to be taken care of; on country roads there certainly will be shoulders to maintain and ditches to keep open.

Costs.

Naturally the cost of the roadway proper will depend upon the cost of the cement, fine aggregate and coarse aggregate on the road and the labor cost for combining them properly and placing them on the road. The material costs will vary greatly with the distances they must be hauled. The labor costs will depend to some extent upon the organization. In rare instances where conditions are particularly favorable, the cost per square yard may be as low as one dollar. Usually the cost should be below one and one-half dollars.

*Canadian Municipal Journal, October, 1915.

SANTA CRUZ TRUSTEES AND ENGINEER DISCUSS NEW STREET WORK.

An ordinance regulating the measurement of grades in the city has been introduced by Commissioner Morrissey and adopted.

City Engineer W. J. Thompson reports in reference to River street side walk work. He says this street is not of uniform width. The matter has been referred to the city attorney and city engineer.

The city engineer reports progress on the ordinance of the new specifications for new pavements.

Technical Societies.

SAN FRANCISCO ASSOCIATION OF MEMBERS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.

Officers for 1916.

President—H. L. Haehl.
 Vice-Presidents—Jerome Newman, M. C. Couchot.
 Secretary—E. T. Thurston.
 Treasurer—P. E. Harroun.
 Board of Directors—M. C. Couchot, H. L. Haehl, A. M. Hunt, P. E. Harroun, E. T. Thurston, C. H. Snyder.

Weekly luncheons in College Room, Hoffbrau Cafe, Wednesdays at 12:30. Engineers welcome; informal; no program.

Regular meetings are held bi-monthly at such time and place as may be appointed by the board of directors. The established custom is to meet on the third Fridays of February, April, June, August, October and December.

Address E. T. Thurston, Secretary, 813 Mechanics' Institute Bldg., 57 Post street, San Francisco.

PROCEEDINGS OF THE SIXTY-FOURTH REGULAR MEETING.

The sixty-fourth regular (eleventh annual) meeting of the Association was held at the Palace Hotel with Vice-President Couchot in the chair and forty-nine members and guests present.

Business.

A communication from Mr. Duryea, suggesting that the evening of meetings be changed to some more convenient one than Friday, on motion, duly made and seconded, was referred to the Board of Directors to provide better hallot.

A communication from Jerome Newman, suggesting that an effort be made to ascertain the views of the Association as to the extent to which it is justifiable for one engineer to use the plans and specifications of another without permission and without giving credit to the latter, was read, and after a brief discussion by Messrs. Newman, Marx, Brunnier, Rhodin and Duryea, was, on motion of Mr. Rhodin, seconded by Mr. Duryea, ordered that a committee of five be appointed to define principles of ethics in engineering practice and report at a subsequent meeting.

Reports of Officers.

The Secretary read his annual report showing average attendance for the year of 66, accession of 19 members, a loss of 6 and a present membership of 197.

The Treasurer read a report showing the Association in a flourishing condition despite the heavy expenditures for entertainment in connection with the Annual Convention of the Society.

(These reports in full will appear in the Constitution and List of Members for 1916.)

General Business.

The Secretary called special attention to the prize competition open to Junior members through the generosity of Mr. Henry A. Schulze, until May 15th, 1916, and urged the older members to use their influence on the

Juniors to secure submission of suitable papers.

The chair appointed Messrs. Dillman, Meredith and O'Shaughnessy the entertainment committee for the February meeting.

Mr. Kriegsmann asked for the results of the postal card inquiry instituted by the Board of Directors in regard to the formation of a class in public speaking under the auspices of the Association. The Secretary reported that in response to 175 inquiries sent, 70 replies had been received, 19 of which were opposed to the plan, 25 approved the plan but would not join a class, 26 approved and would join a class under suitable conditions, 6 of whom reside and work on the eastern side of the bay, 11 reside on the eastern side of the bay and work in San Francisco and 9 reside and work in San Francisco.

In response to a request for definite support from the Association the Chair advised that the Board of Directors considered it outside the scope of the Association to assume responsibility in such a matter, but that any group of members could proceed with it and would receive all the assistance the Association could afford them.

In connection with a discussion by Messrs. Kriegsmann, Haehl and Marx, a motion made by the first mentioned that the Association appoint a committee to organize a class was lost.

Election of Officers

The election of officers for the ensuing year resulted as follows:

President—H. L. Haehl.

Vice-President—Jerome Newman.

Entertainment.

Preliminary to the presentation of the paper for the evening, the entertainment committee introduced a pleasing demonstration of the rewards of ingenuity fortified with a proper diet, a stout heart and a strong keg, by means of a moving picture display of a chapter in the adventures of Colonel Heza-Liar, Explorer, extraordinary.

Paper.

Mr. H. L. Haehl read the paper of the evening on "Water-Right Litigation in the Santa Clara Valley," illustrating his remarks with maps, diagrams and other statistical information displayed by means of a stereopticon.

The meeting adjourned at 10:50 p. m.

SAN FRANCISCO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

233 Post Street.

President—W. B. Paville.

Vice-President—Edgar A. Matthews.

Ser. Treas.—Sylvain Schnaittacher.

Trustee—Walter H. Parker.

Monthly meeting the third Thursday.

CALIFORNIA STATE BOARD OF ARCHITECTURE.

President—Edgar Matthews.

Ser. Treas.—Sylvain Schnaittacher.
 John Bakewell, Joseph C. Newsom,
 one vacancy.

AMERICAN INSTITUTE ELEC. ENGRS.—Los Angeles Section.

Chairman—Ewd. Woodbury.

Secretary—R. H. Manahan, care City Hall, Los Angeles.

Asst. Sec.—Carl Johnson.

Executive Committee—B. F. Scattergood, Ralph Cunningham, R. E. Morehead, C. G. Pyle.

Regular meetings third Tuesday in each month. Address all communications to R. H. Manahan, care City Hall, Los Angeles.

INLAND WATERWAYS ASSOCIATION OF CALIFORNIA.

Officers.

President—Isidor Jacobs, San Francisco.

Vice-Presidents—M. E. Dittmar, Redding; W. H. Booth, Los Angeles; Mrs. E. G. Greene, Stanford University; John Fairweather, Fresno.

Treasurer—J. L. Craig, Stockton.

Executive Secretary—David H. Walker, San Francisco.

Secretary—Craigie Sharp, Oakland.

San Francisco, Nov. 27, 1915.

At a meeting of the executive committee of the Inland Waterways Association of California, it was decided to hold the third annual convention at the Palace Hotel in San Francisco, February 21st, 22nd and 23rd, 1916. There will be over 1,000 delegates in attendance. Mr. Isidor Jacobs, president of the association, has just returned from Oregon and Washington, and arrangements will shortly be completed so that a general conference can be held of delegates from all the Pacific Coast States at the same time as the annual convention, for the purpose of bringing about united action in reference to the work to be prosecuted for the development of Inland Waterways on the Pacific Coast.

The annual convention will consider a proposition to bring about the creation of one State commission to deal with all subjects relating to the water problems of California, including navigation, reclamation, flood control, flood storage, irrigation and kindred subjects. This would necessarily result in the abolishment of the many commissions that are dealing with the subject, and would prevent duplication of work and minimize the expense. The annual convention will also consider the Newlands-Broussard Bill. This bill now pending before the United States Congress, in principle, has the support of the administration. It has for its purpose the bringing about of active co-operation between the Federal and State Governments for a unified system of Inland Waterways improvements.

It is expected the convention in February will be one of the most important that has ever taken place in this State, as representative men from all over the country will be present.

CLARENCE E. TODD,

Secretary pro tem.

ADVANCE CONSTRUCTION NEWS.

Classified According to Character of Work.

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APARTMENT HOUSES

SAN FRANCISCO—Apartment house, 3 story and base, frame, \$8,000. Architect, none. Owner, Alfred T. Morris, 501 11th avenue, S. E. Location, southeast corner of 11th avenue and Anza street. Will contain five suites of two and three rooms. Bath and wall beds. Interior finish pine with some elm panels and hardwood floors. Central heating system and hot water supply. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

BANKS

SACRAMENTO, CAL.—Bank fixtures, etc. Cost not stated. Architect, E. C. Sellon, 1203 J street, Sacramento. Owners, Sacramento Valley Bank and Trust Co. The Sacramento Valley Bank and Trust Co. will occupy the entire ground floor and basement of the new four-story building now under construction at the corner of 8th and J streets. The architect is calling for bids on the special bank fixtures, marble and tile work, electric work, lighting fixtures, plain and ornamental plastering, glass and vault work. J. Harry Wygant, 2110 X street, Sacramento, has the general contract for the building, which is now up to the roof.

BONDS

MARTINEZ, CONTRA COSTA CO., CAL.—With but eighteen votes lacking the proposition to bond the Mount Diablo Boulevard District for \$50,000 to build a boulevard from Bryant station through Moraga Valley to Alamo, thence to Mt. Diablo and on through the Tassajara and Sycamore Valleys to the Alameda County line, was defeated last week. It is said another election will be called.

SAN LEANDRO, ALAMEDA CO., CAL.—E. H. Rollins Co. has purchased the \$100,000 school district bonds voted in San Leandro a short time ago. Now that the bonds have been sold plans for the school improvements to be made will be ordered prepared.

SAN BERNARDINO, SAN BERNARDINO CO., CAL.—The County Supervisors will invite the State Highway Commission and its engineers to visit their county early in January and go over the proposed route to be paved to Barslow. The last legislature ordered that a bond issue be submitted to the people, to carry out and complete the system of good roads. The distance to be constructed under the proposed bond issue is 55 miles.

OAKDALE, STANISLAUS CO., CAL.—O. J. Muscio has leased 80 acres of land and will soon start the erection of a big dairy. Other improvements are also planned.

HOLLYWOOD, LOS ANGELES CO., CAL.—The board of public service commissioners, at a recent meeting, fa-

vored the scheme whereby a water district should be formed in Hollywood and a bond issue for \$1,020,000 authorized to cover the purchase price and to make extensions of the Union Hollywood Water Company's system. The board ordered that a letter should be sent to the residents of the district affected, asking them to vote in favor of the project. Voting will take place on January 18, 1916.

WOODLAND, YOLO CO., CAL.—The City Council has decided to call at an early date an election to vote upon issuing bonds of \$15,000 for the improvement of the municipal water system and \$5,000 for the construction of a municipal ice plant.

The \$15,000 bond issue for improvement of the water system will provide for the installation of a ten-inch high pressure pump operated by a 150-horsepower motor, a 120,000-gallon water tower 100 feet high and the laying of additional mains.

City Engineer C. E. Arnold submitted an estimate placing the cost of the proposed ice plant at \$5,000.

LOVELOCK, NEVADA—A special election has been ordered here for January 15th to vote on a proposal to bond the town of Lovelock for \$75,000 to bring water here from the Sacramento and Wright Canyons.

It is planned to impound the flood waters and spring floods and convey them along the foothills to a point six miles from Lovelock, where they will be stored.

From the reservoirs the water will be piped to the city. It is believed this plan will give a good supply of pure water, besides furnishing a strong gravity pressure for fire fighting purposes.

SACRAMENTO, CAL.—The Sacramento County Supervisors have adopted a resolution calling for an election on January 25th, to form a Wright Irrigation district in the Carmichael colonies.

POCATELLO, IDAHO—Bonds in the sum of \$100,000 have been sold. The city will now purchase a private system or duplicate the present one.

SACRAMENTO, CAL.—Chas. Silver, whose slaughter house was destroyed by fire a few weeks ago, has decided to erect a new \$60,000 building on the old site. Plans for the building are now under way.

SANTA MONICA, LOS ANGELES CO., CAL.—By a margin of thirty votes the electors of Santa Monica refused to bond themselves for \$712,000 for the purpose of buying out the three water companies and organizing a municipal water system in that district. It is possible that a recount of the votes will be asked by the supporters of the issue.

SACRAMENTO, CAL.—The Advisory Board of the State Department of Engineering has provided for the sale of \$1,000,000 worth of State highway bonds. These bonds are the last of the remaining \$18,900,000 bond issue. The

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money will be used according to agreement made by the various counties.

LODI, SAN JOAQUIN CO., CAL.—The \$40,000 bond issue held last week, providing for the erection of a new school building, carried.

ANAHEIM, ORANGE CO., CAL.—Anaheim electors at a special election defeated the proposition of voting \$30,000 in bonds for the construction of a new city hall.

DAIRYLAND SCHOOL DISTRICT, MAJERA CO., CAL.—Bonds of \$25,500 have been voted and are now being advertised for sale. When sold the proceeds will be used in the erection of a new school.

PLACERVILLE, EL DORADO CO., CAL.—Proposal of the erection of a \$50,000 building in the city of Placerville to be used as the headquarters of the Forest Supervisor of the El Dorado National Forest, are contained in Bill 675, introduced in the House of Representatives on December 6 by Congressman Raker.

BRIDGES, DAMS AND HARBOR WORK

LOS ANGELES, CAL.—Bridges, pile trestle. Cost not stated. Engineer, County Surveyor, Los Angeles. Owners, Los Angeles County. Bids will be received by the Board of Supervisors up to 2 p. m. of Monday, January 2nd, for the construction of a pile trestle bridge on Mountain avenue, between School street and Burr avenue, and for a similar bridge on Palm avenue between Michigan avenue and Cross street. They will each consist of a single 19-foot span and will have 20-foot roadways.

CHURCHES

SAN FRANCISCO—Church alterations, frame, \$5,000. Architects, Ward & Blohme, Alaska Commercial Bldg., S. F. Owners, St. John's Evangelical German Lutheran Church. Location, Howard and 21st streets. The work will consist of rearranging the upper floor for Sunday school rooms and the lower floor for class rooms, and will necessitate interior partitions, plastering, painting, plumbing, electric work and carpentry work. Plans are complete and figures are being taken.

FACTORIES AND WAREHOUSES

SEATTLE, WAS.—Storage equipment. Cost as follows. Engineer, Port of Seattle Commission, Bell street dock, Seattle. Owners, City of Seattle. Bids opened by the Port of Seattle Commission for the installation of equipment in the apple storage warehouse, for which Harrington & Peters, Oriental Bldg., Seattle, are general contractors, resulted as follows: Andrew MacLean, \$142,740; York Mfg. Co., \$171,100; Vilter Mfg. Co., \$126,500; Harrington & Peters, \$117,500. All bids taken under advisement.

SAN FRANCISCO—Packing house, 1 story and base, reinforced concrete, \$20,000. Architect, Smith O'Brien, Humboldt Bank Bldg., S. F. Owners, Workman Packing Co. Location, west Seventh street south of Garrison. Construction fireproof. Interior finish pine except in the offices which will be finished in hardwood. Concrete

floors. Special machinery. Steam heat and hot water system. Metal window sash and frames. Exterior faced with cement plaster. Plans complete and segregated figures being taken.

PITTSBURG, CONTRA COSTA CO., CAL.—Packing plant addition, 1 story, reinforced concrete. Cost not stated. Architect, A. W. Cornelius, Merchants' National Bank Bldg., S. F. Owners, American Fish and Oyster Co. Addition will consist of cold storage room and packing space. Interior finish rough. Concrete floor and metal window sash and frames. Exterior faced with cement plaster. Plans being prepared.

SAN FRANCISCO—Automobile assembling plant, 5 story and base, reinforced concrete, \$200,000. Architect's name not given. Owners, Ford Motor Car Co. Location 21st and Treat avenue. Preliminary plans have been received in this city for the new Ford addition. A contract covering the entire work will be let. Complete information can be secured from Mr. Lund at the company's plant.

Contracts Awarded.

CROCKETT, CONTRA COSTA CO., CAL.—Warehouse, 2 story and base, reinforced concrete, \$116,000. Architect's name not given. Owners, California-Hawaii Sugar Co. Contractors, Clinton Construction Co., Mutual Bank Bldg., S. F. Contract price, \$116,000. Note: Subcontracts are now being let for the work.

FIRE HOUSES AND JAILS

BAKERSFIELD, KERN CO., CAL.—Jail counter, etc. Cost not stated. Architect, Orville L. Clark, Brower Bldg., Bakersfield. Owners, Kern County. Bids will be opened on January 3rd for furnishing a steel counter complete with box and roller drawers. Plans can be secured from the County Clerk.

FLATS

SAN FRANCISCO—Flats, 2 story and base, frame, \$2,500. Architect, William J. Anderson, 292 5th street, S. F. Owner, Morris Farber, 140 Russ street, S. F. Location, west Harriet north of Folsom. Will contain two flats of five and six rooms. Interior finish pine and redwood. Some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Interiors covered with rustic, shiplap and brick veneer. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2, 3 story and base, frame, \$4,600 each. Architect, none. Owner, John T. Quigley, 325 Masonic avenue, S. F. Location, southwest Moss and Folsom, covering an area of 23 by 69 feet each. Will contain three flats with baths. Interiors finished in pine and redwood with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Interiors covered with rustic, shiplap and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,000. Architects, Koenig & Christiansen, Humboldt Bank Bldg., S. F. Owner, H. C. Christiansen. Location, north Cabrillo west of 7th avenue, covering an area of 25 by 55 feet. Will contain two modern flats of five

and six rooms. Interiors finished in pine, elm panels and white enamel. Hardwood floors. Bath rooms finished in tile. Automatic water heaters. Basement garage. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$4,500. Architect, E. G. Bolles, 660 Market street, S. F. Owners, S. A. Born Building Co., 660 Market street, S. F. Location, north Carl west of Stanyan. Will contain two flats of five and six rooms. Interiors finished in pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. Tile baths. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Flats, 2 story and base, frame, \$2,000. Architect, none. Owner, A. M. Sylvia, 371 36th avenue, S. F. Location, east 19th avenue north of Clement. Will contain two flats of five rooms each with baths. Interior finish pine and redwood. Some hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SACRAMENTO, CAL.—Flats, 1 story and base, frame, \$2,500. Architect, none. Owner, Max Smith, Fairmount Hotel, Sacramento. Location, 506 U street. Will contain two flats of four rooms each. Interior finish pine and redwood. Some hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

GARAGES

SACRAMENTO, CAL.—Garage, 1 story, hollow tile construction, \$5,000. Architect, none. Owner, Mrs. Edith Rockerby. Location, 224 K street. Has been designed for a commercial garage and will have concrete floor, metal window sash and frames and special underground storage tank. Exterior faced with cement plaster. Plans complete and work to be done by Day Labor.

GOVERNMENT WORK & SUPPLIES

New Mexico-Texas, Reclamation.

Under authority from the Secretary of the Interior the Reclamation Service has awarded the following contracts in connection with the Rio Grande irrigation project, New Mexico-Texas:

To Tochey & Johnson, of Phoenix, Ariz., for the excavation of approximately 162,000 cu yds of earth for the Leasburg Canal and the Picache Branch Canal in the vicinity of Hill, N. Mex., contract price, \$23,008.

To H. E. Williams, of El Paso, Tex., for earthwork on the San Elizario feed canal, near Ysleta, Tex., amounting to about \$3,149.50.

To John Mulligan, El Paso, Tex., earthwork on the San Elizario feed canal, amounting to about \$2,838.

Fort Stanton, N. Mex., Sanitorium.

The contract for furnishing lumber for repairs to the Fort Stanton Sanatorium.

torium has been awarded to Burton-lange Co. at \$1,410.57.

San Diego, Cal., Painting.

The following bids were received by the supervising architect, Treasury Department, Washington, D. C., for painting plastering in the U. S. public building at San Diego, Cal.:

Fairfax Bros., Geneva, N. Y., \$1,484.-50.
Jarvis & Co., St. Louis, Mo., \$1,791.
Graham Contracting Co., Philadelphia, Pa., \$2,069.
Mays Decorating Co., San Diego, Cal., \$2,375.
J. P. Sullivan, Chicago, Ill., \$2,584.
W. C. Redlich, New York City, \$3,280.
Albert Theriault, Brooklyn, N. Y., \$4,824.

Denver, Colo., Steel Furniture.

The contract for installing steel furniture in the U. S. post office at Denver, Colo., has been awarded to Art Metal Construction Co., Jamestown, N. V., at \$1,312.75.

Idaho Falls, Idaho, Post Office.

In the construction of the U. S. post office at Idaho Falls, Idaho, for which the Sound Construction and Engineering Co., Portland, Ore., has the contract, cabinet and tablet manufactured by the Agutter-Griswold Electric and Mfg. Co. will be used.

Pearl Harbor, Building.

The bid of J. L. Young, of Honolulu, if, T., \$26,100 in amount, has been accepted for reinforced concrete power house and operating building and one wooden double barrack building at Pearl Harbor, H. T.

Contracts Awarded.

SAN FRANCISCO—Hospital ward addition, 2 story, reinforced concrete. Cost as follows. Architect, Constructing Quartermaster's office, Fort Mason. Owners, United States Government. Contractors, Frank M. Garden & Co., 251 Kearny street, S. F., general construction, \$12,913; Burnham Plumbing Co., 1220 Webster street, S. F., plumbing, \$2,678; Collman & Collman Co., Sharon Bldg., S. F., heating, \$900; Collman & Collman Co., wiring, \$580; Turner Co., 272 Natoma street, fixtures, \$218. This work is for addition B to the Nurses' Dormitory at the Letterman General Hospital at the Presidio.

BENICIA, SOLANO CO., CAL.—Water mains, hydrants, etc., \$8,374. Engineer, War Department, Washington, D. C. Owners, United States Government. Contractors, Pringle, Dunn & Co., 338 Pine street, S. F. Contract price, \$8,374.

HALLS AND SOCIETY BUILDINGS

RICHMOND, CONTRA COSTA CO., CAL.—City Hall, 2 story and base, reinforced concrete, \$50,000. Architects, James T. Nabett, associated with J. B. Gghorn, Richmond. Owners, City of Richmond. From bids opened late Saturday night in Richmond for the construction of the new City Hall, it was learned that Mathew Morton, of Richmond, and Williams Bros. & Henderson, Halbrook Bldg., S. F., were the two lowest bidders. Both bids were taken under advisement. Morton's bid is said to be about \$1,400 higher than

Williams Bros. & Henderson. The approximate figure is \$28,000. There is \$25,000 in the fund to build this first unit and changes will be made in the plans in order to bring the cost of the building within this figure.

HOSPITALS

OAKLAND, CAL.—Pay hall and dormitories, 2 story and base, brick and concrete. Cost not stated. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, Alameda County. Bids opened for this work show Larsen-Sampson Co., S. F., low on the general construction at approximately \$75,000. Bids have been taken under advisement. A complete list of the figures will be found under the heading of Oakland and Alameda County in this issue.

Contracts Awarded.

SAN FRANCISCO—Hospital excavating and foundation work, \$16,237. Architect, Hermann Barth, 12 Geary street, S. F. Owners, City and County of San Francisco. Contractor, O. Monson, 1901 Bryant street, S. F. Contract price, \$16,237.

HOTELS

MONTEREY, MONTEREY CO., CAL.—Hotel alteration, \$30,000. Decorator, Mrs. Edgar de Wolfe, 1801 Van Ness avenue, S. F. Owners, Del Monte Hotel Co. The work will consist of complete rearrangement of the main floor and a large number of the bed rooms. New trim, hardwood floors, painting, plastering and electric work.

IRRIGATION PROJECTS

SACRAMENTO, CAL.—Levee construction. Cost not stated. Engineers, State Reclamation Board, Sacramento. Owners, West Side Levee District et al. At a recent meeting of the State Reclamation Board, plans of the West Side Levee District for levee construction from Colusa down to Knights Landing were approved, with the reservation that the Sacramento and San Joaquin Drainage District would not be called on hereafter to compensate the West Side District for any levee construction in excess of the plans called for by the flood control project. The Board also named as Assessors for the district Fred H. Harvey, Geo. B. Greene and Ben. F. Rush. The application of District No. 353 for approval of its plans for a drainage ditch was granted. Application of the American Farms Co. for small levees on the Northern Electric Railway embankment near Shippe Station, Butte County, were approved as being outside of Sacramento and San Joaquin Drainage District and not detrimental to the flood control project.

OAKDALE, STANISLAUS CO., CAL.—Irrigation work, \$80,000. Engineer, Burton Smith, Oakdale. Owners, Oakdale Irrigation District. Plans have been approved and bids are now being taken by the Oakdale Irrigation District for the extension of several laterals, installation of concrete gates, drops, etc. Bids on the work close January 17th. Further information may be had from Engineer Burton Smith.

Chester B. Loomis, M. E.

CONSULTING ENGINEER

Power and Pumping Plants
Cost Studies. - Design.
Installation. - Testing
Reports.

419 Wilcox Building

Los Angeles,

California

George Nelson, C. E.

Engineering	560 Mission St.
Financing	San Francisco, Cal.
Developments	503 Grant Bldg.
Construction	Los Angeles, Cal.

Contracts Awarded

MERIDIAN, SUTTER CO., CAL.—Irrigation weir. Cost not stated. Engineer's name not given. Owners, Irrigation District No. 70. The Missouri Valley Bridge and Iron Co. has been awarded a contract by District 70 to drive piling in the Girdner Bend on the river and in the Garmire Bend on the slough. Several years ago a weir was put in at a cost of \$85,000 at the slough bend, but the first high water washed everything away. Work will begin immediately.

POST OFFICES

ELLENBURGH, WASH.—Post office, 1 story and base, brick and stone. Cost not stated. Architect, Supervising Architect, Washington, D. C. Owners, United States Government. Plans have been forwarded to the west for the construction of the new Federal building. Bids will be taken for the entire work, including the heating, ventilating and electric work and fixtures. Plans can be secured from either the Supervising Architect, Washington, D. C., or from the custodian of the site at Ellensburg. Bids will be opened on January 27th. An official proposal appears in another column of this issue.

RAILROAD CONSTRUCTION AND EQUIPMENT

RIVERSIDE, RIVERSIDE CO., CAL.—Passenger depot, 1 story, reinforced concrete, \$60,000. Engineer, Engineering Dept., Kerehoff Bldg., L. A. Owners, Santa Fe Railroad Co. The Santa Fe Railway is planning the construction of a depot on property bounded by 7th, 8th, Santa Fe and Salt Lake rights of way, one-half of which the City Council have voted to purchase. The ground will be improved by the city for a public park.

Contracts Awarded.

ORVILLE, LITTLE & CO., CAL.—Passenger depot, frame and concrete. Cost not stated. Architect's name not given. Owners, Northern Electric Co. Contractor, S. T. Cobb, Thermalito. Contract price not stated.

RESIDENCES

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$3,000 each. Architects, Koenig & Christiansen, Humboldt Bank Bldg., S. F. Owner, Margaret Koenig. Location, north Cabrillo west of 12th avenue. Each dwelling will contain seven rooms, bath and basement garage. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile bath rooms. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 2 story and base, frame, \$3,000. Architect, none. Owner, J. M. Peters, 1010 Balboa avenue, S. F. Location, west 17th avenue south of Anza. Will contain seven rooms, bath and basement garage. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residence, 3 story and base, frame, \$30,000. Architect, Willis Polk, Hohart Bldg., S. F. Owner, Mrs. Andrew Welch. Location, north Broadway west of Broderick. Will contain 16 rooms, several baths, conservatory and sleeping porches. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors throughout. Central heating system, probably steam heat, hot water circulating system and vacuum cleaning. Bath rooms tile. Open fire places and tile or brick mantels. Exterior faced with cement plaster and brick veneer. Plans complete and figures to be called for shortly.

SAN FRANCISCO—Residence, 2 story and base, frame, \$2,000. Architect, none. Owner, N. J. Nelson, 547 Elizabeth street, S. F. Location, south 17th west of Belvedere. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SAN FRANCISCO—Residences, 2 2 story and base, frame, \$5,000. Architect, D. C. Coleman, Merchants' National Bank Bldg., S. F. Owners, Brown Construction Co. Location, Forest Hill. Each house will contain eight rooms, bath, sleeping porch and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath rooms tile. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

BERKELEY, ALAMEDA CO., CAL.—Residence, 2 story and base, frame, \$4,500. Architect, H. H. Gutterston, 80 Post Street, S. F. Owners, Mason McDuffie Co., Shattuck and Addison

streets, Berkeley. Location, Oak Knoll Terrace. Will contain eight rooms, two baths and sleeping porch. Interior finish pine, hardwood veneer and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Automatic water heater. Bath room tile. Exterior covered with cement plaster. Plans complete and work by Day Labor.

OAKLAND, CAL.—Residence, 1½ story and base, frame, \$2,500. Architect, none. Owner, John A. Bischoff, 6045 Harwood avenue, Oakland. Location, Shattuck avenue east of College. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Tile bath room. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residence, 1 story and base, frame, \$2,000. Architect, none. Owner, R. C. Hillen, 430 Haight avenue, Oakland. Location, Mantana east of Curran. Will contain six rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work by Day Labor.

HERCULES, CONTRA COSTA CO., CAL.—Residences, 2, 1 story and base, frame, \$7,500. Architect, James T. Nabrett, 704 Macdonald avenue, Richmond. Owners, Hercules Powder Co. These dwellings have been designed as double bungalows and each will contain five or six rooms. Interiors finished in pine and white enamel. Some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic and shingles. Plans complete and figures under advisement.

FRESNO, FRESNO CO., CAL.—Residence, 1 story and base, frame, \$1,500. Architect, none. Owner, C. A. Clark, Fresno. Location, Orchard Hill Addition. Will contain five rooms, bath and sleeping porch. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and shingles. Plans complete and work to be done by Day Labor.

SACRAMENTO, CAL.—Residence, 1 story and base, frame, \$1,500. Architect, none. Owner, William Jacinto, 319 W street, Sacramento. Location, 319 W street. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Exterior rustic and shingles. Plans complete and work by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, \$5,000 each. Architect, none. Owner, C. J. Keenan, 20 Broderick, S. F. Location, west Scott south of Green and southwest Scott and Green. Will contain seven rooms, bath and sleeping porch. Interiors will be finished in pine, elm and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Automatic water heaters. Bath rooms tile. Exteriors covered with rustic and cement plaster. Plans complete and work by Day Labor.

SAN FRANCISCO—Residences, 2, 2 story and base, frame, \$3,000. Architect, none. Owners, Johnson and Johnson, 818 14th avenue, S. F. Location, east 22nd avenue north of Clement. Each will contain six rooms and bath. Interiors finished in pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

OAKLAND, CAL.—Residences, 5, 1 story and base, frame, \$2,000 each. Architect, Frank J. Melbourne, 46 Kearny street, S. F. Owner's name withheld. Location, Eastlawn. Each house will contain five rooms and bath. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Open fire places. Mantels tile and brick. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and subfigures being taken.

BERKELEY, ALAMEDA CO., CAL.—Residence, 1 story and base, frame, \$2,500. Architect, none. Owner, C. J. Pfarr, 5487 Claremont avenue, Oakland. Location, north Derby east of California. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$2,500. Architect, none. Owner, Edward Larmer, 470 Boulevard Way, Oakland. Location, Alcatraz west of Hillegass. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete, work by Day Labor.

PIDMONT, ALAMEDA CO., CAL.—Residence, 1½ story and base, frame, \$3,000. Architect, E. H. Strang, 2521 Lincoln avenue, Alameda. Location, Howie near York Drive. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire places and tile mantels. Furnace heat. Bath room tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work by Day Labor.

OAKLAND, CAL.—Residence, 2 story and base, frame, \$4,000. Architect, none. Owner, William R. Cummey, 1627 25th avenue, Oakland. Location, east 24th avenue south of East 21st street. Will contain eight rooms, two baths and sleeping porch. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors. Open fire places and furnace heat. Mantels tile or brick. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

PETROLIA, HUMBOLDT CO., CAL.—Residence, 2 story and base, frame, \$3,500. Architect, Frank T. Georgeson, Eureka. Owner, William Clark. Will contain six rooms and bath. Interior finish pine and redwood. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater.

Exterior covered with rustic. Plans being prepared.

SCHOOLS

ALAMEDA, ALAMEDA CO., CAL.—School addition, 2-story and base, brick and concrete. Cost not stated. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, City of Alameda. Plans for the addition to the Washington School are now practically complete and will be out for figures by the first of the year. Plans can be secured from the architect.

SEATTLE, WASH.—School group, 2 and 3 story, brick and reinforced concrete, \$250,000. Architect, School Architect Edgar Blair, Seattle. Owners, City of Seattle. Preliminary plans for the West Seattle School are now being prepared. Other than the fact that the building will be of fireproof construction, no details have been given out. Further mention will be made of the work.

Contracts Awarded.

SANTA MARGARITA, SAN LUIS OBISPO CO., CAL.—School, 1 story and base, frame, \$11,627. Architect, J. J. Roth, Atascadero. Owners, Santa Margarita School District. Contractors, Engstrom Co., 5th and Seaton streets, L. A. Contract price, \$11,627.

PITTSBURG, CONTRA COSTA CO., CAL.—School painting, \$695. Architect, none. Owners, Pittsburg Grammar School District. Contractor, C. J. Frisk & Co., 3419 23rd avenue, S. F. Contract price, \$695.

SEWERS, STREET WORK & WATER SYSTEMS

PASADENA, LOS ANGELES CO., CAL.—Reservoir, reinforced concrete. Cost not stated. Engineer, City Engineer Morris. Pasadena. Owners, City of Pasadena. Work on a twelve million gallon reservoir for the municipal water department will be started shortly. The structure will be erected between Sheldon avenue and the Vavra property south of the Sheldon wells. Plans for the structure are now being prepared. The reservoir will bring the water storage capacity of the municipal department to 68,500,000 gallons and will be the second largest in the chain of reservoirs in the city.

PORTLAND, ORE.—Pumping plant and reservoir. Cost not stated. Engineers, Gilbert & Hall, Couch Bldg., Portland. Owner's name withheld. Bids will be received until 7:30 p. m. January 14th for the materials and labor required in constructing a 200,000-gallon reservoir, pumping main, distributing main, etc. Separate proposals will be received as follows: (a) For constructing reservoir, pumping main and distributing mains, using machine banded wood stave pipe for part of the pumping and distributing mains. (b) For the same contract, using lap welded steel pipe throughout. The equipment required includes 3,000 feet of 8-inch, 3,750 feet of 6-inch and 11,000 feet of 4-inch pipe, also 20 fire hydrants. Bids for the pumping plant will be taken later. Further information may be had from the engineers.

SAN ANSELMO, MARIN CO., CAL.—Street Improvement. Cost not stated.

Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Only one bid that of the Marin Rock Co., was presented for the improvement of Forest avenue, and was rejected as being too high. New bids will be called for at once.

ANTIOCH, CONTRA COSTA CO., CAL.—Sewer construction. Cost not stated. Engineer, Town Engineer, Antioch. Owners, Town of Antioch. At the last meeting of the Town Trustees, Town Engineer Oliver presented plans and specifications for a storm sewer to be provided to drain the intersection and blocks leading to it at the corner of 6th and B streets. Two styles of bids will be called for, one in which the contractor is to furnish the material and labor, the other the material and the town will perform the work. Bids will be asked for furnishing 2,000 feet of 3-inch screw joint pipe, double dipped f. o. b. Antioch. Further information may be had from the Town Engineer or Town Clerk at Antioch.

SOUTH SAN FRANCISCO, SAN MATEO CO., CAL.—Sewer construction. Cost as follows. Engineer, Town Engineer, South San Francisco. Owners, Town of South San Francisco. Bids were opened on December 20th by the City Trustees of South San Francisco for extensive street improvements and sewer construction in 1st, 2nd and 3rd streets and portions of A, B and C streets. Bids were not regarded as satisfactory and will probably be rejected and new figures called. Following is a list of the bids received: E. H. Sundberg, 215 Oakland Bank of Savings Bldg., Oakland, \$38,599.95; Leech & De Camp, 14 Montgomery street, S. F., \$38,581.91; F. R. Ritchie, Chronicle Bldg., S. F., \$42,951.66.

SANTA CLARA, SANTA CLARA CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer Fisher, Santa Clara. Owners, City of Santa Clara. Plans are now being prepared by City Engineer Fisher for the elimination of a curve in the highway at the corner of Lincoln street and the San Francisco road. Property has been purchased by the City Trustees. On the completion of the plans bids will be called for.

SALINAS, MONTEREY CO., CAL.—Road construction. Cost not stated. Engineer, County Surveyor Cozzens, Salinas. Owners, Monterey County. At the last meeting of the County Supervisors the plans and specifications of County Surveyor Cozzens for the grading and improving of a portion of the San Miguel canyon road were adopted and approved, and bids for the same will be opened on Tuesday, January 1, 1916. Further information may be had from the County Surveyor or County Clerk at Salinas.

HAYWARD, ALAMEDA CO., CAL.—Street improvement. Cost as follows. Engineer, City Engineer, Hayward. Owners, City of Hayward. At the last meeting of the City Trustees bids were opened for the L and Watkins streets crossing paving. Two bidders answered to the call for the work. The Ransome-Stumphy Co., First National Bank Bldg., Oakland, bid for grading, a 10-inch paving, 24 six-inch sewer pipe, 7 c. brick manhole, \$40. California Bricktile Co., 1700 Franklin street

Oakland, grading — paving, 10-inch sewer pipe, 8 c. brick manhole — \$48. The matter of awarding a contract was laid over until the next meeting.

WAKERSFIELD, KERN CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor Wakersfield. Owners, Kern County. Bids will be received until January 1st for grading and paving and construction of culverts in Division 6, Section 1, McKittrick Maricopa road, 1/4 section 1/4 portion lying between the 1/4 section limits of Taft and its north city limits of Maricopa. Length approximately 0.7 miles. Plans can be secured from the County Clerk.

WOODLAND, YUBA CO., CAL.—Water system, \$17,000. Engineer, City Engineer Arnold, Woodland. Owners, City of Woodland. As a result of thorough investigation, City Engineer Arnold plans to install two new wells at 18-foot in depth on the Grand street for a 10-inch high pressure pump, a 15-horsepower electric motor, a 120,000-gallon steel tank to be 100 feet from the ground and the necessary accessories, the estimated cost to be \$17,156. It is proposed to lay 2,100 feet of 12-inch pipe on Grand avenue and 1,200 feet of the same size on Lincoln avenue. Pipe 8 inches in diameter will be laid as follows: 1,300 feet on Cleveland street, 2,000 feet on Pendegast street, 1,750 feet on Walnut street, 2,000 feet on Clover street, Pipe 6 inches in diameter, 1,000 feet on Pendegast street, 1,100 feet on 7th street and 50 feet on Clover street. Pipe 14 inches in diameter would be laid in this wise: 1,000 feet on College, Pendegast and Gibson; 800 feet on 1st, Marshall and Gibson; 1,600 feet on 2nd, Marshall and Gibson; 1,500 feet on 4th, Pendegast and Gibson; 600 feet on North 5th and East streets; 600 feet on 12th, 13th and East; 250 feet on Court 6th and East. The estimated cost of this is placed at \$15,275.90. The estimated cost of laying the pipe is placed at \$15,000. The cost of gate valves, fittings, accessories and the labor for excavations, incidentals and supervision brings the total cost made up to about \$17,000.

MIDEST, STANISLAUS CO., CAL.—Lighting system. Cost not stated. Engineer, County Surveyor, Stanislaus. Modesto. Owners, City of Modesto. At the last meeting of the City Trustees, Modesto, County Surveyor 15th Engineer appeared to discuss the matter of lighting the new Tadmor bridge plans for which are now being prepared in view of the fact that the city has not had to pay any of the cost of construction, it seemed to be the sentiment of the board that it would be no more than fair to provide for lights for the structure. A definite resolution was passed on this point but W. L. Temperley, city controller, was authorized to visit San Francisco and consult authorities on the best means of arranging the lighting system.

SANTA CRUZ, SANTA CRUZ CO., CAL.—Street improvement. Cost not stated. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. At a recent meeting of the City Trustees a resolution was made regarding the conditions for sidewalks and curb on the

north side of Walter street between Catalpa street and Poplar avenue was passed.

Contracts Awarded.

SAN FRANCISCO—Street improvement, \$30,412.72. Engineer, City Engineer, Temporary City Hall. Owners, City and County of San Francisco. Contractor, P. Rolandi, 550 Montgomery street, S. F. Contract price, \$30,412.72.

COLUSA, COLUSA CO., CAL.—Pumps and motors. Cost not stated. Engineer, none. Owners, Blevins & Mallon, Colusa. Contractors, Yuba Construction Co., Colusa. Contract price not stated.

MILWAUKEE, ORE.—Water works system, \$22,542.40. Engineer, J. W. Morris, Milwaukie. Owners, Town of Milwaukie. Contractors, Giebisch & Joplin, Rothchild Bldg., Portland. Contract price, \$22,542.40.

SAN FRANCISCO — Sewer construction, \$41,000. Engineer, City Engineer, Temporary City Hall, S. F. Owners, City and County of San Francisco. Contractors, Tibbitts-Pacific Co., 16 California street, S. F. Contract price, \$41,000.

REDWOOD CITY, SAN MATEO CO., CAL. Street improvement, \$2,211.50. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Contractors, Colma Construction Co. Contract price, \$2,211.50.

DALY CITY, SAN MATEO CO., CAL.—Sewer construction, \$4,345.50. Engineer, Town Engineer, Daly City. Owners, Town of Daly City. Contractors, F. R. Ritchie & Co., Chronicle Bldg., S. F. Contract price, \$4,345.50.

BAKERSFIELD, KERN CO., CAL.—Road improvement. Cost not stated. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractors, Federal Construction Co., Sharon Bldg., S. F. Contract price not stated, paying three miles of the Bellevue road and also some distance on the Brundage Lane road.

SAN ANSELMO, MARIN CO., CAL.—Sewer construction, \$1,382.37. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Contractors, Marin Rock Co., San Anselmo. Contract price, \$1,382.37.

ANTIOCH, CONTRA COSTA CO., CAL.—Water purification plant. Cost not stated. Engineer, City Engineer, Antioch. Owners, City of Antioch. At the last meeting of the Town Trustees a suggestion was received from the State Board of Health relating to the installation of a chlorination plant to purify the water supply. The suggestion was adopted and bids for the installation of the plant were ordered received. Further information relative to this work may be had from the Town Clerk at Antioch.

STORES AND OFFICES

SAN FRANCISCO—Service station, 1 story, steel frame. Cost not stated. Architect, John Reid, Jr., First National Bank Bldg., S. F. Owners, Richmond Oil Co. Location, 4th avenue and California street. Complete steel frame, cement plaster exterior and cement floor. Underground storage tanks. Corrugated iron roof. Plans complete and figures being taken.

RICHMOND, CONTRA COSTA CO., CAL.—Store and office, 2 story and base, brick and steel, \$14,000. Archi-

tect, James T. Narbett, 704 Macdonald avenue, Richmond. Owner, Dr. C. W. Cunningham. Will contain stores on the first floor and modern offices above. Interior finish pine and hardwood. Patent store fronts. Steam heat with oil burning system. Exterior faced with pressed brick. Plans being prepared.

SAN FRANCISCO—Sales room and distributing plant, 5 story and base, reinforced concrete. Cost not stated. Architect, George A. Mills, Toledo, Ohio. Owners, Willys-Overland Co., leased to J. W. Leavitt Co. The architect's name for this building is published here after several mentions of the work without an architect. Construction will be started shortly after the first of the year.

Contracts Awarded

SAN FRANCISCO—Store addition, 1 story and base, reinforced concrete, \$13,000. Architects, Reid Bros., California-Pacific Bldg., S. F. Owners, Hale Bros. Contractors, Macdonald & Kahn, Rialto Bldg., S. F. Contract price, \$13,000.

THEATRES

STOCKTON, SAN JOAQUIN CO., CAL.—Theatre, 3 story and base, Class A construction. Cost not stated. Architect, W. B. Thomas, Yosemite Theatre Bldg., Stockton. Owners, Henry Cowell Lime and Cement Co., leased to Turner & Dahnken Circuit. Location, Weber street. Fireproof construction, complete steel frame, and reinforced concrete floors and walls. Steam heat, special ventilating system and vacuum cleaning. Ornamental plaster. Patent store fronts and metal window sash and frames. Upper floors arranged for offices, finished in pine and hardwood. Exterior faced with pressed brick and terra cotta. Preliminary plans being prepared.

Prizes Awarded

The Committee on awarding the prizes to participants in the monster industrial parade held during American Builders' Week have, after mature deliberation, awarded the prizes as follows:

The prize for the largest number of participants in any one division is awarded to the General Contractors' Association of San Francisco.

The prize for the division most uniquely designed is awarded to the San Francisco Planing Mill Owners' Association.

The prize for the largest section of uniformly decorated automobiles is awarded to the Master Plasterers' Association of San Francisco.

The prize for the largest section of participants outside of San Francisco is awarded to the General Contractors' Association of Oakland.

The prize for the largest participation of Ladies' Auxiliaries is awarded to the Ladies' Auxiliary to the Master Plasterers' Association of San Francisco.

The prize for the most unique and imposing float is awarded to the Sacramento Builders' Exchange for their magnificent float portraying the Sacramento sky line.

The prize for the float most indicative of progress in the Building Trades is awarded to the Master Plumbers' Association of San Francisco.

The prize for the individual or firm entering the largest number of floats is awarded to the J. H. Kruse Lumber Company.

The prize to the handsomest Alde in the Grand Marshall's Cavalcade is awarded to Wm. H. George, Secretary of the Cowell Lime & Cement Co.

The prize for the biggest bunch of real noise is awarded to the Sacramento Builders' Exchange.

The prize for the most beautifully decorated automobile driven by a lady is awarded to Mrs. Edward J. Brandon.

The prize for the best special feature float is awarded to Dyer Bros. for their float representing the Tower of Jewels.

The committee found their task a difficult one and the decision has been rendered to the best of their ability. It is hoped that their opinion will be concurred in by the most of the builders and material men interested in the American Builders' Week celebration.

NEW LINE BETWEEN SAN FRANCISCO AND EAST INDIES.

Recent articles in Commerce Reports, published by the Government, have recorded successful efforts in behalf of neutral shipping on the Pacific, with the benefits coming partly to American commerce. The Java-Pacific Line will inaugurate a service between Batavia, Java, and San Francisco by a sailing from Batavia on December 15. Steamers will stop at various ports, including Manila and Hongkong. The new line will link Java and other islands of the rich Netherlands Indian Archipelago with San Francisco for closer trade relations, as well as supply facilities at the other ports mentioned. The service is made possible through the co-operation of three large Netherlands steamship companies which have been operating out to Java and the Orient—the Nederland Steamship Co., and the Java-China-Japan Line of Amsterdam, and the Rotterdam Lloyd, of Rotterdam.

Arrangements for the organization of the Pacific & Eastern Steamship Co. (Inc.) to operate under the American flag between China, the Philippines, and the Pacific and Atlantic coasts of the United States was mentioned in Commerce Reports for October 30, 1915. In the issues of October 22 and November 19 were reports of the formation of the China Mail Steamship Co. for traffic between San Francisco and China. This company is financed by Chinese in the United States.

TANKER TO BE BUILT AT SAN FRANCISCO.

NEW YORK—The Vacuum Oil Company recently placed orders for two new tank steamers and one general cargo steamer, which will fly the American flag in the concern's export service.

One tanker with a capacity of 50,000 barrels of oil, and a steamer with a capacity of 3,500 tons of cargo will be built at Wilmington, Del. The other tanker with a capacity of 75,000 barrels will be built at the Union Iron Works, San Francisco.

OFFICIAL PROPOSALS.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 998. Steel, Iron, Pig Iron, Cast Iron, Wire, Horseshoes, Toe Chalks, Sheet Tin, Track Frogs, Steel and Iron Castings, Manganese Steel Dipper Lips, Track Spikes, Boat Spikes, Chain Shackles, Cable, Turnbuckles, Stovepipe, Rabbit Metal, Bronze, Brass, Copper, Copper Tubing, Brass Tubing, Pig Lead, Sheet Lead, Lead Washers, Lead Pipe, Sheet Zinc, Shovels, Taps, Pipe Fittings, Sheet Bolts, Hinges, Valves, Sanitary Fixtures, Wagon Rims and Spokes, Manila Rope, Leather, Crayons, Silica Sand, Fire Clay, Foundry Clay, Silica Grit, Calcium Chloride, Ash Soda, Pitch, Alumina Sulphate, White Zinc, White Lead, Land Oil, Lined Oil, Neat's-foot Oil, Turpentine Substitute, Fish Oil Paints and Lumber. Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. January 8, 1916, at which time they will be opened in public, for furnishing the above mentioned articles. Bids and general information relating to this circular (No. 998) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. R. C. BROWN, major, corps of engineers, U. S. army, general purchasing officer.

NOTICE TO CONTRACTORS.

TREASURY DEPARTMENT. Supervising Architect's Office, Washington, D. C., December 16, 1915.—**SEALED PROPOSALS** will be opened in this office at 3 P. M., January 27, 1916, for the construction complete (including mechanical equipment and approaches) of the United States Post Office at Ellensburg, Wash. Drawings and specifications may be obtained from the custodian of site at Ellensburg, Wash., or at this office, in the discretion of the Supervising Architect, JAS. A. WETMORE, Acting Supervising Architect.

PROPOSALS FOR CANAL SUPPLIES.

PANAMA CIRCULAR 998. Proposals for Bronze Ladders and Numerals, Structural Bronze Work, Cutting-Off Machine, Lathes, Poles, Rivets, Nuts, Washers, Lag Screws, Lead Sleeves, Cable, Terminal Hardware, Cable and Wire. Sealed proposals will be received at the office of the general purchasing officer, the Panama Canal, Washington, D. C., until 10:30 a. m. December 29, 1915, at which time they will be opened in public, for furnishing the above mentioned articles. Bids and general information relating to this circular (No. 998) may be obtained from this office or the office of the assistant purchasing agent, Fort Mason, San Francisco, Cal.; also from the U. S. engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal. R. C. BROWN, major, corps of engineers, U. S. army, general purchasing officer.

THIS WANTED FOR SCHOOL FURNITURE

The Board of Education of the City of Oakland will on December 29, 1915, open the bids for school furniture and equipment for the year 1916-17. The bids will be received in the City of Oakland until 10:00 a. m. on December 29, 1915.

and in accordance with specifications therefor and on file in the office of Purchasing Agent, Board of Education, Fifth Floor, City Hall, Oakland and California to which said plans and specifications of same is hereby made and to be made on form 1, enclosed and bid to be accompanied by a certified check for 1% of amount of bid, check payable to L. H. Cummings, City Clerk. Work to be commenced on or before ten days after execution of contract, and completed by February 1, 1916.

The right is reserved to the Board to reject any or all bids submitted.
L. H. CUMMINGS,
Purchasing Agent of the Board of Education.

BIG GAIN IN BUILDING OPERATIONS FOR NOVEMBER.

The showing presented by the building industry throughout the United States for the month of November is so splendidly favorable as to be almost amazing. It would look as if a tremendous wave of activity had swept over the country during the month, energizing construction work almost everywhere. Official reports received by the American Contractor, Chicago, from the principal cities of the country show that the building permits issued for the month total \$62,452,586, as compared with \$35,788,711 for November, last year. The improvement, however, while a reality, is somewhat exaggerated for the reason that the business of a year ago was specially depressed as a war reaction. The building permits for November, 1915, totaled \$11,005,514.

The size of that gain indicates strongly that the present business is above normal and no doubt includes a lot of deferred plans, the execution of which is now made possible by the ease of the money market. A careful study of the tabulation below reveals the large gains made by most of the cities. Only 15 of the 72 make unfavorable comparisons.

The detailed statement follows:

	Nov. 1915	Nov. 1914
Akron	\$ 523,165	\$ 179,295
Alameda	61,521	39,367
Albany	888,265	301,378
Albany	281,647	232,101
Baltimore	690,178	274,980
Birmingham	121,904	76,710
Boston	3,063,673	1,266,778
Buffalo	788,000	495,000
Butler Rapids	119,000	70,000
Chattanooga	55,327	28,788
Chicago	10,861,600	6,513,140
Cincinnati	390,965	326,976
Cleveland	2,131,115	2,568,645
Columbus	217,349	377,884
Dallas	769,198	1,130,850
Dayton	541,077	58,625
Denver	35,408	131,110
Des Moines	125,070	97,702
Detroit	182,680	761,780
Indianapolis	701,171	585,710
Fort Orange	54,018	79,067
Fort Wayne	160,521	100,915

Grand Rapids	179,325	173,424
Harrisburg	81,375	74,000
Hartford	707,709	599,385
Indianapolis	138,823	265,190
Kansas City	744,115	341,220
Lincoln	186,705	39,175
Los Angeles	1,000,329	785,310
Louisville	216,020	51,600
Manchester	111,898	87,666
Memphis	191,185	165,275
Milwaukee	1,123,925	646,888
Minneapolis	1,339,217	763,613
Nashville	108,665	32,655
Newark	611,385	725,627
New Haven	966,080	315,755
New Orleans	156,531	69,632
New York City	11,211,740	5,102,693
Manhattan	1,601,215	2,058,211
Bronx	3,555,038	118,013
Brooklyn	4,282,576	1,617,115
Borough of—		
Queens	1,560,389	1,118,586
Oakland	155,160	281,769
Oklahoma	39,765	1,509,915
Omaha	656,075	133,583
Patterson	119,585	46,361
Peoria	197,575	605,200
Philadelphia	2,108,665	1,240,530
Pittsburgh	663,312	777,368
Portland	210,595	153,820
Richmond	275,251	120,665
Rochester	817,251	397,820
St. Joseph	64,819	36,110
St. Louis	782,943	650,029
St. Paul	619,701	710,697
Salt Lake City	156,705	171,800
San Antonio	127,310	216,575
San Francisco	2,261,687	1,512,369
Schenectady	60,125	76,385
Scranton	323,164	88,832
Seattle	798,810	229,615
Shreveport	55,683	77,761
Sioux City	194,297	81,477
Spokane	46,175	57,700
Springfield, Ill.	147,115	35,100
Syracuse	608,321	235,265
Tacoma	55,465	276,655
Toledo	335,755	276,676
Topeka	49,630	35,105
Troy	76,735	77,450
Utica, N. Y.	151,035	96,700
Washington	394,925	419,511
Wilkes-Barre	48,335	76,493
Worcester	354,829	424,211
Total	\$62,452,586	\$35,788,711

NEW PAVING COMPANY FILES ARTICLES OF INCORPORATION.

MODESTO, Cal. Articles of Incorporation have been filed with the county clerk by the Central California Paving Company, one of the two new companies formed as a result of the division of the Worswick Paving Company.

The company names Modesto as its principal place of business, and is capitalized at \$50,000 of this amount, \$47,000 has been subscribed as follows:—J. C. Worswick, \$10,000; Z. H. Burke, \$7,000; H. J. Melo-Lopez, \$3,000. These three also constitute the board of directors.

ADVANCE CONSTRUCTION NEWS.

Classified According to Location.

SAN FRANCISCO.

RESIDENCES—2, 2 story and base, frame, \$3,000 each. San Francisco. Architects, Koenig & Christiansen, Humboldt Bank Bldg., S. F. Owner, Margaret Koenig. Location, north Cabrillo west of 12th avenue. Each dwelling will contain seven rooms, bath and basement garage. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Tile bath rooms. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—2 story and base, frame, \$3,000. San Francisco. Architect, none. Owner, J. M. Peters, 1010 Balboa avenue, S. F. Location, west 16th avenue south of Anza. Will contain seven rooms, bath and basement garage. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—3 story and base, frame, \$50,000. San Francisco. Architect, Willis Polk, Hohart Bldg., S. F. Owner, Mrs. Andrew Welch. Location, north Broadway west of Broderick. Will contain 16 rooms, several baths, conservatory and sleeping porches. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors throughout. Central heating system, probably steam heat, hot water circulating system and vacuum cleaning. Bath rooms tile. Open fire places and tile or brick mantels. Exterior faced with cement plaster and brick veneer. Plans complete and figures to be called for shortly.

RESIDENCE—2 story and base, frame, \$2,000. San Francisco. Architect, none. Owner, N. J. Nelson, 547 Elizabeth street, S. F. Location, south 17th west of Belvedere. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$5,000. San Francisco. Architect, D. C. Coleman, Merchants' National Bank Bldg., S. F. Owners, Brown Construction Co. Location, Forest Hill. Each house will contain eight rooms, bath, sleeping porch and basement garage. Interior finish pine, hardwood and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Bath rooms tile. Automatic water heaters. Exteriors covered with cement plaster. Plans complete and work to be done by Day Labor.

APARTMENT HOUSE—3 story and base, frame, \$8,000. San Francisco.

Architect, none. Owner, Alfred T. Morris, 501 11th avenue, S. F. Location, southeast corner of 11th avenue and Anza street. Will contain five suites of two and three rooms. Baths and wall beds. Interior finish pine with some elm panels and hardwood floors. Central heating system and hot water supply. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

SERVICE STATION—1 story, steel frame. Cost not stated. San Francisco. Architect, John Reid, Jr., First National Bank Bldg., S. F. Owners, Richmond Oil Co. Location, 4th avenue and California street. Complete steel frame, cement plaster exterior and cement floor. Underground storage tanks. Corrugated iron roof. Plans complete and figures being taken.

CHURCH ALTERATIONS—\$5,000. San Francisco. Architects, Ward & Blohne, Alaska Commercial Bldg., S. F. Owners, St. John's Evangelical German Lutheran Church. Location, Howard and 21st streets. The work will consist of rearranging the upper floor for Sunday school rooms and the lower floor for class rooms, and will necessitate interior partitions, plastering, painting, plumbing, electric work and carpentry work. Plans are complete and figures are being taken.

PACKING HOUSE—1 story and base, reinforced concrete, \$20,000. San Francisco. Architect, Smith O'Brien, Humboldt Bank Bldg., S. F. Owners, Workman Packing Co. Location, west 7th street south of Garrison. Construction fireproof. Interior finish pine except in the offices, which will be finished in hardwood. Concrete floors. Special machinery. Steam heat and hot water system. Metal window sash and frames. Exterior faced with cement plaster. Plans complete and segregated figures being taken.

FLATS—2 story and base, frame, \$3,500. San Francisco. Architect, Wm. J. Anderson, 292 5th street, S. F. Owner, Morris Farber, 140 Russ street, S. F. Location, west Harriet north of Folsom. Will contain two flats of five and six rooms. Interior finish pine and redwood. Some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic, shiplap and brick veneer. Plans complete and work to be done by Day Labor.

FLATS—2, 2 story and base, frame, \$4,600 each. San Francisco. Architect, none. Owner, John T. Quigley, 528 Masonic avenue, S. F. Location, southwest Moss and Folsom, covering an area of 23 by 69 feet each. Will contain three flats with baths. Interiors finished in pine and redwood with some elm panels and hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic, shiplap and cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$1,000. San Francisco. Architects, Koenig and Christiansen, Humboldt Bank Bldg., S. F. Owner, H. C. Christiansen. Location, north Cabrillo west of 7th avenue, covering an area of 25 by 55 feet. Will contain two modern flats of five and six rooms. Interiors finished in pine, elm panels and white enamel. Hardwood floors. Bath rooms finished in tile. Automatic water heaters. Basement garage. Exterior covered with cement plaster on metal lath. Plans complete and work to be done by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$5,000. San Francisco. Architect, none. Owner, C. J. Keenan, 20 Broderick street, S. F. Location, west Scott south of Green and southwest Scott and Green. Will contain seven rooms, bath and sleeping porch. Interiors will be finished in pine, elm and white enamel. Hardwood floors. Furnace heat and open fire places. Mantels tile and brick. Automatic water heaters. Bath rooms tile. Exteriors covered with rustic and cement plaster. Plans complete and work by Day Labor.

RESIDENCES—2, 2 story and base, frame, \$3,000. San Francisco. Architect, none. Owners, Johnson and Johnson, 818 14th avenue, S. F. Location, east 22nd avenue north of Clement. Each will contain six rooms and bath. Interiors finished in pine and white enamel. Hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

AUTOMOBILE ASSEMBLING PLANT—5 story and base, reinforced concrete, \$200,000. San Francisco. Architect's name not given. Owners, Ford Motor Car Co. Location, 21st and Treat avenue. Preliminary plans have been received in this city for the new Ford addition. A contract covering the entire work will be let. Complete information can be secured from Mr. Lund at the company's plant.

FLATS—2 story and base, frame, \$4,500. San Francisco. Architect, E. G. Bolles, 660 Market street, S. F. Owners, S. A. Born Building Co., 660 Market street, S. F. Location, north Carl west of Stanyan. Will contain two flats of five and six rooms. Interiors finished in pine and elm panels with some hardwood floors. Open fire places and tile or brick mantels. The baths. Automatic water heaters. Exterior covered with rustic and cement plaster. Plans complete and work to be done by Day Labor.

FLATS—2 story and base, frame, \$2,000. San Francisco. Architect, none. Owner, A. M. Sylvia, 371 30th avenue, S. F. Location, east 19th avenue north of Clement. Will contain two flats of five rooms each with baths. Interior finish pine and redwood. Some

Friermuth & Price

Civil Engineers & Surveyors

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San Francisco,

California

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hardwood floors. Open fire places and
tile mantels. Automatic water heat-
ers. Exterior covered with rustic and
cement plaster. Plans complete and
work to be done by Day Labor.

**SALES ROOM AND DISTRIBUTING
PLANT**—3 story and base, reinforced
concrete. Cost not stated. San Fran-
cisco. Architect, George A. Mills, To-
ledo, Ohio. Owners, Willys-Overland
Co., leased to J. W. Leavitt Co. The
architect's name for this building is

published here after several mention-
of the work without an architect. Con-
struction will be started shortly after
the first of the year.

Contracts Awarded.

HOSPITAL WARD ADDITION—2
story, reinforced concrete. Cost as
follows. San Francisco. Architect
Constructing Quartermaster's office,
Fort Mason. Owners, United States
Government. Contractors, Frank M.
Garden & Co., 251 Kearny street, S. F.,
general construction, \$12,913; Burnham
Plumbing Co., 1220 Webster street, S.
F., plumbing, \$2,678; Collman & Col-
lman, Sharon Bldg., S. F., heating, \$300.
Collman & Collman Co., wiring, \$580;
Turner Co., 272 Natoma street, S. F.,
fixtures, \$218. This work is for addition
B to the Nurses' Dormitory at the
Letterman General Hospital at the
Presidio.

STORE ADDITION—1 story and
base, reinforced concrete, \$13,000. San
Francisco. Architects, Reid Bros., S.
F. owners, Hale Bros. Contractors,
Macdonald & Kahn, Haight Bldg., S. F.
Contract price, \$13,000.

SEWER CONSTRUCTION—\$11,000.
San Francisco. Engineer, City Engi-
neer, Temporary City Hall, S. F. Own-
ers, City and County of San Francisco.
Contractors, Tibbitts-Pacific Co., 16
California street, S. F. Contract price,
\$11,000.

**HOSPITAL EXCAVATING AND
FOUNDATION WORK**—\$16,237. San
Francisco. Architect, Hermann Barth,
12 Geary street, S. F. Owners, City
and County of San Francisco. Con-
tractor, O. Monson, 1907 Bryant street,
S. F. Contract price, \$16,237.

STREET IMPROVEMENT—\$30,112.72.
San Francisco. Engineer, City Engi-
neer, Temporary City Hall. Owners,
City and County of San Francisco.
Contractor, F. Rolandi, 550 Montgom-
ery street, S. F. Contract price, \$30,
112.72.

City Bids Opened.

**Board of Public Works Receives
Twelve Figures for Construction
of Redding School.**

Twelve bids were received at the
Friday afternoon meeting of the San
Francisco Board of Public Works for
the general construction of the Red-
ding School, a brick and steel structure
designed by Architect Frederick H.
Meyer. C. L. Wold presented the low

bids at \$19,700. Following is a com-
plete list of the bids.

General Construction Redding School.	
W. D. Henderson	\$19,150
Val Franz & Son	21,960
Lange & Bergstrom	22,855
P. F. Riley	26,288
H. L. Peterson	27,177
C. L. Wold	19,295
Grace & Bernier	25,000
W. A. Newsum	21,139
A. Kohn	21,500
Elmer Carlson	21,465
Anderson & Ringrose	21,100
E. L. Mulford	19,161
Special Furniture, New City Hall.	
Rucker Fuller Desk Co.	\$43,100
Mullen Mfg. Co.	48,775
W. & J. Sloane	51,240
Spencer Street Planing Mill	\$163.00
Fink & Schindler Co.	1564.00
Wm. Bateman	13,000

OAKLAND AND ALAMEDA COUNTY

RESIDENCE—2 story and base,
frame, \$1,500. Berkeley, Alameda Co.,
Cal. Architect, H. H. Gutterston, 80
Post street, S. F. Owners, Mason-Me-
dulla Co., Shattuck and Addison
streets, Berkeley. Location, Oak Knoll
Terrace. Will contain eight rooms, two
baths and sleeping porch. Interior fin-
ish pine, hardwood veneer and white
enamel. Hardwood floors. Furnace
heat and open fire places. Mantels tile
and brick. Automatic water heater.
Bath room tile. Exterior covered with
cement plaster. Plans complete and
work by Day Labor.

RESIDENCE—1½ story and base,
frame, \$2,500. Oakland, Cal. Architect,
none. Owner, John A. Bischoff, 6045
Harwood avenue, Oakland. Location,
Shattuck avenue east of College. Will
contain six rooms, bath and sleeping
porch. Interior finish pine and white
enamel. Hardwood floors. Open fire
place and tile or brick mantel. Tile
bath room. Automatic water heater.
Exterior covered with cement plaster.
Plans complete and work to be done
by Day Labor.

RESIDENCE—1 story and base,
frame, \$2,000. Oakland, Cal. Archi-
tect, none. Owner, R. C. Hillen, 150
Haight avenue, Oakland. Location,
Mantana east of Curran. Will contain
six rooms, bath and sleeping porch.
Interior finish pine and white enamel.
Hardwood floors. Open fire place and
tile or brick mantel. Automatic water
heater. Exterior covered with rustic
and cement plaster. Plans complete
and work by Day Labor.

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panel.

200 varieties—price list free.

STREET IMPROVEMENT—Cost as follows, Hayward, Alameda Co., Cal. Engineer, City Engineer, Hayward, Owners, City of Hayward. At the last meeting of the City Trustees bids were opened for the B and Watkins streets crossing paving. Two bidders answered to the call for the work. The Ransome-Crummey Co., First National Bank Bldg., Oakland, bid for grading, 2c; for paving, 23c; six-inch sewer pipe, 70c; brick manhole, \$50. Californian Bitulithic Co., 1300 Franklin street, Oakland, grading, 3c; paving, 23c; six-inch sewer pipe, 80c; brick manholes, \$48. The matter of awarding a contract was laid over until the next meeting.

Frame, \$2,000 each. Oakland, Cal. Architect, Frank J. Melbourne, 46 Kenny street, S. F. Owner's name withheld. Location, Eastlawn. Each house will contain five rooms and bath. Interiors finished in pine, hardwood and white enamel. Hardwood floors. Open fire places. Mantels tile and brick. Automatic water heaters. Exteriors covered with rustic and cement plaster. Plans complete and subfigures being taken.

RESIDENCE—1 story and base, frame, \$2,500. Berkeley, Alameda Co., Cal. Architect, none. Owner, C. J. Pfarr, 5487 Claremont avenue, Oakland. Location, north Derby east of California. Will contain five rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

RESIDENCE—2 story and base, frame, \$2,500. Oakland, Cal. Architect, none. Owner, Edward Larmer, 470 Boulevard Way, Oakland. Location, Alcatraz west of Hillcress. Will contain seven rooms, bath and sleeping porch. Interior finish pine and white enamel. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Plans complete, work by Day Labor.

RESIDENCE—1½ story and base, frame, \$3,000. Piedmont, Alameda Co., Cal. Architect, E. H. Straug, 2524 Lincoln avenue, Alameda. Location, Bowie near York Drive. Will contain seven rooms, bath and sleeping porch. Interior finish pine and hardwood with some white enamel. Hardwood floors. Open fire places and tile mantels. Furnace heat. Bath room tile. Automatic water heater. Exterior covered with rustic and cement plaster. Plans complete and work by Day Labor.

RESIDENCE—2 story and base, frame, \$4,000. Oakland, Cal. Architect, none. Owner, William R. Crumme, 1627 25th avenue, Oakland. Location, east 24th avenue south of East 21st street. Will contain eight rooms, two baths and sleeping porch. Interior finish pine and hardwood with white enamel in the bed rooms. Hardwood floors. Open fire places and furnace heat. Mantels tile or brick. Bath rooms tile. Automatic water heater. Exterior covered with cement plaster. Plans complete and work by Day Labor.

DAY HALL AND DORMITORIES—2 story and base, brick and concrete.

Cost not stated. Oakland, Cal. Architect, Charles Peter Weeks, Mutual Bank Bldg., S. F. Owners, Alameda County. Bids opened for this work show Larsen-Sampson Co., S. F., low on the general construction at approximately \$75,000. Bids have been taken under advisement. A complete list of the figures submitted will be found under the heading of Oakland and Alameda County in this issue.

SCHOOL ADDITION—2 story and base, brick and concrete. Cost not stated. Alameda, Alameda Co., Cal. Architect, Henry H. Meyers, Kohl Bldg., S. F. Owners, City of Alameda. Plans for the addition to the Washington School are now practically complete and will be out for figures by the first of the year. Plans can be secured from the architect.

Receive Figures For Alameda County Job.

All Bids on Women's Day Hall and Dormitories Referred to Architect And Advisory Board.

Segregated figures were received Monday, December 20, for the construction of the Women's Day Hall and Dormitories at the Alameda County Infirmary from plans by Architect Charles Peter Weeks, San Francisco. Construction will be of brick, steel and concrete. The following bids were received. All bids were referred to the Advisory Board and the Architect.

General Construction.

Larsen-Sampson Co. \$75,000
Heating, electric work and plumbing excepted.

Ward & Goodwin \$2,878
Carpentry and Mill Work.

J. C. Nielsen \$4,650
Marble and Terrazzo Work.

Oakland Concrete, Terrazzo & Mosaic Co. \$1,798

Terra Cotta and Roof Tile.
N. Clark & Sons \$6,900

Plastering and Cementing
A. Knowles \$1,941

Greenbank Plastering Co. 1,125
Wm. Bosch 5,250

Wm. Makin 5,990
Geo. Dixon 5,800

Glass and Glazing.
Cal. Plate & Window Glass Co. \$388

W. P. Fuller & Co. 285

Painting and Finishing Work.
J. C. Peterson \$6,469

Robert Swan 2,730
D. Zelinsky & Sons 5,714

James Cahill & Co. 4,960

Finish Hardware.
Sunset Hardware Co. \$1,663

Maxwell Hardware Co. 1,627
J. C. Nielsen 1,680

Metal Furring and Lathing.
Greenbank Plastering Co. \$1,275

Geo. Dixon 1,560
Wm. Makin 1,575

H. Bosch 1,600
A. Knowles 1,100

Donald Mowat (on plastering and cementing) 7,492

Masonry Work.
Lester H. Stock \$16,688

Mentley & Collins 19,760
McGowan & Butler 19,873

Structural Steel and Erection.

Western Iron Works. \$13,889
Golden Gate Iron Works (water

ship) 15,331
Golden Gate Iron Works (rail

ship) 16,331
Ralston Iron Works 11,965

Judson Mfg. Co. 15,990
Pacific Rolling Mills Co. 14,633

California Steel Co. 14,987
Greater Iron Works (mill ship) 15,135

Greater Iron Works (S. F. stock) 16,560

Sheet Metal Roofing and Skylights.
Forderer Cornice Works \$2,896

Parraffine Paint Co. 2,525

Ornamental & Miscellaneous Iron Work
California Steel Co. \$170

Pacific Iron Works 152

Plumbing.

J. E. O'Mara \$ 9,745
Scott Company 7,754

Frederick W. Snook Co. 8,000
Turner Co. 8,840

(Vacuum clean, deduct, \$1560)
Whitman-Lyman & Co. 9,974

(Vacuum cleaning, deduct \$1000)
Carl T. Doell 11,288

Heating.

J. E. O'Mara \$5,177
Scott Company 4,840

Turner Co. 8,480
Whitman-Lyman & Co. 5,444

Carl T. Doell 5,258

Electrical Work.

Butte Eng. & Elec. Co. \$3,142
H. S. Tittle 3,718

Turner Co. 4,290
Rex Elec. & Constr. Co. 3,282

Central Elec. Co. 3,400
Ne Page McKinney Co. 3,192

Electric Constr. Co. 3,698
Boynton Elec. Co. 4,440

SAN JOSE AND THE SANTA CLARA VALLEY

HOTEL ALTERATION—\$20,000. Monterey, Monterey Co., Cal. Decorator, Mrs. Edgar de Wolfe, 1801 Van Ness avenue, S. F. Owners, Del Monte Hotel Co. The work will consist of complete rearrangement of the main floor and a large number of the bed rooms. New trim, hardwood floors, painting, plastering and electric work.

SEWER CONSTRUCTION—Cost as follows. South San Francisco, San Mateo Co., Cal. Engineer, Town Engineer, South San Francisco, Owners, Town of South San Francisco. Bids were opened on December 20th by the City Trustees of South San Francisco for extensive street improvements and sewer construction in 1st, 2nd and 3rd streets and portions of A, B and C streets. Bids were not regarded as satisfactory and will probably be rejected and new figures called. Following is a list of the bids received: E. H. Sundberg, 215 Oakland Road of Savings Bldg., Oakland, \$38,599.95; Leech & De Camp, 14 Montgomery street, S. F., \$29,381.91; F. R. Ritchie, Chronicle Bldg., S. F., \$42,051.06.

STREET IMPROVEMENT—Cost not stated. Santa Clara, Santa Clara Co., Cal. Engineer, City Engineer Fisher, Santa Clara, Owners, City of Santa Clara. Plans are now being prepared by City Engineer Fisher for the elimination of a curve in the highway at the corner of Lincoln street and the San Francisco road. Property has been purchased by the City Trustees. On

the completion of the plans bids will be called for.

ROAD CONSTRUCTION—Cost not stated. Salinas, Monterey Co., Cal. Engineer, County Surveyor Cozens, Salinas. Owners, Monterey County. At the last meeting of the County Supervisors the plans and specifications of County Surveyor Cozens for the grading and improving of a portion of the San Miguel canyon road were adopted and approved, and bids for the same will be opened on Tuesday, January 1, 1916. Further information may be had from the County Surveyor or County Clerk at Salinas.

STREET IMPROVEMENT—Cost not stated. Santa Cruz, Santa Cruz Co., Cal. Engineer, City Engineer, Santa Cruz. Owners, City of Santa Cruz. At a recent meeting of the City Council a resolution adopting plans and specifications for sidewalks and curb on the north side of Walter street, between Catalpa street and Poplar avenue, was passed.

Contracts Awarded.

STREET IMPROVEMENT—\$2,211.50. Redwood City, San Mateo Co., Cal. Engineer, County Surveyor, Redwood City. Owners, San Mateo County. Contractors, Colma Construction Co. Contract price, \$2,211.50.

SEWER CONSTRUCTION—\$1,315.56. Daly City, San Mateo Co., Cal. Engineer, Town Engineer, Daly City. Owners, Town of Daly City. Contractors, F. R. Ritchie & Co., Chronicle Bldg., S. F. Contract price, \$1,315.56.

MARIN, CONTRA COSTA AND SONOMA COUNTIES

STREET IMPROVEMENT—Cost not stated. San Anselmo, Marin Co., Cal. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Only one bid, that of the Marin Rock Co., was presented for the improvement of Forest avenue, and was rejected as being too high. New bids will be called for at once.

SEWER CONSTRUCTION—Cost not stated. Antioch, Contra Costa Co., Cal. Engineer, Town Engineer, Antioch. Owners, Town of Antioch. At the last meeting of the Town Trustees, Town Engineer Oliver presented plans and specifications for a storm sewer to be provided to drain the intersection and blocks leading to it at the corner of 6th and B streets. Two styles of bids will be called for, one in which the contractor is to furnish the material and labor, the other the material and the town will perform the work. Bids will be asked for furnishing 2,000 feet of 3-inch screw joint pipe, double dipped f. o. b. Antioch. Further information may be had from the Town Engineer or Town Clerk at Antioch.

CITY HALL—2 story and base, reinforced concrete, \$50,000. Richmond, Contra Costa Co., Cal. Architects, James T. Narbett, associated with J. R. O'Boon, Richmond. Owners, City of Richmond. From bids opened late Saturday night in Richmond for the construction of the new City Hall, it was learned that Mathew Morton, of Richmond, and Williams Bros. & Henderson, Holbrook Bldg., S. F., were the two lowest bidders. Both bids were taken under advisement. Morton's bid is said to be about \$1,400 higher than

Williams Bros. & Henderson. The approximate figure is \$28,000. There is \$25,000 in the fund to build this first unit and changes will be made in the plans in order to bring the cost of the building within that figure.

RESIDENCES— $\frac{3}{4}$ 1 story and base, frame, \$7,500. Hercules, Contra Costa Co., Cal. Architect, James T. Narbett, 701 Macdonald avenue, Richmond. Owners, Hercules Powder Co. These dwellings have been designed as double bungalows and each will contain five or six rooms. Interiors finished in pine and white enamel. Some hardwood floors. Open fire places and tile or brick mantels. Automatic water heaters. Exteriors covered with rustic and shingles. Plans complete and figures under advisement.

STORE AND OFFICE—2 story and base, brick and steel, \$11,000. Richmond, Contra Costa Co., Cal. Architect, James T. Narbett, 701 Macdonald avenue, Richmond. Owner, Dr. C. W. Cunningham. Will contain stores on the first floor and modern offices above. Interior finish pine and hardwood. Patent store fronts. Steam heat with oil burning system. Exterior faced with pressed brick. Plans being prepared.

WATER PURIFICATION PLANT—Cost not stated. Antioch, Contra Costa Co., Cal. Engineer, City Engineer, Antioch. Owners, City of Antioch. At the last meeting of the Town Trustees a suggestion was received from the State Board of Health relating to the installation of a chlorination plant to purify the water supply. The suggestion was adopted and bids for the installation of the plant were ordered received. Further information relative to this work may be had from the Town Clerk at Antioch.

PACKING PLANT ADDITION—1 story, reinforced concrete. Cost not stated. Pittsburg, Contra Costa Co., Cal. Architect, A. W. Cornelius, Merchants' National Bank Bldg., S. F. Owners, American Fish and Oyster Co. Addition will consist of cold storage room and packing space. Interior finish rough. Concrete floor and metal window sash and frames. Exterior faced with cement plaster. Plans being prepared.

Contracts Awarded

SEWER CONSTRUCTION—\$1,382.37. San Anselmo, Marin Co., Cal. Engineer, Town Engineer, San Anselmo. Owners, Town of San Anselmo. Contractors Marin Rock Co., San Anselmo. Contract price, \$1,382.37.

WAREHOUSE—2 story and base, reinforced concrete, \$116,000. Crockett, Contra Costa Co., Cal. Architect's name not given. Owners, California-Hawaiian Sugar Co. Contractors, Clinton Construction Co., Mutual Bank Bldg., S. F. Contract price, \$116,000. Note: Subcontracts are now being let for the work.

WATER MAINS, HYDRANTS, ETC—\$8,371. Benicia, Solano Co., Cal. Engineer, War Department, Washington, D. C. Owners, United States Government. Contractors, Pringle, Dunn & Co., 338 Pine street, S. F. Contract price, \$8,371.

SCHOOL PAINTING—\$695. Pittsburg, Contra Costa Co., Cal. Architect, none. Owners, Pittsburg Grammar School District. Contractor, C. J. Frisk & Co., 3819 23rd avenue, S. F. Contract price, \$695.

FRESNO, MODESTO, STANISLAUS AND CENTRAL CALIFORNIA

RESIDENCE—1 story and base, frame, \$1,500. Fresno, Fresno Co., Cal. Architect, none. Owner, C. A. Clark. Fresno. Location, Orchard Hill Addition. Will contain five rooms, bath and sleeping porch. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Automatic water heater. Exterior covered with rustic and shingles. Plans complete and work to be done by Day Labor.

ROAD IMPROVEMENT—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Bids will be received until January 6th for grading, paving and construction of culverts in Division 6, Section 1, McKittrick-Maricopa road, being that portion lying between the south city limits of Taft and the north city limits of Maricopa, length approximately 6.5 miles. Plans can be secured from the County Clerk.

ROAD IMPROVEMENT—Cost not stated. Bakersfield, Kern Co., Cal. Engineer, County Surveyor, Bakersfield. Owners, Kern County. Contractors, Federal Construction Co., Sharon Bldg., S. F. Contract price not stated. Paving three miles on the Bellevue road and also some distance on the Brundage Lane road.

JAIL COUNTER, ETC. Cost not stated. Bakersfield, Kern Co., Cal. Architect, Orville L. Clark, Brower Bldg., Bakersfield. Owners, Kern County. Bids will be opened on January 7th for furnishing a steel counter complete with box and roller drawers. Plans can be secured from the County Clerk.

IRRIGATION WORK—\$80,000. Oakdale, Stanislaus Co., Cal. Engineer, Burton Smith, Oakdale. Owners, Oakdale Irrigation District. Plans have been approved and bids are now being taken by the Oakdale Irrigation District for the extension of several laterals, installation of concrete gates, drops, etc. Bids on the work close January 15th. Further information may be had from Engineer Burton Smith.

LIGHTING SYSTEM—Cost not stated. Modesto, Stanislaus Co., Cal. Engineer, County Surveyor Edgar Anner, Modesto. Owners, City of Modesto. At the last meeting of the City Council of Modesto, County Surveyor Edgar Anner appeared to discuss the matter of lighting the new Tuolumne bridge, plans for which are now being prepared. In view of the fact that the city has not had to pay any of the cost of construction, it seemed to be the sentiment of the board that it would be no more than fair to provide for lights for the structure. No definite resolution was passed on this point but W. L. Carpenter, city electrician, was authorized to visit San Francisco and consult authorities on the best means of arranging the lighting system.

SACRAMENTO, STOCKTON AND NORTHERN CALIFORNIA

BANK FIXTURES, ETC—Cost not stated. Sacramento, Cal. Architect, E. C. Sellon, 1203 J street, Sacramento. Owners, Sacramento Valley Bank and

Trust Co, The Sacramento Valley Bank and Trust Co. will occupy the entire ground floor and basement of the new four-story building now under construction at the corner of 8th and J streets. The architect is calling for bids on the special bank fixtures, marble and tile work, electric work, lighting fixtures, plain and ornamental plastering, glass and vault work. J. Harry Wygant, 2110 X street, Sacramento, has the general contract for the building, which is now up to the roof.

GARAGE—1 story, hollow tile construction, \$5,000. Sacramento, Cal. Architect, none. Owner, Mrs. Edith Hockerby. Location 224 K street. Has been designed for a commercial garage and will have concrete floor, metal window sash and frames and special underground storage tank. Exterior faced with cement plaster. Plans complete and work to be done by Day Labor.

RESIDENCE—1 story and base, frame, \$1,500. Sacramento, Cal. Architect, none. Owner, William Jacinto, 219 W street, Sacramento. Location, 219 W street. Will contain five rooms and bath. Interior finish pine and redwood. Some hardwood floors. Open fire place and tile mantel. Exterior rustic and shingles. Plans complete and work by Day Labor.

THEATRE—3 story and base. Class A construction. Cost not stated. Stockton, San Joaquin Co., Cal. Architect, W. B. Thomas, Yosemite Theatre Bldg., Stockton. Owners, Henry Cowell Lime and Cement Co., leased to Turner & Dahnen Circuit. Location, Weber street. Fireproof construction, complete steel frame and reinforced concrete floors and walls. Steam heat, special ventilating system and vacuum cleaning. Ornamental plaster. Patent store fronts and metal window sash and frames. Upper floors arranged for offices, finished in pine and hardwood. Exterior faced with pressed brick and terra cotta. Preliminary plans being prepared.

RESIDENCE—2 story and base, frame, \$2,500. Petrolia, Humboldt Co., Cal. Architect, Frank T. Georgeson, Eureka. Owner, William Clark. Will contain six rooms and bath. Interior finish pine and redwood. Hardwood floors. Open fire place and tile or brick mantel. Automatic water heater. Exterior covered with rustic. Plans being prepared.

WATER SYSTEM—\$45,000. Woodland, Yolo Co., Cal. Engineer, City Engineer Arnold. Woodland. Owners, City of Woodland. As a result of thorough investigation, City Engineer Arnold plans to install two new wells at 185 feet in depth on the Grand street lot, a 10-inch high pressure pump, a 150-horsepower electric motor, a 120,000-gallon steel tank to be 100 feet from the ground and the necessary accessories, the estimated cost to be \$12,478. It is proposed to lay 250 feet of 12-inch pipe on Grand avenue and 1,200 feet of the same size on Lincoln avenue. Pipe 8 inches in diameter will be laid as follows: 1900 feet on Cleveland street, 2,100 feet on Pendegast street, 1,850 feet on Walnut street, 2,100 feet on Clover street. Pipe 6 inches in diameter, 1,000 feet on Pendegast street, 1,400 feet on 8th street and 350 feet on Clover street. Pipe 4 inches in

diameter would be laid in this wise: 1,600 feet on College, Pendegast and Gibson; 800 feet on 1st, Marshall and Gibson; 1,600 feet on 2nd, Marshall and Gibson; 1,600 feet on 3rd, Pendegast and Gibson; 1,300 feet on 4th, Pendegast and Gibson; 600 feet on North 5th and East streets; 600 feet on Elliott, 5th and East; 250 feet on Court, 6th and East. The estimated cost of this is placed at \$15,397.80. The estimated cost of laying the pipe is placed at \$5,000. The cost of gate valves and other accessories and the allowance for extras, incidentals and of engineering and supervision brings the total estimate up to about \$45,000.

FLATS—1 story and base, frame, \$2,500. Sacramento, Cal. Architect, none. Owner, Max Smith, Fairmount Hotel, Sacramento. Location 506 U street. Will contain two flats of four rooms each. Interior finish pine and redwood. Some hardwood floors. Open fire places and tile mantels. Automatic water heaters. Exterior covered with cement plaster. Plans complete and work to be done by Day Labor.

LEEVEE CONSTRUCTION—Cost not stated. Sacramento. Engineers, State Reclamation Board, Sacramento. Owners, West Side Levee District, et al. At a recent meeting of the State Reclamation Board, plans of the West Side Levee District for levee construction from Colusa down to Knights Landing were approved, with the reservation that the Sacramento and San Joaquin Drainage District would not be called on hereafter to compensate the West Side District for any levee construction in excess of the plans called for by the flood control project. The Board also named as Assessors for the district Fred H. Harvey, Geo. B. Greene and Ben. F. Rush. The application of District No. 535 for approval of its plans for a drainage ditch was granted. Application of the American Farms Co. for small levees on the Northern Electric Railway embankment near Shippe Station, Butte County, were approved as being outside of Sacramento and San Joaquin Drainage District and not detrimental to the flood control project.

Contracts Awarded.

PASSENGER DEPOT—Frame and crete. Cost not stated. Oroville, Butte Co., Cal. Architect's name not given. Owners, Northern Electric Co. Contractor, S. T. Cobb, Thermalito. Contract price not stated.

PUMPS AND MOTORS—Cost not stated. Colusa, Colusa Co., Cal. Engineer, none. Owners, Blevins and Mallon, Colusa. Contractors, Yuha Construction Co., Colusa. Contract price not stated.

IRRIGATION WIER—Cost not stated. Mendocino, Sutter Co., Cal. Engineer's name not given. Owners, Irrigation District No. 70. The Missouri Valley Bridge and Iron Co. has been awarded a contract by District 70 to drive piling in the Girdner Bend on the river and in the Garmire Bend on the slough. Several years ago a weir was put in at a cost of \$85,000 at the slough bend, but the first high water washed every thing away. Work will begin immediately.

LOS ANGELES AND SOUTHERN CALIFORNIA

RESERVOIR—Reinforced concrete. Cost not stated. Pasadena, Los Angeles Co., Cal. Engineer, City Engineer Morris, Pasadena. Owners, City of Pasadena. Work on a twelve million gallon reservoir for the municipal water department will be started shortly. The structure will be erected between Sheldon avenue and the Yavra property south of the Sheldon wells. Plans for the structure are now being prepared. The reservoir will bring the water storage capacity of the municipal department to 63,850,000 gallons and will be the second largest in the chain of reservoirs of the city.

BRIDGES—Pile trestle. Cost not stated. Los Angeles, Cal. Engineer, County Surveyor, Los Angeles. Owners, Los Angeles County. Bids will be received by the Board of Supervisors up to 2 p. m. of Monday, January 3rd, for the construction of a pile trestle bridge on Mountain avenue, between School street and Burr avenue, and for a similar bridge on Palm avenue, between Michigan avenue and Cross street. They will each consist of a single 19-foot span and will have 20-foot roadway.

PASSENGER DEPOT—1 story, reinforced concrete, \$60,000. Riverside, Riverside Co., Cal. Engineer, Engineering Dept., Kerchoff Bldg., L. A. Owners, Santa Fe Railroad Co. The Santa Fe Railway is planning the construction of a depot on property bounded by 7th, 8th, Santa Fe and Salt Lake rights of way, one half of which the city council have voted to purchase. The ground will be improved by the city for a public park.

Contracts Awarded.

SCHOOL—1 story and base, frame, \$14,627. Santa Margarita, San Luis Obispo Co., Cal. Architect, J. J. Roth, Atascadero. Owners, Santa Margarita School District. Contractors, Engstrom Co., 5th and Seaton streets, L. A. Contract price, \$14,627.

PORTLAND AND OREGON

PUMPING PLANT AND RESERVOIR—Cost not stated. Portland, Ore. Engineers, Gilbert & Hall, Couch Bldg., Portland. Owner's name withheld. Bids will be received until 7:30 p. m. January 10th for the materials and labor required in constructing a 200,000-gallon reservoir, pumping main, distributing main, etc. Separate proposals will be received as follows: (a) For constructing reservoir, pumping main and distributing mains, using machine banded wood stave pipe for part of the pumping and distributing mains. (b) For the same contract, using lap-welded steel pipe throughout. The equipment required includes 3,000 feet of 8-inch, 3,750 feet of 6-inch pipe and 11,000 feet of 4-inch pipe; also 20 fire hydrants. Bids for the pumping plant will be taken later. Further information may be had from the engineers.

Contracts Awarded

WATER WORKS SYSTEM—\$22,542.40. Milwaukie, Ore. Engineer, J. W. Morris, Milwaukie. Owners, Town of Milwaukie. Contractors, Gleibisch & Joplin, Rothchild Bldg., Portland. Contract price, \$22,542.40.

SEATTLE AND WASHINGTON

STORAGE EQUIPMENT—Cost as follows. Seattle, Wash. Engineer, Port of Seattle Commission, Bell street dock, Seattle. Owners, City of Seattle. Bids opened by the Port of Seattle Commission for the installation of equipment in the apple storage warehouse, for which Harrington & Peters, Oriental Bldg., Seattle, are general contractors, resulted as follows: Andrew MacLean, \$142,740; York Mfg. Co., \$171,100; Vilter Mfg. Co., \$126,500; Harrington & Peters, \$117,500. All bids taken under advisement.

POST OFFICE—1 story and base, brick and stone. Cost not stated. Ellensburg, Wash. Architect, Supervising Architect, Washington, D. C. Owners, United States Government. Plans have been forwarded to the west for the construction of the new Federal building. Bids will be taken for the entire work, including the heating, ventilating and electric work and fixtures. Plans can be secured from either the Supervising Architect, Washington, D. C., or from the Custodian of the site at Ellensburg. Bids will be opened on January 27th. An official proposal appears in another column of this issue.

SCHOOL GROUP—2 and 3 story, brick and reinforced concrete, \$250,000. Seattle, Wash. Architect, School Architect Edgar Blair, Seattle. Owners, City of Seattle. Preliminary plans for the West Seattle School are now being prepared. Other than the fact that the building will be of fireproof construction no details have been given out. Further mention will be made of the work.

LIEN LAW UPHOLD.

At last the Supreme Court has passed upon the lien law and has declared the provisions of the present statute valid in every particular. Not only its general provisions but the anomalous clause relating to the 50 per cent bond has also been declared to be valid so that the question of how the courts of the State may decide on any of its provisions are now finally set at rest.

In an exhaustive opinion delivered by Justice Shaw and concurred in by all the judges of the Supreme Court has upheld all the provisions of the present statute. The case came up on appeal from Los Angeles County, Roystone Co. vs Darling, L. A. 1072, and was decided in bank on Wednesday the 15th day of December. The court reviews the legislation and decisions on the subject since 1850 and passes upon all the provisions, both on the history of legislation and its relation to the constitution. Justice Henshaw writes a concurring opinion in which he upholds the law but arrives at his conclusion for a different reason and states that Section 15 of Article XX of the Constitution of 1879 provides for a mechanics' lien and that the legislature of 1911 enacted a law that carried out this provision with the exception of the anomalous provision of the 50 per cent bond clause in Section 1183 which, he says, introduces an ambiguity and was upon its face an attempt to introduce something that should not be in the law. The reasoning of Justice Hen-

shaw is clear and concise, he brushes aside the longwinded argument of the main decision and arrives at his conclusion that the Constitution itself provides for a mechanics' lien and that it was the duty of the legislature to enact one, though it has taken more than 50 years to get a law in proper form.

James Metcalfe, the theatrical critic on "Life," some years ago brought an action against the theatrical trust for preventing him from entering 47 theatres in New York and thus depriving him of his occupation and means of living. He had dared to criticize the demoralizing shows that the trust was foisting on the public so the trust debared him from the theatres it controlled, and it controlled all of them. The case went up to the Supreme Court of the State of New York and Metcalfe lost. In the head note to his comment on the decision there was the picture of a parrot, and on the ground that it considered itself bound by an old decision and parrot like repeated the words handed down from a distant period, whether the original decision was based on sound sense or reason or was the whim and caprice of some crooked-minded judge.

So in the present case, the court in its main decision, seems to consider itself bound by the old decision of Latson vs Nelson, decided in 1883, a case which was never officially reported, and professes not to know what the expression "direct lien" used in the present statute means. However the court, while attempting to be consistent with itself, upholds the present law and by so doing virtually over rules the decision in Latson vs Nelson. Thus at last the provisions of Section 15 Article XX of the Constitution have been carried out and a workable lien law has been placed upon the statutes of the State of California.

It is right and proper that the people engaged in the great building industry should give credit to the men who succeeded in having this law enacted. And the major part of it should go to Major William S. Scott, Secretary of the California Building Law Association, and now Senator from the 20th District. Not that the men who sent him to Sacramento and supported him at every turn should not be given full credit; nor that the great part played by the late Alexander G. Ellis should be overlooked. It was this great lawyer who drafted the law, who met every objection that the banks and bonding companies could raise and kept them finally from slipping in a joker that would nullify the law in the end. But it was the tireless Major who fought the fight all the way through, it was he who was the thorn in the side of the opposition, it was he who would not down and who made so much noise that he forced the fight out into the open and finally succeeded in getting passed the law which has just been declared to be valid. It was hard work, a herculean task, and it is altogether probable that no other two men outside of W. S. Scott and Alexander G. Ellis would have ever got it through. It is a good law. The only suggestion contained in the decision is that of Justice Henshaw who, says he upholds the law until the legislature by

proper enactment shall enact a law that will carry out more fully the provision of Section 15, Article XX of the Constitution. By that he means that the 50 per cent bonding provision should be eliminated and the law be enacted in its simplicity as originally drafted by Mr. Ellis. The main fight has been won so far, and the law is working well. If the fly up the creek contractors and crooked owners and bonding companies had a means of evading it in the future the Supreme Court itself has suggested the enactment of a law that would give the direct and unlimited lien.

CONDUIT SYSTEM PLANNED.

MARTINEZ, Cal.—All telephone and electric wiring in the city limits are to be placed under ground. A conduit system is to be advocated immediately. Councilman J. E. Colton will introduce an ordinance providing for this, and it is understood he has the support of fellow officials.

APPROPRIATION FOR WATER HOLES.

WASHINGTON—The senate public lands committee has favorably reported on the Works bill appropriating \$10,000 for water holes in California deserts.

TWO MILLIONS NEEDED FOR ALASKA RAILWAY WORK.

WASHINGTON—A deficiency appropriation of \$2,000,000, which Secretary Lane said is needed at the earliest possible moment to enable the continuance of construction of the Alaskan railroad, has been asked of Congress by Secretary McAdoo.

GERMANS DIG CANAL.

BERLIN—Construction of another link in the German canal system has been begun. The new canal is to connect the Rhine and Ruhr rivers in Westphalia. It will run from Hru to Muehlin-Am-Ruhr and will be of sufficient depth to accommodate large ships.

CABINET MAKERS.

Hunter, R. J., expert cabinet maker, 2156 Telegraph Ave., dealer in mahogany, antique and all kinds of furniture, repairs and polishing. Telephone Oakland 3735.

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Building Contracts Let and Recorded

Completion Notices, Liens Filed and Releases.

Building Contracts Awarded

SAN FRANCISCO COUNTY.

No.	Owner	Contractor	Amt.
3612	Wallach	Wallach	400
3613	House	Nicoll	500
3614	Bjorkman	Bjorkman	1800
3615	Kossack	Kossack	1350
3616	Picerno	Picerno	1500
3617	Nelson	Nelson	2000
3618	Swan	Hannah	14700
3619	Coffey	Reedy	2100
3620	San Mateo Dry.	Segurson	1175
3621	Uebener	Uebener	500
3622	McClenahan	McClenahan	500
3623	Bay View Bldg.	Owner	1000
3624	Paola	Ghiotto	450
3625	Peters	Peters	3000
3626	Brandsdorf	Olsen	400
3627	Rollis	Megas	400
3628	Maurer	Maurer	2500
3629	Boilman	Scott	1950
3630	Same	Pacific Coast	3300
3631	Same	Same	20400
3632	Lewis	Coburn	7100
3633	Quigley	Quigley	4600
3634	Same	Same	4600
3635	Christiansen	Owner	1000
3636	Koenig	Koenig	3900
3637	Same	Same	3900
3638	Ufer	Seghieri	500
3639	Foster	Kleiser	400
3640	Cerutti	Cerutti	100
3641	Bjors	Bjors	1500
3642	Moller	Moller	1950
3643	Stevens	Stevens	8000
3644	Allred	Allred	1950
3645	Same	Same	1950
3646	Same	Same	1950
3647	Same	Same	1950
3648	Smith	Hatch	690
3649	Hughes	Hughes	400
3650	Larkin	Larkin	4500
3651	Daily Del.	Trost	2000
3652	Planz	Beck	3217
3653	Same	Snook	692
3654	Livemore	Marussen	21050
3655	Grant et al.	Rolandi	—
3656	McKillop	McKillop	1500
3657	Nelson	Nelson	1900
3658	Nelson	Nelson	1900
3659	Morris	Morris	8000
3660	Heinenger	McDonald	1250
3661	Gift Edge	Gift	400
3662	Lee	Lee	4600
3663	Pacific G. & E.	Fuller	6129
3664	Clausen	Holt	3900

(Correction in Work)

SHEET METAL WORK

35902) NE VAN NESS AVE AND McAllister 120x109. All sheet metal work except tradesmen's passage and lining of 1st to 4th story passenger elevator doors.

Owner.....Mrs. Hannah de Urioste.
Architect...J. C. Hladik, Monadnock Bldg., San Francisco.

Contractor...Jas. T. Conway (as Western Furnace & Cornice Co) 1645 Howard, S. F.

Filed Dec. 16, '15. Dated Dec. 15, '15.

On 1st of each month..... 75%
Usual 35 days..... 25%

TOTAL COST, \$4913

Bond, none. Limit, as fast as required. Forfeit, \$20. Plans and specifications filed.

ALTERATIONS

35612) NO. 982 MARKET. Alter front Owner.....L. Wallach, 1021 Market, San Francisco.

Architect...None.
Day's work. COST, \$400

REPAIRS

35615) NO. 322 TWENTY-NINTH AVE. Repairs, Plastering, plumbing, new roof, etc.

Owner.....Mrs. E. House, 1515 Lyons, San Francisco.

Architect...None.

Contractor...M. C. Nicoll, 366 Pine, S. F.
COST, \$500

FRAME DWELLING

35614) S GENEVA 30 W Munich. One-story and basement frame dwelling. Owner.....John Bjorkman, 45 Cordova, San Francisco.

Architect...None.

Day's work. COST, \$1800

FRAME DWELLING

35615) SE ATHENS AND GENEVA. One-story and basement frame dwlg. Owner.....G. B. Kossack, U. S. Army.

Architect...None.

Day's work. COST, \$1950

FRAME DWELLING

35616) SE NAPLES 100 SW France. One-story and basement frame dwlg. Owner.....Francesco Picerno, 719 Naples, San Francisco.

Architect...None.

Day's work. COST, \$1000

FRAME DWELLING

35617) S SEVENTEENTH 97 Belvedere. Two-story and basement frame dwlg. Owner.....N. J. Nelson, 547 Elizabeth San Francisco.

Architect...None.

Day's work. COST, \$2000

GARAGE AND STORE

35618) SW RUSH AND PIERCE W 126 X8 100. All work for one-story garage and store building.

Owner.....Alice Cook Swan and Inez Cook Noble, 27 Montgomery, San Francisco.

Architect...J. R. Miller, 213 Lick Bldg., San Francisco.

Contractor...J. D. Hannah, Monadnock Bldg., San Francisco.

Filed Dec. 18, '15. Dated Dec. 17, '15.

On 1st of each month..... 75%
Usual 35 days..... 25%

TOTAL COST, \$14,700

Bond, \$7350. Sureties, J. S. Hannah and D. W. Cameron. Limit, 90 days after notification. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCE

35619) LOT 399 Gift Map No. 1, being W Gates 300 N Courtland Ave. All work for one and one-half-story frame residence.

Owner.....M. J. and Mary Coffey, 442 Banks, San Francisco.

Architect...None.

Contractor...Win. M. Reedy, 157 Bonte, San Francisco.

Filed Dec. 18, '15. Dated Dec. 10, '15.

Frame up\$525
Brown coated 525

Completed 525

Usual 35 days..... 525

TOTAL COST, \$2100

Bond, none. Limit, 70 days from issuance of permit. Forfeit, none. Plans and specifications filed.

FRAME STORE

35620) W HOWARD 75 S 14th. All work for one-story frame store bldg. Owner.....San Mateo Dairy, 1822 Howard, San Francisco.

Architect...Smith & Stewart, 244 Kearny, San Francisco.

Contractor...Segurson Bros., 505 Guerrero, San Francisco.

Filed Dec. 20, '15. Dated Dec. 4, '15.

Frame up\$391.65

Completed 391.65

Usual 35 days..... 391.70

TOTAL COST, \$1175.00

Bond, none. Limit, 30 days. Forfeit, none. Plans and specifications filed.

ALTERATIONS

35621) NE CLEMENT & FIFTH AVE.

Alter store.

Owner.....Ernest J. Uebener, 1230 Virginia, Berkeley.

Architect...None.

Day's work. COST, \$500

ALTERATIONS

35622) S CHESTNUT 137-6 E Pierce.

Install boiler and sink.

Owner.....T. McClenahan & Co., 333 16th Ave., San Francisco.

Architect...D. Kearns.

Day's work COST, \$500

FRAME DWELLING

35623) E JENNINGS 25 N Meade. One

story and basement frame dwlg.

Owner.....Bay View Bldg. Co., Prem.

Architect...None.

Day's work. COST, \$1000

ALTERATIONS

35624) NO. 114 SAGAMORE. Alter

store.

Owner.....P. Paola, Premises.

Architect...None.

Contractor...M. B. Ghiotto, 233 Delano, San Francisco.

COST, \$450

FRAME DWELLING

35625) W SIXTEENTH AVE 225 S

Anza. Two-story and basement

frame dwelling.

Owner.....J. M. Peters, 1010 Balboa, San Francisco.

Architect...None.

Day's work. COST, \$2000

ALTERATIONS

35626) W FAIRFAX 125 S Rail Road

Ave. Raise dwelling.

Owner.....Mrs. Brandsdorf, Redwood City, Cal.

Architect...None.

Contractor...Mr. Olsen.

COST, \$400

ALTERATIONS

(36271) NO. 100 VALENCIA After grill
Owner.....Alek Rolis, Premises
Architect...None.
Contractor..Peter Megas, 3676 19th,
S. F. COST, \$100

ALTERATIONS

(3628) S. WALLER 146-3 E Divisadero
Remove wash room in rear, add two
rooms for flats and make other minor
changes and additions.
Owner.....Marie L. Maurer, 3526 Ful-
ton, San Francisco.
Architect...None.
Contractor..Fred J. Maurer, 3526 Ful-
ton, San Francisco.
COST, \$2500

HEATING

(36279) SE FOURTH and BRANNAN
275 on Fourth by 137-6 on Brannan.
Heating for three-story and base-
ment reinforced concrete warehouse.
Owner.....John Bollman Co., Battery
and Commercial by Lange
& Bergstrom, Sharon Bldg.,
San Francisco.
Architect...Chas. Peter Weeks, Mutual
Bank Bldg., San Francisco.
Contractor..Scott Co., 243 Minna, S. F.
Filed Dec. 21, '15. Dated Dec. 20, '15.
On or before 14th of each month 75%
Usual 35 days..... 25%
TOTAL COST, \$1050
Bond, limit, forfeit, none. Plans and
specifications, none.

(3630) ERECT and FABRICATE ALL
reinforcing steel bars and No. 3 wire
on above.
Contractor..Pacific Coast Steel Co.,
Rialto Bldg., S. F.
Filed Dec. 21, '15. Dated Dec. 13, '15.
On 10th of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$3500
Bond, limit, forfeit, none. Plans and
specifications, none.

(3631) REINFORCING STEEL BARS
and No. 3 wire on above.
Contractor..Pacific Coast Steel Co.,
Rialto Bldg., S. F.
Filed Dec. 21, '15. Dated Dec. 13, '15.
On 15th of each month for all
steel and wire delivered at rate
of \$19.40 net per ton.....
TOTAL COST, \$20,100
Bond, limit, forfeit, none. Plans and
specifications, none.

COMPLETE BUILDING

(3632) INT. S CHESTNUT and NE
Columbus Ave E 105 S 50 N 63.37 NW
65.065. All work yet uncompleted
for building.
Owner.....Lewis Packing Co.
Architect...Harvey E. Harris, 432 Mo-
nadnock Bldg., S. F.
Contractor..Charles Coburn, 4030 24th,
San Francisco.
Filed Dec. 21, '15. Dated Dec. 15, '15.
On signing contract..... \$ 710
On 1st and 15th of each month 65%
Usual 35 days, 25%..... \$1775
TOTAL COST, \$7100
Bond, \$3550. Sureties, Chas. Monson
and Val. Meinberger. Limit, 35 days.
Forfeit, \$20. Plans and specifications,
none

FRAME FLATS

(3633) SW MOSS 155 NW Folsom.
Three-story and basement frame (3)
flats.

Owner.....John T. Quigley, 628 Ma-
sonic Ave., San Francisco
Archit et. .None.
Day's work COST, \$1600

FRAME FLATS

(3634) SW MOSS 179 NW Folsom.
Three-story and basement frame (2)
flats.
Owner.....John T. Quigley, 628 Ma-
sonic Ave., San Francisco
Architect...None.
Day's work COST, \$1600

FRAME FLATS

(3635) N CARRILLO 45 W Seventh
Ave. Two-story and basement frame
(2) flats.
Owner.....H. C. Christiansen, 1315
12nd Ave., San Francisco.
Architect...Koenig & Christiansen,
Humboldt Bank Bldg., S. F.
Day's work COST, \$1000

FRAME DWELLING

(3636) N CARRILLO 117-6 W 12th Ave
Two-story and basement frame dwlg.
Owner.....Margaret Koenig, 5th Ave
and Parnassus, S. F.
Architect...Koenig & Christiansen,
Humboldt Bank Bldg., S. F.
Day's work COST, \$3000

FRAME DWELLING

(3637) N CARRILLO 90 W 12th Ave.
Two-story and basement frame dwlg.
Owner.....Margaret Koenig, 5th Ave
and Parnassus, S. F.
Architect...Koenig & Christiansen,
Humboldt Bank Bldg., S. F.
Day's work COST, \$3000

ALTERATIONS

(3638) NW GEARY and TWELFTH
Ave. Underpin and ratproof bldg.
Owner.....G. Ufer, Premises.....
Architect...None.
Contractor..A. Seghieri & Bros., Inc.,
35 Cook, San Francisco.
COST, \$500

METAL SIGN

(3639) NW BROADWAY & GRANT
Ave. Erect metal sign on roof.
Owner.....Poster & Kleiser of Cal.,
273 Valencia, S. F.
Architect...None.
Day's work COST, \$100

FRAME SHOP

(3640) W JONES 100 S Tomlin. One-
story frame shop.
Owner.....V. Cerutti, 2123 Powell,
San Francisco.
Architect...Paul F. De Martin, 2123
Powell, San Francisco.
Day's work COST, \$100

FRAME DWELLING

(3641) N THEREA 136 E Alemany.
One and one-half story and basement
frame dwelling.
Owner.....Victor Bjors, 660 Waller,
San Francisco.
Architect...None.
Day's work COST, \$1500

FRAME STORE

(3642) W MISSION 120 S Randall.
One story frame store.
Owner.....R. W. Moller, 185 Steven-
son, San Francisco.
Architect...None.
Day's work COST, \$1950

FRAME APARTMENTS

(3643) W LEAVENWORTH 56-6 N
Vallejo. Three-story and basement
frame (6) apartments.
Owner ..Arthur Stevens, 567 Polk,
San Francisco.
Architect...None.
Day's work COST, \$8000

FRAME DWELLING

(3644) NE MEHA 175 SE Delano. One
and one-half-story and basement
frame dwelling
Owner ..C. S. Alfred, 150 Onondaga
Ave., San Francisco.
Architect...None.
Day's work COST, \$1950

FRAME DWELLING

(3645) NE MEHA 125 SE Delano. One
and one-half-story and basement
frame dwelling.
Owner ..C. S. Alfred, 150 Onondaga
Ave., San Francisco.
Architect...None.
Day's work COST, \$1950

FRAME DWELLING

(3646) NE MEHA 75 SE Delano. One
and one-half-story and basement
frame dwelling.
Owner ..C. S. Alfred, 150 Onondaga
Ave., San Francisco.
Architect...None.
Day's work COST, \$1950

FRAME DWELLING

(3647) NE MEHA 25 SE Delano. One
and one-half-story and basement
frame dwelling.
Owner ..C. S. Alfred, 150 Onondaga
Ave., San Francisco.
Architect...None.
Day's work COST, \$1950

MOVING BUILDING

(3648) E COLLINGWOOD 192-6 N 20th
All work for moving building now
located on N Liberty, bet. Church
and Dolores, No. 262 Liberty.
Owner.....Mrs. Catherine Smith.
Architect...None.
Contractor..Herbert L. Hatch, 1439
Geary, San Francisco.
Filed Dec. 21, '15. Dated Dec. 16, '15.
When building is moved to corner
Church and 19th streets..... \$200
When building is moved to corner
19th and Collingwood streets..... 200
Balance when building is lowered
on to foundation and all house-
moving material removed.....
TOTAL COST, \$690
Bond, \$550. Surety, Pacific Coast Casu-
alty Co. Limit, forfeit, none. Plans
and specifications, none.

ALTERATIONS

(3649) NO. 179 BROAD After store.
Owner... Mrs. S. Hughes, 202 Sa-
dowa, San Francisco.
Architect...None.
Contractor..Harry Hughes, 202 Sadowa
San Francisco.
COST, \$100

FRAME DWELLING

(3650) LOT 18 BLK 9, Forest Hill
Two story and basement frame dwlg.
Owner ..Wm. A. Larkin.
Architect..Clarkson Swain, 520 Clunie
Bldg., San Francisco
Day's work COST, \$4200
NOTE—Job started.

BUILDING AND ENGINEERING NEWS

POWER HOUSE
(3651) N NINETEENTH 105 E Guerrero. One-story reinforced concrete power house.
Owner.....Dairy Delivery Co., 3550 19th, San Francisco.
Architect...None.
Contractor...Robt. Trost, 26th & Howard, San Francisco.
COST, \$2000

ALTERATIONS
(3652) N TWENTY-SECOND 105 W Valencia W 22-6XN 114 M B 74. Carpenter work for alterations and additions to two-story frame building.
Owner.....The Planz Co., Inc., 3318 22nd, San Francisco.
Architect...C. A. Meussdorffer, Humboldt Bank Bldg., S. F.
Contractor...John E. Beck, 110 Jessie, San Francisco.
Filed Dec. 22, '15. Dated Dec. 17, '15.
Enclosed and roof on.....\$329
Ready to receive inside finish... 829
Completed and accepted..... 829
Usual 35 days..... 830
TOTAL COST, \$3317
Bond, \$1600. Sureties, P. P. Quinn and J. A. Blutcher. Limit, 90 days. Forfeit, none. Plans and specifications filed.

(3653) **PLUMBING, GAS FITTING & sewer work on above.**
Contractor...Frederick W. Snook Co., 596 Clay, San Francisco.
Filed Dec. 22, '15. Dated Dec. 17, '15.
Piping roughed in.....\$259.50
Completed and accepted..... 259.50
Usual 25 days..... 173.00
TOTAL COST, \$692.00
Bond, none. Limit, as fast as possible. Forfeit, none. Plans and specifications filed.

FRAME RESIDENCES
(3654) NE VALLEJO AND JONES E 137-6XN 137-6. All work for residences (three three-story and basement frame residence)
Owner.....Norman B. Livermore, Merchants National Bank Bldg San Francisco.
Architect...Willis Polk & Co., Hobart Bldg., San Francisco.
Contractor...Marcus Marcussen.
Filed Dec. 22, '15. Dated Dec. 7, '15.
On 15th of each month..... 75%
Usual 35 days..... 25%
TOTAL COST, \$31,050
Bond, \$15,525. Sureties, M. Thompson and Fred Linderman. Limit, June 15, 1916. Forfeit, \$10. Plans an specifications filed.

NOTE:—1st report Nov. 6; Nos. 3159, 3161 and 3162.

PAVING CONTRACT
(3655) LARKIN, bet. Chestnut and N line Francisco and N Francisco, bet. Polk and Larkin. Certain street improvements and grading. Costs to be paid individually as follows:
Owners...Sarah A. Grant, \$3688.90; Allen and Vivian McEwen, \$723.62; O. N. V. E. le N. De Bretteville, \$2436.98; Adolph Sommers, \$2884; Henry Root, \$2884; City Property, \$3100.30; I. M. Green, \$6066.70; Spring Valley Water Co., \$1148.50; John G. Klumpke, \$2-317.50; Mahel C. Deering, \$455.08; George T. Page, \$455.09; C. J. Burnham, \$952.26.
City Eng.....M. M. O'Shaughnessy, City Hall, San Francisco.

Contractor...F. Rolandi, 550 Montgomery, San Francisco.
Filed Dec. 22, '15. Dated Sept. 14, '15.
Payments of 75%
Usual 35 days..... 25%
TOTAL COST, as above
Bond, \$15,000. Sureties, Tadini Baciagalupi and J. S. Phillips. Limit, 180 days. Forfeit, \$10. Plans and specifications filed.

MOVE BUILDING
(3656) SW DOLORES AND FOURTEENTH. Move apartment building.
Owner.....McKillop Bros., 510 Cole, San Francisco.
Architect...None.
Day's work..... COST, \$1500

FRAME DWELLING
(3657) E TWENTY-EIGHTH AVE 27 N Irving. Two-story and basement frame dwelling.
Owner.....P. Nelson, 30 Presidio Terrace, San Francisco.
Architect...None.
Day's work..... COST, \$1900

FRAME DWELLING
(3658) E TWENTY-EIGHTH AVE 32 N Irving. Two-story and basement frame dwelling.
Owner.....P. Nelson, 30 Presidio Terrace, San Francisco.
Architect...None.
Day's work..... COST, \$1900

FRAME APARTMENTS
(3659) SE ANZA AND ELEVENTH AVE. Three-story and basement frame (5) apartments.
Architect...Alfred T. Morris, 501 11th Ave., San Francisco.
Architect...None.
Day's work..... COST, \$8000

(3660) E GUERRERO 74 N 19th. Construct foundation.
Owner.....C. P. Heinenger, 1029 Treat Ave., San Francisco.
Architect...None.
Contractor...P. M. McDonald, 1149 Treat Ave., San Francisco.
COST, \$1250

ALTERATIONS
(3661) N SACRAMENTO 75 E Presidio Ave. Alter market.
Owner.....Gilt Edge Market, Prem.
Architect...None.
Contractor...Barrett & Hilp, Sharon Bldg., San Francisco.
COST, \$400

(3662) W NINTH AVE 125 N Anza (A) N 25XW 125. All work for two-story frame flats.
Owner.....Celia Lee.
Architect...C. O. Clausen, Hearst Bldg San Francisco.
Contractor...Louis H. Lee, 135 Carl, San Francisco.
Filed Dec. 23, '15. Dated Dec. 11, '15.
Frame up ¼
Rough coat plaster on..... ¼
Completed ¼
Usual 35 days..... ¼
TOTAL COST, \$4600
Bond, limit, forfeit, none. Plans and specifications, none.

GLAZING
(3663) S SUTTER 115-9 E Powell S 137-6XE 45. Glazing for eight-story Class "A" office building.

Owner.....Pacific Gas & Electric Co., 445 Sutter, San Francisco.
Architect...Edgar A. Mathews, 251 Post, San Francisco.
Contractor...W. P. Fuller & Co., Beale and Mission, San Francisco
Filed Dec. 23, '15. Dated Dec. 22, '15.
All skylight glass to 1st floor in place and window and skylight glass set above 4th floor.....\$2000
Window and skylight glass set upon remaining floors..... 2100
All work completed 721
Usual 35 days..... 1608
TOTAL COST, \$6429
Bond, \$3250. Sureties, E. E. Simmons and H. H. Somers. Limit, reasonable diligence. Forfeit, none. Plans and specifications filed.

FRAME DWELLING
(3664) E FORTY-SIXTH AVE 275 S Balboa S 25XE 120. All work for one story and basement frame dwelling.
owner.....Bertha J. Clausen, 1246 12th Ave., San Francisco.
Architect...C. O. Clausen, Hearst Bldg San Francisco.
Contractor...O. K. Holt, 3877 26th, S. F.
Filed Dec. 23, '15. Dated —.
Frame up\$150
Brown coated 750
Completed and accepted..... 750
Usual 35 days..... 750
TOTAL COST, \$3000
Bond, none. Limit, 60 days. Forfeit, none. Plans and specifications filed.

INCORPORATIONS.

Occidental Furniture and Bedding Manufacturing Co. Capital Stock, \$20,000; subscribed, \$20; shares, \$10 each. Directors—M. Saroff, J. Saroff, G. McNally, 1 share each. Place of business, San Francisco.

American Bottling Co. Capital Stock, \$20,000; subscribed, \$5; shares, \$1 each. Directors—J. Herlihy, B. Stelling, D. A. Murdoch, E. E. Zimmerman, J. J. Rooney, 1 share each. Place of business, San Francisco.

Assts Collection Agency. Capital Stock, \$1000; subscribed, \$150; shares, \$50 each. Directors—H. T. Crowley, J. F. Vizzard, H. S. Cramer 1 share each. Place of business, San Francisco.

Washington Square Amusement Co. Capital Stock, \$1000; subscribed, \$30; shares, \$10 each. Directors—J. J. West, C. Baer, J. Jacobson, 1 share each. Place of business, San Francisco.

James E. Inglis Co. Capital Stock, \$10,000; subscribed, \$300; shares, \$100 each. Directors—J. E. Inglis, A. H. Mulletz, J. A. Olson, 1 share each. Place of business, San Francisco.

LEASE.

Dec. 23, 1915—W BRYANT AND CONVERSE SW 25XNW 75. Edw J Thomas to Jas Burns. 1 year \$300.

Dec. 23, 1915—NW TWENTY-FOURTH and Vermont. P Barbonchielli and A Simi to Leopold Spath. 5 years. \$35 per month.

NOTICE OF NON-RESPONSIBILITY.

Dec. 22, 1915—SW PINE AND BATTERY S 45-10XW 97-6. Anna Meloy Donahoe and as Trustee Estate Michael Donahoe, dec'd as to improvements on leased property...

COMPLETION NOTICES

San Francisco

RECORDED ACCEPTED

Dec. 18, 1915—LOT 42 BLK 3, Sunny-side. C S Allred to whom it may concern.....Dec. 18, 1915
Dec. 18, 1915—GOLDEN GATE PARK. California Academy of Sciences to Rudger Merle Co.....Dec. 1, 1915
Dec. 18, 1915—W VALENCIA 122 S 16th S 30xW 88. C F Hornung to Chas Farnsworth, Geo Rehn, Jas Wagner, Schroder Iron Works, A Christensen and A Rassmusen.....Oct. 13, 1915
Dec. 18, 1915—NW FILLMORE AND Oak W 35xN 100. Julie Depierre to Hofmeister & Berdahl.....Dec. 16, 1915
Dec. 20, 1915—COMG. 75 E BRYANT and 225 S 26th E 25 S 85-65° W 25-07° m or l N 86-10-4. Joseph Frank Marty and Marie Marty to F A Holdener.....Dec. 20, 1915
Dec. 20, 1915—S TWENTYTY-NINTH 80 W Castro W 25xS 76-6. Frank Gordon to A J Jensen.....Dec. 17, 1915
Dec. 20, 1915—SE VAN NESS AVE and Post — 109xS 120. The Concordia to Butte Eng & Elec Co.....Dec. 17, 1915
Dec. 20, 1915—E TWELFTH AVE 375 N Fulton N 25xE 120. Edward A Janssen to whom it may concern.....Dec. 16, 1915
Dec. 21, 1915—W FIFTEENTH AVE 200 S Irving. John Walter Gillogley to whom it may concern.....Dec. 20, 1915
Dec. 21, 1915—E ELEVENTH AVE 50 S Balboa S 25xE 95. Alton R Lapham to whom it may concern.....Dec. 20, 1915
Dec. 21, 1915—W BELVEDERE 25 S Rivoli S 25 W 97-7 N 25 E 97-8-4. John A Hoots to whom it may concern.....Dec. 18, 1915
Dec. 21, 1915—N WASHINGTON 117-6 E Leavenworth N 60 W 7-6 N 45-6 E 27-6 N 32 E 11-6 S 137-6 W 31-4. F W Lurmann to whom it may concern.....Dec. 18, 1915
Dec. 21, 1915—N WASHINGTON 148-10 E Leavenworth E 31-4xN 137-6. F W Lurmann to whom it may concern.....Dec. 18, 1915
Dec. 21, 1915—W SIXTEENTH AVE 125 N Balboa N 25xW 120. Michael Costello and Byron Feerick (as Costello & Feerick) to whom it may concern.....Dec. 13, 1915
Dec. 21, 1915—W FORTY-SIXTH AVE 225 S Cabrillo S 25xW 120. Mrs Jessie A Griffin to whom it may concern.....Dec. 17, 1915
Dec. 21, 1915—NW TAYLOR AND Washington N 60xW 92-3-4. L E W Pioda to Marcus Marcussen.....Dec. 17, 1915
Dec. 21, 1915—S HAYES 181-3 W Clayton W 25xS 37-6. Henry P Ryan to Oscar W Thunberg.....Dec. 21, 1915
Dec. 21, 1915—LOT 42 and strip 8.33 wide on SE Lot 43 Blk "D" Mission Terrace, said strip being described as SW Santa Rosa Ave distant thereon S 55 deg 51 min E 340.74 SE San Jose Ave th S 55 deg 51 min E 8.33 th along line common to lots 43 and 42 S 34 deg 09 min W 125 to pt common to lots 42, 43 and 18 and 19 th along said lines N 55 deg 51 min W 8.33 N 34 deg 09 min E 125. Mission Terrace Co to

Jos Neil and D Birmingham.....Dec. 17, 1915
Dec. 21, 1915—LOT 43 and strip 8.33 on NW side Lot 44 Blk "D" Mission Terrace, said strip being described as SW Santa Rosa Ave th S 55 deg 51 min E 299.07 from SE San Jose Ave th along SW Santa Rosa Ave S 55 deg 51 min E 8.33 th S 34 deg 09 min W 125 to line common to lots 43 and 17 th along said line N 55 deg 51 min W 8.33 to pt common to lots 44, 45, 16 and 17 th along said line N 34 deg 09 min E 125. Mission Terrace Co to Jos Neil and D Birmingham.....Dec. 17, '15
Dec. 22, 1915—NW COLLEGE AVE and Mission W 100xN 52-9. J H Kruse to whom it may concern.....Dec. 22, 1915
Dec. 22, 1915—S CALIFORNIA 137-6 W Taylor W 137-6xS 137-6. Towne Realty Co to Richard Lynch.....Dec. 17, 1915
Dec. 22, 1915—S NEY 350 E Craut E 25x110. John Christensen to whom it may concern.....Dec. 22, 1915
Dec. 22, 1915—S ELLIS 63-9 E Steiner. Emma & Geo Hotschelder to whom it may concern.....Dec. 20, '15
Dec. 22, 1915—W VALENCIA 60 N 17th 60x88. J and Fred Braun to Steur & Bury.....Dec. 22, 1915
Dec. 23, 1915—E ELEVENTH AVE 50 S Geary S 56xE 87-6. E P Kennedy to H C Keenan.....Dec. 23, 1915
Dec. 23, 1915—W TENTH AVE 75 S Judah. Congregational Church Extension Society of S F to A W Bryant.....Dec. 22, 1915
Dec. 23, 1915—W CONNECTICUT 74-6 S Mariposa S 19-6xW 100. Mrs M Hencken to E J Montgomery.....Dec. 18, 1915

Dec. 22, 1915—N PINE bet. Sansome and Montgomery. John A. Roebings Sons Co of California to McCreery Estate Co.....
Dec. 22, 1915—N PINE bet. Sansome and Leidesdorff, No. 732 Pine. Rolander & Halliwell, N Clark & Sons to McCreery Estate Co.....
Dec. 22, 1915—N PINE 87-6 W Sansome W 50xN 137-6. The Columbia Marble Co to McCreery Estate Co.....
Dec. 22, 1915—SANSOME & LEIDESDORFF, No. 332 Pine. Joost Bros to McCreery Estate Co.....
Dec. 22, 1915—SANSOME & LEIDESDORFF, No. 332 Pine. Pacific Lime & Gypsum Co to McCreery Estate Co.....
Dec. 22, 1915—N PINE 87-6 W Sansome W 50xN 137-6. Golden Gate Iron Works Imly Golden Gate Structural & Ornamental Iron Wks. to McCreery Estate Co.....
Dec. 21, 1915—E ALHAGO & HAVELOCK SE 5.45 N 75.53 NW 95.54 NE 126.19 NW 154.34 W 105.56 N 64.35 NW 265.95 SW 128.80. Church & Clark to L Battanai.....

Building Contracts Awarded

Oakland.

No.	Owner	Contractor	Am't.
2690	Bliss	Leid	400
1691	Bowles	Muller	5090
2692	Petersen	Petersen	1853
2684	Hoxie	Knigh	2600
2696	Pahlola	Pahlola	400
2697	Grover	Whalin	1090
2698	Bertoldi	Bertoldi	550
2700	Scheyer	Stewart	1735
2701	Clifford	Clifford	1500
2702	Petersen	Petersen	1552
2703	Philips	Hammarberg	1700
2704	Same	Same	500
2706	Mead	Sommerstrom	4500
2707	Bischoff	Bischoff	2500
2708	Lo Young	Scott	400
2709	Hillen	Hillen	2000
2710	Dorgan	Corbett	400
2715	Look Tin Ell	Duval	2000
2716	Pac Co Cannling	Behrens	2350
2717	Coast Wrecking	Owner	300
2718	Look Tin Ell	Duval	500
2719	Heishaw	Davis	455
2721	McNear	Murdock	520
2723	Pacific G&E	Wsten Pipe	2035
2727	Larmer	Larmer	2500
2729	Martin	Owner	2800
2724	Strang	Strang	3000

ALTERATIONS

(2690) NOS. 1539-41 BROADWAY, Oakland, Alterations.
Owner.....Bliss & Leid, Premises.
Architect.....None.
Day's work.....COST, \$100

BRICK STORES

(2691) S SIXTEENTH 100 E San Pablo Ave, Oakland, One-story brick stores.
Owner.....Bowles, Morris & Dow, lat Savings Bank Bldg., Okd.
Architect.....Richardson & Burrell, Albany Block, Oakland.
Contractor.....F. A. Muller, Syndicate Bldg., Oakland.
COST, \$5000

FRAME DWELLING

(2692) PTN LOT 1 PLK "N" Map No. 2 Sbdvn Ptn Central Oakland Tract E Telegraph Avenue, Oakland. All work for one-story frame dwelling.
Owner.....Captain P. H. Petersen, 4105 Webster, Oakland.
Architect.....None.
Contractor.....Alfred Peterson, 1201 19th, Oakland.

LIENS FILED

San Francisco

Dec. 10, 1915—BLK 51 Salt Marsh & Tide Lands. Scott & Turner vs J B Coryell.....\$6743.95
Dec. 11, 1915—NW WASHINGTON & Webster N 92-4-4xW 27-6. Pioneer Plate & Window Glass Co vs John H Schroder and L C Wooldridge.....\$62.32
Dec. 11, 1915—NW WASHINGTON & Webster N 92-4-4xW 27-6. F G Norman & Sons vs John H Schroder and L C Wooldridge.....\$44.15
Dec. 17, 1915—W JORDAN AVE 100 N Geary W 120xN 30. W P Goss to Peck & Draper and H B Goldsmith.....\$148

RELEASE OF LIENS.

SAN FRANCISCO COUNTY.

Dec. 20, 1915—S FULTON 75-3 E Octavia E 50 S 137-6 W 25 N 50 W 25 N 87-6. Wilson Bros & Co to G Almer, A Porta, N A Glaconini
Dec. 22, 1915—N PINE bet. Sansome and Leidesdorff, No. 332 Pine. Malott & Peterson, Holmes Lime & Cement Co, J K Stewart, Parrott & Co, N F Nilsen, I Cohen, Pacific Portland Cement Co, Pacific Mfg Co, John H Spark, White Bros, S D Le Clair, San Francisco Lime Co, Pope & Talbot, United States Metal Products Co, Elevator Supply & Repair Co to McCreery Estate Co..

Filed Dec. 18, '15. Dated Dec. 16, '15.
 Frame up and brown coated.....\$617
 Completed 617
 Usual 35 days..... 619
TOTAL COST, \$1853
 Bond, none. Limit, March 1. Forfeit,
 \$3. Plans and specifications filed.

DWELLING

(2694) LOT 79 Pleasant Valley Court,
 Oakland. All work for one-story 5-
 room dwelling.
 Owner.....Silas O. Hoxie.
 Architect...None.
 Contractor...Harry C. Knight, 3857
 Market, Oakland.

Filed Dec. 18, '15. Dated Nov. 26, '15.
 Ceiling joists in place.....\$500
 Roof shingled 500
 Brown coated 500
 Door jams set..... 500
 Completed and accepted..... 400
 Receipted bills shown..... 200
TOTAL COST, \$2600
 Bond, none. Limit, 75 days. Forfeit,
 none. Plans and specifications filed.

ADDITION

(2696) NE MOSS AVE & BROADWAY,
 Oakland. Addition.
 Owner.....Fabiola Hospital Association,
 Premises.
 Architect...None.
 Day's work..... **COST, \$400**

REPAIRS

(2695) NO. 558 TWENTY-FOURTH,
 Oakland. Repairs.
 Owner.....Mrs. S. Grover, 2079 Oak-
 land Ave., Oakland.
 Architect...None.
 Contractor...Whalin Bros., 565 16th,
 Oakland. **COST, \$1000**

DWELLING

(2698) GORE VINCENTE & AYALA,
 Oakland. One-story 3-room dwelling.
 Owner.....Joe Bertoldi, 5642 Vicente,
 Oakland.
 Architect...None.
 Day's work..... **COST, \$350**

ALTERATIONS AND ADDITIONS

(2700) NW TWENTY-FOURTH AND
 Market 38 N of 24th, Oakland. All
 work for alterations and additions
 (alter one-story store and rooms into
 2 flats.)
 Owner.....S. Scheyer, 142 Townsend,
 San Francisco.
 Architect...None.
 Contractor...J. L. Stewart & G. A. Webb,
 518 17th, Oakland

Filed Dec. 20, '15. Dated Dec. 20, '15.
 Roof on\$433.75
 Brown coated 433.75
 Completed and accepted..... 433.75
 Usual 35 days..... 433.75
TOTAL COST, \$1733.00
 Bond, \$867.50. Surety, E. J. Burns
 Limit, 30 days. Forfeit, none. Plans
 and specifications filed.

DWELLING

(2701) W LAUREL AVE 75 S Dele-
 ware, Oakland. One-story 5-room
 dwelling
 Owner.....J. B. Clifford, 2847 35th
 Ave., Oakland.
 Architect...None.
 Day's work..... **COST, \$1500**

DWELLING

(2702) W WEBSTER 120 S 41st, Oak-
 land. One-story 4-room dwelling.

Owner.....P. H. Petersen, 41st and
 Webster, Oakland.
 Architect...None.
 Contractor...Alfred Peterson, 1201 19th,
 Oakland. **COST, \$1853**

DWELLING

(2703) S SIXTIETH 180 W Dover, Oak-
 land. One-story 5-room dwelling.
 Owner.....Mrs. H. B. Phillips, 131
 Lower Terrace, S. F.
 Architect...None.
 Contractor...A. Hammarberg, 3758 Pied-
 mont Ave., Oakland. **COST, \$1700**

ALTERATIONS

(2704) S SIXTIETH 180 W Dover
 (rear), Oakland. Alterations.
 Owner.....Mrs. H. B. Phillips, 131
 Lower Terrace, S. F.
 Architect...None.
 Contractor...A. Hammarberg, 3758 Pied-
 mont Ave., Oakland. **COST, \$500**

BRICK GARAGE

(2706) W BROADWAY 200 S Orchard,
 Oakland. One-story brick garage.
 Owner.....O. J. Mead.
 Architect...None.
 Contractor...Sommarstrom Bros., 301
 Oakland Ave., Oakland. **COST, \$4500**

DWELLING

(2707) N SHAFTER AVE 578 E Col-
 lege Ave., Oakland. One and one-
 half-story 6-room dwelling.
 Owner.....John A. Biscoff, 6045
 Harwood Ave., Oakland.
 Architect...None.
 Day's work..... **COST, \$2500**

ALTERATIONS

(2708) NW NINTH AND FRANKLIN,
 Oakland. Alterations.
 Owner.....Lo Yong, 414 9th, Oakland.
 Architect...None.
 Contractor...J. Scott, 1081 7th Ave.,
 Oakland. **COST, \$400**

DWELLING

(2709) N MONTANA 115 E Curran,
 Oakland. One-story 5-room dwelling.
 Owner.....R. C. Hillen, 430 Haight
 Ave., Oakland.
 Architect...None.
 Day's work..... **COST, \$2000**

ALTERATIONS

(2710) NO. 472 TWELFTH, Oakland.
 Alterations.
 Owner.....T. Dorgan & Co., Prem.
 Architect...None.
 Contractor...Corbett & Bayliss, 1110
 Franklin, Oakland. **COST, \$400**

ADDITION

(2715) NO. 415 PERKINS, Oakland.
 Two-story 5-room addition to dwlg.
 Owner.....Look Tin Eli, Premises.
 Architect...None.
 Contractor...Oliver Duval & Son, Dal-
 ziel Bldg., Oakland. **COST, \$2000**

WAREHOUSE

(2716) S TWELFTH 100 W Wood,
 Oakland. Two-story warehouse.
 Owner.....Pacific Coast Canning Co.,
 Premises.

Architect...None.
 Contractor...Behrens & Brewin, 1519
 7th, Oakland. **COST, \$2350**

SHED

(2717) N TWENTY-EIGHTH 60 W San
 Pablo Ave., Oakland. Shed.
 Owner.....Coast Wrecking Co., 2901
 San Pablo Ave., Oakland.
 Architect...None.
 Day's work..... **COST, \$500**

GARAGE

(2718) NO. 415 PERKINS, Oakland.
 Two-story garage.
 Owner.....Look Tin Eli, Premises.
 Architect...None.
 Contractor...Oliver Duval & Son, Dal-
 ziel Bldg., Oakland. **COST, \$500**

ALTERATIONS

(2719) NE FOURTEENTH & HARRI-
 son, Oakland. Alterations.
 Owner.....W. G. Henshaw, Hill Crest.
 Architect...None.
 Contractor...Wm. Davis & Son, 461 E-
 28th, Oakland. **COST, \$425**

STEEL TANK

(2721) NO. 1955 SAN PABLO AVE.,
 Oakland. Steel tank.
 Owner.....McNear Estate, Premises.
 Architect...None.
 Contractor...L. W. Murdock, 1310 Web-
 ster, Oakland. **COST, \$500**

BOILERS, ETC.

(2723) S FIRST 25 W Jefferson W 155
 xs 150, Oakland. All work for 50 ft.
 of 2-7 ft. 6 inch diameter stacks of
 McNault boilers.
 Owner.....Pacific Gas & Electric Co.,
 13th and Clay, Oakland.
 Architect...None.

Contractor...Western Pipe & Steel Co.
 of California, 444 Market,
 San Francisco.

Filed Dec. 22, '15. Dated Dec. 13, '15.
 Completed 75%
 Usual 35 days..... 25%
TOTAL COST, \$2035

Bond, \$1050. Surety, National Surety
 Co. Limit, as soon as possible. For-
 feit, none. Specifications only filed.

DWELLING

(2727) N ALCATRAZ AVE 100 W
 Hillegass, Oakland. Two-story 7-
 room dwelling.
 Owner.....Edward Larmer, 470 Boule-
 vard Way, Oakland.
 Architect...None.

Day's work..... **COST, \$2500**

DWELLING

(2729) KEITH AVE, being Lot 8
 Blk 2, North Cragmont Tract, Oak-
 land Tp. All work for two-story 7-
 room dwelling.
 Owner.....Dora L. Martin, 1050 Keith
 Ave., Berkeley.

Architect...None.
 Contractor...C. A. Martin, 1050 Keith
 Ave., Oakland.

Filed Dec. 23, '15. Dated Dec. 21, '15.
 Frame up 1/4
 Brown coated 1/4
 Completed 1/4
 Usual 35 days..... 1/4
TOTAL COST, \$2800
 Bond, none. Limit, 90 days. Forfeit,
 none. Plans and specifications filed.

FRAME DWELLING

(2721) E BOWIE, bet. York Drive and Jerome Ave., Piedmont. One and half-story 7-room frame dwelling. Owner.....E. H. Strang, 2521 Lincoln Ave., Alameda.
Architect...None.
Day's work. COST, \$3000

Building Contracts Awarded

Berkeley.

No.	Owner	Contractor	Amt.
2693	Deaconess	.....Knight	712
2695	Williamson	.....Owner	1009
2699	Mason	.....MacDuffie	4500
2705	Eriasson	.....Eriasson	1000
2720	St. Margaret's	.....Knight	750
2722	Underhill	.....House	4700
2725	McCan	.....Pinkerton	1750
2726	Allison	.....Allison	1000
2728	Pfrang	.....Pfrang	2250

FRAME ADDITION

(2693) NO. 2629 HASTE, Berkeley. All work for three-room frame addition to dwelling.
Owner.....Deaconess Training School of the Pacific.
Architect...None.
Contractor...Harry C. Knight, 3857 Market, Oakland.
Filed Dec. 18, '15. Dated Dec. 16, '15.
Ceiling joists in place.....\$200
Ready for plaster.....200
Wood work completed.....200
Completed and accepted.....112
TOTAL COST, \$712

Bond, none. Limit, 45 days. Forfeit, none. Plans and specifications filed.

DWELLING

(2695) W CALIFORNIA 125 S Hearst, Berkeley. One-story 5-room dwlg.
Owner.....L. M. Williamson, 1621 Scenic Ave., Berkeley.
Architect...None.
Day's work. COST, \$1000

DWELLING

(2699) S GARBER 170 W Oak Knoll Terrace, Berkeley. Two-story 8-room dwelling.
Owner.....Mason-MacDuffie Co., Shattuck and Addison, Bkly.
Architect...H. H. Guttersen, 80 Post, San Francisco.
Day's work. COST, \$1500

DWELLING

(2705) E BRUCE 23 1/2 S Bancroft, Berkeley. One-story 1-room dwlg.
Owner.....Carl Eriasson, 1200 Masonic Ave., Berkeley.
Architect...None.
Day's work. COST, \$1000

ADDITION

(2720) NO. 2629 HASTE, Berkeley. Addition.
Owner.....St. Margaret's House, Prem
Architect...None.
Contractor...Harry C. Knight, 3857 Market, Berkeley.
COST, \$750

FRAME DWELLING

(2722) TAMALPAIS near Rose, being Ptn Lots 14 and 15 Blk 1 Amended Map Hopkins Terrace Map No. 4, Berkeley. All work for two-story and basement frame dwelling.
Owner.....Mary F. Underhill, 2508 Vine, Berkeley.
Architect...Harris Allen, Central Bank Bldg., Oakland.
Contractor...Jacob House, 1619 Alston

Way, Berkeley.

Filed Dec. 21, '15. Dated Dec. 20, '15.
Frame up 1/4
Brown coated 1/4
Completed and accepted. 1/4
Usual 35 days..... 1/4
TOTAL COST, \$1700
Bond, none. Limit, 90 days. Forfeit, none. Plans and specifications filed.

DWELLING

(2725) N SACRAMENTO 100 S Virginia, Berkeley. One-story 1 room dwelling.
Owner.....Agnes McCan, 2212 Stuart, Berkeley.
Architect...None.
Contractor...J. A. Pinkerton, 1931 Berkeleyman, Berkeley.
COST, \$1750

DWELLING

(2726) N DERRY 310 E Mabel, Berkeley. One-story 3-room dwelling.
Owner.....C. H. Allison, 31 Brookside, Berkeley.
Architect...None.
Day's work. COST, \$1000

DWELLING

(2728) N DERRY 72 E California, Berkeley. One-story 5-room dwelling.
Owner.....C. J. Pfrang, 5487 Claremont Ave., Oakland.
Architect...None.
Day's work. COST, \$2250

Building Contracts Awarded

Alameda

2711	Cyamaguchi	.....Enomoto	100
2712	Cole	.....Kopf	2750
2713	Hillen	.....Hillen	500
2711	Cole	.....Adams	3000

GREEN HOUSE

(2711) NO. 3529 BLANRING AVE., Alameda. Green house.
Owner.....Cyamaguchi, Premises.
Architect...None.
Contractor...F. Enomoto, 11 Pacific Court, Alameda.
COST, \$100

(2712) NO. 3259 BAYO VISTA AVE., Alameda. Two-story 6-room dwlg.

Owner.....M. T. Cole, 3200 Fernside Blvd., Alameda.
Architect...None.
Contractor...B. F. Kopf, 1015 82nd Ave., Alameda.
COST, \$2750

ADDITION

(2713) NO. 1511 FERNSIDE BLVD., Alameda. Addition.
Owner.....R. C. Hillen, 170 Haight Ave., Oakland.
Architect...None.
Day's work. COST, \$500

DWELLING

(2714) NO. 3212 FAIRVIEW AVE., Alameda. Two-story 7-room dwlg.
Owner.....M. T. Cole, 3200 Fernside Blvd., Alameda.
Architect...None.
Contractor...C. C. Adams, 2200 Fernside Blvd., Alameda.
COST, \$2000

NOTICE OF NON-RESPONSIBILITY.

Dec. 22, 1915. PTN PLOT 13 Keller, Berkeley Map Rancho of Vincent

& Lomina Loralis. Addition to house as to improvements on leased property.
Dec. 22, 1915.—E J. SEPHINE being Ptn Lots 14 and 15 Blk "C" Map Northbrae Business Ppty, Berkeley. Pakeley Development Co. as to improvements on leased property

COMPLETION NOTICES.

ALAMEDA COUNTY.

RECORDED	AMOUNT
Dec. 17, 1915.—E TELEGRAPH AVE. 33 7 S 25th S 60' E S 1 1/2 N 61 1/2 W S 1 1/2, Okd. N Gallagher to Barnes & Prince. Dec. 16, 1915	
Dec. 18, 1915.—LOT 27 Map Shdvn 9 and 10 Hardy Tract, Bkly., Lucy Gelder to W B Wells. Dec. 17, 1915	
Dec. 18, 1915.—LOT 36 BLK 13 Northbrae, Bkly., R W Thomas to whom it may concern..... Dec. 16, 1915	
Dec. 20, 1915.—LOTS 18 AND 19 BLK "H" Oakridge, Claremont, Bkly., A Andrew to G Armstrong, Dec. 20, '15	
Dec. 20, 1915.—LOTS 18 AND 19 BLK "H" Oakridge, Claremont, Berkeley, A Andrew to W T Baker Co, Dec. 20 and G Armstrong.....Dec. 20, 1915	
Dec. 21, 1915.—N 18 1/5 BLK 65 and S 15 1/5 Lot 61 Map Piedmont Manor, Piedmont, Walter H Creighton to whom it may concern .....Completed --	
Dec. 22, 1915.—NE KENMORE AVE 181.72 NW Lake Shore Ave NW 50 NE 131.94, Okd. Louis E and Nellie Braun to F T Malley.....Oct. 11, 1915	
Dec. 22, 1915.—LOTS 16 AND 17 Fruitvale Blvd Tract, Okd. Freda S Gutleben to Gutleben Bros..... Nov. 16, 1915	
Dec. 22, 1915.—LOTS 8 AND 9 Fruitvale Blvd Tract, Okd. Rev J Gutleben to Gutleben Bros. Nov. 16, 1915	
Dec. 23, 1915.—LOTS 12 TO 18, INC'L 11K 136 Kellersberger's Map, Oakland, Frank E Pichman to Sonmarston Bros. Dec. 23, 1915	
Dec. 23, 1915.—PTN L TS 10 AND 11 11K "E" Map Lincoln Park, Piedmont, Peter Dahl to John Kungl..... Dec. 23, 1915	

LIENS FILED

ALAMEDA COUNTY.

Dec. 18, 1915.—S WILLIAMS 211 E Alvarado 812 300xSW 194, San Leandro, Martin S de Marcos, \$75.00
Dec. 18, 1915.—W HERALTA AVE 50 S Hyde S 50x125, Okd. Charles Thordander \$130.00
Dec. 20, 1915.—LOT 32 11K 9 Map 10th Ave Heights, Okd. Rollins L Dec \$500.00
Dec. 22, 1915.—S FIFTY SEVENTH 175.90 W Glen SW 10 SE 104 S, NE 10 NW 100 10, Okd. Catherine A plund OWL Alfred J. \$100.00

BUILDING CONTRACTS

SANTA CLARA COUNTY.

CL PAIR
NO. 12 S FIRST ST San Jose, B
100
W 11111
11111
San Jose
Architect None

Contractor...J. C. Thorp, Porter Bldg.,
San Jose.

COST, \$3000

COTTAGE

SE COR. NINTH AND VIRGINIA STS.,
San Jose. Six-room cottage.

Owner.....S. G. Pelton, Montgomery
Bldg., San Jose.

Architect...None.

Day's work.

COST, \$2750

COTTAGE

E EIGHTH, bet. Martha and Virginia
Sts., San Jose. Six-room cottage.

Owner.....T. E. Smith.

Architect...None.

Contractor...S. G. Pelton, Montgomery
Bldg., San Jose.

COST, \$2500

MACHINE SHOP

SANTA CLARA AND ST. MARY STS.,
San Jose. Machine shop.

Owner.....N. B. Kooser Estate, Prem.
Architect...None.

Contractor...J. C. Thorp, Porter Bldg.,
San Jose.

COST, \$2500

COTTAGE

S-SECOND near Keys, San Jose. Six-
room cottage.

Owner.....W. T. Lloyd, 152 Sierra
Ave., San Jose.

Architect...None.

Contractor...L. I. Kelly, 5 Magnolia St.,
San Jose.

COST, \$2300

COTTAGE

HOLLYWOOD AND THIRD STS., San
Jose. Five-room cottage.

Owner.....Shottenhamer Bros., Mar-
ket and Viola, San Jose.

Architect...None.

Day's work.

COST, \$2300

COTTAGE

SE FIFTEENTH AND SAN CARLOS,
San Jose. Seven-room cottage.

Owner.....J. F. Clark, 11th and San
Salvador, San Jose.

Architect...None.

Day's work.

COST, \$2000

COTTAGE

E EIGHTH, bet. Martha and Virginia
Sts., San Jose. Five-room cottage.

Owner.....E. McGregor.

Architect...None.

Contractor...S. G. Pelton, Montgomery
Bldg., San Jose.

COST, \$2000

COTTAGE

E THIRTEENTH, bet. Washington and
Empire Sts., San Jose. Six-room
cottage.

Owner.....Geo. W. Hinds, "The Wil-
lows," San Jose.

Architect...None.

Day's work.

COST, \$2000

COTTAGE

E THIRTEENTH, bet. Washington and
Empire Sts., San Jose. Five-room
cottage.

Owner.....Geo. W. Hinds, "The Wil-
lows," San Jose.

Architect...None.

Day's work.

COST, \$2000

COTTAGE

S-THIRD near Keys St., San Jose. Six
room cottage.

Owner.....L. I. Kelly, 5 Magnolia St.,
San Jose.

Architect...None.

Day's work.

COST, \$1950

COTTAGE

S LICK, bet. Willow and Goodyear Sts.,
San Jose. Five-room cottage.

Owner.....I. Rancadore, 58 N-Market
St., San Jose.

Architect...None.

Day's work.

COST, \$1000

COTTAGE

W PLUM, bet. Humboldt and Good-
year Sts., San Jose. Four-room
cottage.

Owner.....Salvador Picone, Premises.

Architect...None.

Contractor...Camenetti, 963 Vine St.,
San Jose.

COST, \$1000

COTTAGE

NO. 555 N-TWELFTH ST., San Jose.
Four-room cottage.

Owner.....John Tolorich, Premises.

Architect...None.

Day's work.

COST, \$400

FRAME RESIDENCE

ON HAMILTON AVE near Leigh Ave.,
San Jose. All work for two-story
frame residence.

Owner.....Mr. B. Davidson, Premises.

Architect...F. D. Wolfe, 1st National
Bank Bldg., San Jose.

Contractor...C. F. Keesling, 347 Coe
Ave., San Jose.

Filed Dec. 2, '15. Dated Nov. 29, '15.

Frame up\$900

1st coat plaster on 900

When completed 900

When accepted 900

TOTAL COST, \$3600

Bond, \$1800. Sureties, R. G. Mitchell
and E. E. Keesling. Limit, 110 days.
Forfeit, none. Plans and specifications
filed.

FRAME BUNGALOW

LOT 3 BLK 33 Seale Addition, Palo
Alto. All work for one-story frame
shingled bungalow.

Owner.....Clara E. Kimber, Palo
Alto.

Architect...C. E. Hodges and W. Gard-
ner Mitchell, 742 Market,
San Francisco.

Contractor...Geo. B. Moore, 139 Stan-
ford Ave., Mayfield.

Filed Dec. 2, '15. Dated Nov. 30, '15.

Frame up\$677

1st coat plaster on 677

When completed 677

Usual 35 days 678

TOTAL COST, \$2709

Bond, \$1354. Surety, American Surety
Co. of New York. Limit, 60 days. For-
feit, none. Plans and specifications
filed.

FRAME COTTAGE

LOT 23 BLK 3, Shottenhamer Sub, San
Jose. All work for one-story frame
cottage.

Owner.....T. & M. Woolley, San Jose.

Architect...T. & M. Woolley.

Contractor...Robt. and E. J. Shotten-
hamer, 143 S-16th, San Jose.

Filed Dec. 11, '15. Dated Dec. 1, '15.

Building enclosed\$550

1st coat plaster on 550

When completed 550

Usual 25 days 550

TOTAL COST, \$2200

Bond, \$1100. Sureties, G. W. Dobson
and A. E. Holmes. Limit, 80 days.
Forfeit, none. Plans and specifications
filed.

COMPLETION NOTICES

SANTA CLARA COUNTY.

RECORDED ACCEPTED

Dec. 2, 1915—FREMONT AVE near
Los Altos (known as The Red Barn
Property). Wm Crauston to E G

Finlay.....Oct. 20, 1915

Dec. 4, 1915—10 ACRES bounded by
Lincoln, Benton, Gemakle and

Elgel Survey being SW Cor. Lin-
coln and Benton Sts., Town of

Santa Clara. F J Sullivan to
Kelly Bros.....Nov. 15, 1915

Dec. 8, 1915—LOT 7 BLK 4 Shotten-
hamer Subdn, San Jose. J A Wag-
ner to J A Wagner.....Dec. 7, 1915

Dec. 9, 1915—STEPHENS CREEK
Road near Winchester Road near

San Jose. M A Di Fiore to Frank
Peres.....Dec. 3, 1915

Dec. 11, 1915—E TWELFTH ST., bet.
William and Reed Sts., San Jose.

L E Appleton to C Thomas.....Dec. 8, 1915

Dec. 16, 1915—ON MIDDLEFIELD
Road near Lytton Ave and being

Lot 4 Bk 43 of J S Larkin Sub of
Bk 48, Palo Alto. San Jose Home

Builders to Sibley & Richards.....
.....Dec. 11, 1915

COMPLETION NOTICES

SAN MATEO COUNTY.

RECORDED ACCEPTED

Dec. 14, 1915—"CAROLANDS," Hills-
borough. Harriet Pullman Carolan

to Yale & Towne Mfg Co (assignee
of Pacific Hardware & Steel Co);

Floodberg & McCaffery...Dec. 6, 1915

Dec. 15, 1915—HILLSBOROUGH.
Harriet Pullman Carolan to Wm F

Wilson Co; A J Forbes & Son....
.....Dec. 11, 1915

Dec. 17, 1915—UNORGANIZED TER-
ritory in Twp 3, South Range 5

West M. D. M. South San Fran-
cisco Land & Imp Co to San Fran-
cisco Bridge Co.....Dec. 15, 1915

Dec. 17, 1915—LOT NO. 2 BLK 2, San
Mateo Park. John Duffield to

whom it may concern...Dec. 17, 1915

Dec. 18, 1915—LOT 13 BLK 23, Red-
wood Highlands. Redwood High-
lands Co to whom it may concern.

.....Dec. 17, 1915

Dec. 18, 1915—LOT 15 BLK 30, Red-
wood Highlands. Redwood High-
lands Co to whom it may concern

.....Dec. 17, 1915

Dec. 14, 1915—"UPLANDS," Hills-
borough. Charles T Crocker to

Floodberg & McCaffery...Dec. 7, 1915

BUILDING CONTRACTS

FRESNO COUNTY.

ADDITION

LOTS 16 TO 20 BLK 60, Fresno. All
work for three-story addition to
building.

Owner.....Paul J. T. Mayer.

Architect...None.

Contractor...Hansen Constr. Co.

Filed Dec. 18, '15. Dated Dec. 18, '15.

Floor laid \$1064
Plastered 1064
Completed 1064
Usual 35 days..... 1065
TOTAL COST, \$4257
Bond, none. Limit, Marv'h 15, 1916.
Forfeit, \$5. Plans and specifications filed.

DWELLING

LOTS 21 AND 25 East Fresno Tract, Fresno. All work for dwelling.
Owner.....Shepherd - Cochrane Co., 1659 I St., Fresno.
Architect...None.
Contractor.....Henry Jr. and Victor R. R. Gede, 451 Poplar St., Fresno.
Filed Dec. 17, '15. Dated Dec. 16, '15.
Floor joists in.....\$890
Plastered 890
Completed 890
Usual 35 days..... 890
TOTAL COST, \$3560
Bond, \$1800. Sureties, J. C. Gastin and Chas. Bergstrom. Limit, 65 days. Forfeit, \$2.50. Plans and specifications filed.

DWELLING
LOT 31 BLK 3, Orchard Hill Addition, Fresno. Dwelling.
Owner.....C. A. Clark.
Architect...None.
Day's work. COST, \$1100

COMPLETION NOTICES.

FRESNO COUNTY.

RECORDED ACCEPTED
Dec. 17, 1915—LOTS 9 AND 10 BLK 1, Van Ness Heights, Fresno. Carolyn M Taylor to J R Church.
.....Dec. 15, 1915

LIENS FILED.

FRESNO COUNTY.

RECORDED AMOUNT
Dec. 20, 1915—LOTS 5 TO 10 BLK 10, Kennore Park. N Arshag Amir-khanian vs Vartan Liloian.....\$90
Dec. 18, 1915—LOTS 19 AND 20 BLK 181, Fresno. Barrett & Hicks Co vs John and Lucy Barsarian.....\$17

BUILDING CONTRACTS.

SACRAMENTO COUNTY.

STORE
NO. 1206 EIGHTH ST., on E 21 feet Lot 1 blk L, M, 7th and 8th Sts., Sacramento. One-story masonry store.
Owner.....Henry Feldhusen, 1127 8th St., Sacramento.
Architect...None.
Contractor.....Chas. P. Guth, 1516 27th St., Sacramento.
COST, \$6000

FRAME BARN
GEO. A. MEISTER, 15 acre Tract, Sacramento. Two-story frame barn.
Owner.....Albert Meister, 315 16th St., Sacramento.
Architect...None.
Contractor.....George W McKoy, 1015 T St., Sacramento.
COST, \$2000

REPAIRS
NO. 319 W ST., on W 1/2 Lot 6 blk V, W, 2nd and 10th Sts., Sacramento. Re-

pair fire damage to five-room residence.

Owner.....William Jacinto, Premises.
Architect...None.
Day's work COST, \$1400

ADDITION

NO. 2116 NINTH ST., on N 1/2 Lot 5 blk N, V, 8th and 9th Sts., Sacramento. Brick and tile addition to laundry.
Owner.....Peoples Wet Wash Laundry, Premises.
Architect...None.
Contractor.....J. P. O'Brien, 2315 12th St., Sacramento.
COST, \$500

GARAGE

NO. 1798 M ST., on W 30 feet Lot 2 blk M, N, 17th and 18th Sts., Sacramento. One-story frame private garage.
Owner.....G. M. Naus, Oakland, Cal.
Architect...None.
Contractor.....Supply Garage Co., 3601 Park Ave., Sacramento.
COST, \$350

FRAME FLATS

NO. 506 U ST., on Lot E 11 of N 1/2 of Lot 1, U, V, 5th and 6th Sts., Sacramento. One-story frame dwelling, 2 flats (4-room and bath each).
Owner.....Max Smith, Fairmont Hotel Sacramento.
Architect...None.
Day's work. COST, \$2100

FRAME STORE

NO. 207 ELEVENTH ST., on Lots 1 and 2, T, E, 11th and 12th Sts., Sacramento. One-story frame store 30x50
Owner.....A. L. Da Roza, 1300 T St., Sacramento.
Architect...None.
Day's work. COST, \$1200

ADDITION

NO. 207 ELEVENTH ST., Lots 1 and 2, T, U, 11th and 12th Sts., Sacramento. Addition on rear of store and dwlg.
Owner.....A. L. Da Roza, 1330 T St., Sacramento.
Architect...None.
Day's work. COST, \$300

ALTERATIONS

OLD PIONEER MILL SITE on Ptn of Tract of Southern Pacific Co., Sacramento. Install new pumping plant in brick building known as Gas Works in center of Pioneer Mill ppty.
Owner.....Central Pacific Railroad.
Architect...None.
Day's work. COST, \$6000

GARAGE

NO. 1224 K ST., on 1/2 Lot 1, K, L, 12th and 13th Sts., Sacramento. One-story "Denison Tile" public garage.
Owner.....Mrs. Edith Rockerby.
Architect...None.
Day's work. COST, \$1786

CLASS "C" BUILDING

NOS. 800 SUI J ST., on W 1/2 of N 90 feet Lot 1 blk J, K, 8th and 9th Sts., Sacramento. Four story steel frame interlocking tile Class "C" building.
Owner.....California Guaranty Co. of Oakland.
Architect...E. C. Hemmings, 1203 J St., Sacramento.
Contractor.....J. Harry Wynn, 900 N St., Sacramento.
COST, \$55,000

BUILDING CONTRACTS.

SANOMA COUNTY

FRAME RESIDENCE

TOWN OF COTATI. All work for two-story frame residence.
Owner.....Roman Catholic Arch-bishop of S. F., 1100 Frank-lin, San Francisco.
Architect...John J. Foley, 36 Kearny, San Francisco.
Contractor.....M. Hermann.
Filed Dec. 11, '15. Dated Dec. 2, '15.
Frame up \$501
Plaster on 801
Completed and accepted..... 801
Usual 35 days..... 801
TOTAL COST, \$3200
Bond, none. Limit, 70 working days.
Forfeit, \$5. Plans and specifications filed.

FRAME RESIDENCE

SANTA ROSA. All work for one-story frame residence.
Owner.....W. M. Dundup.
Architect...None.
Contractor.....J. C. Lindsay.
Filed Nov. 20, '15. Dated Nov. 19, '15.
Frame up and roof on \$265 50
Plastering completed 368 50
Completed and accepted..... 368 50
Usual 35 days..... 368 50
TOTAL COST, \$1011 00
Bond, none. Limit, 70 working days from Nov. 22. Forfeit, none. Plans and specifications filed.

LIENS FILED

SANOMA COUNTY

RECORDED AMOUNT
Dec. 7, 1915—HEALDSBURG. A F Stevens Lumber Co vs Alice C Meyer\$537 21
Dec. 13, 1915—SANOMA CO. Jones Duncan Paint Co vs Emma Biaglini\$10.18

RESULT OF TRADE OPPORTUNITIES

Consul James Oliver Lamb reports that as a result of Foreign Trade Opportunities No. 17821, published in Commerce Reports on August 9, 1915, an electrical engineer of Karachi has placed an order for electric fans for a hotel in that Indian metropolis. He also states that orders for agricultural implements have been placed in the United States.

ELECTRIC PLANT FOR STATION IN MANCHURIA.

Consul Charles K. Moser, Harbin, China, Nov. 11.

The Navosti Chizui of October 31 states that a British firm has made arrangements for establishing an electrical plant at Station Hanchow-shan, on the line of the Chinese Eastern Railway, about 150 miles east of Harbin. It is stated that the capacity of the plant will be sufficient to provide several thousand subscribers with electricity and to light the street of the village. It is rumored that the plant will be furnishing power within a few weeks.

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American Elec. Eng. Co.
Boynston Electric Co.
Central Elec. Co.
DeLew, M. A.
Decker, Electrical Construction Co.
Fidneworth Electrical Works.
General Electric Constr. Co.
Globe Electric Works
Hicks & Folte
Manhattan Electric Co.
Pac. Fire Extinguisher Co.
Rex Electric Construction Co.
Riley, A. B. R.
Rochdale Elec. Co.
Schmetschek, M. The Turner Co.
Weidental - Gosliner Elec. Co.
Wetzel Electric Co.
- Elevator Builders.**
Adamson, Osborn, Otis Elevator Co.
S. F. Elevator Co.
- Estimator.**
Horweg, Harvey.
Peterson, P. O.
Priddle, Arthur
- Floors, Composition.**
Dwan Co., Jas. P. (Inc.)
Fibrestone & Roofing Co.
Golden Gate Art Marble Co.
Johns - Manville Co., H. W.
King & Sons, J. C.
Malott & Peterson
Paraffine Paint Co.
- Floors, Hardwood.**
Enterprise Floor Co.
Hardwood Int. Co.
Inland Floor Co.
Pac. Floor Sanding Co.
Union Floor Co.
- Galvanized Iron.**
Baker & Hamilton
Berger Mfg. Co.
Burtchall, J. W.
- Gas Fixture.**
Dav Co., Thomas
Gas & Electric Appliance Co.
- Gas Heating Systems.**
Rector System Gas Heating Co.
- Gasoline Tanks & Pumps.**
Brown, F. R.
Blaisdell Mch'y. Co.
- Glass & Glazing.**
Cal. Plate & Window Glass Co.
Friedman Bros.
Fuller Co., W. P.
Fuller & Goepf
Habenicht & Howlett
Mission Plate & Window Glass Co.
Pioneer Plate & Window Glass Co.
Schwartz & Gettler
- Grading.**
Branick, J. P.
Carlin, John
Cassatello, John
Ovencenzi & Co., L.
Dillon Teaming Co.
Federal Transfer Co.
Giorgi Co., G.
Lennon Co., E. M.
Leflier, Fred
McGlinchey & Monahan
Montague Co., P.
O'Day Co., Dan'l
O'Donnell, Philip
Pittman, Harry M.
Powers, Chas. J.
Reader, A. J.
Shibley Grading & Teaming Co.
- Granite Curbing.**
Graham Granite Co.
Lead Granite Co.
Pac. Granite Co.
Tronoff, Chas. J.
- Gravel.**
Bay Devel. Co.
Cable Building Material Co.
Cassartto, John
Standard Crushed Rock Co.
Street Co., F. P. & A. J.
- Floors.**
Emanuel, L. & E.
Enterprise Floor Co.
Inial Floor Co.
Hardwood International Co.
Pac. Floor Sanding Co.
Hd'ware, Dealers.
Baker & Hamilton
Bennett Bros.
Kortick - Falls Mfg. Co.
Kruse, J. H.
Joost Bros.
Meyer, Adolph
Norman & Sons, F. G.
Palace Hrw. Co.
Smith Co., P. A.
- Heating & Ventilating.**
Atlas Heating & Ventilating Co.
Kiernan & O'Brien
Hurley Co., J. C.
Lawson, Herman
Looney Co., J.
Mangrum & Otter
Pac. Fire Extinguisher Co.
Snook & Co.
Fred W.
Torrill Zone Furnace Co.
Turner Co., The
- House Movers & Raisers.**
Hatch H. T.
Pearson Bros.
Sullivan D. & T.
- Holting Engineer.**
Lamharth, C. E.
Le Clair, S. D.
- Inland Floors.**
Enterprise Floor Co.
Hardwood Interior Co.
Inial Floor Co.
Pac. Floor Sanding Co.
Union Floor Co.
- Iron Foundry.**
Steiger & Kerr.
Stove & Foundry Co.
- Iron & Steel.**
Baker & Hamilton
- Holbrook, Merrill & Stetson.**
Judson Mfg. Co.
Pacific Coast Steel Company
Pac. Rolling Mills Co.
U. S. Metal Products Co.
Woods & Huddart
- Iron Works.**
Brode Iron Works
Central Iron Wks.
Dyer Bros.
Eureka Wire & Iron Wks.
Golden Gate Iron Works
Hillard Co., C. J.
Iron & Steel Contract Co.
Kell Iron Works
Mickel & Prentiss
Monarch Iron Works
Pacific Iron Wks.
Pacific Structural Iron Works
Ralston Iron Works
S. F. Iron Works
Sartorius & Sons
Steelers Iron Works
Steiger & Kerr
Stove & Foundry Co.
Vulcan Iron Wks.
West Coast Wire & Iron Works
Western Iron Supply Co.
Western Iron Works
- Joint Hangers & Post Caps.**
Fair Mfg. Co.
Kortick - Falls Mfg. Co.
Pac. Bldg. Materials Co.
Roman Co., C.
Western Bldrs. Supply Co.
- Lathes, Wood & Metal.**
Edwards, C. H.
Hayden, Fred
Kaiser, Joe
Peerless Fireproofing Co.
Lighting Fixtures
Burtchall, J. W.
Thaw Co., Thomas
H. C. Electric Appliance Co.
Mayberg Co., Leo J.
- Lime & Plaster Dealers.**
Arden Plaster Co.
Civiv Center Supply Co.
Cowell Lime & Cement Co.
Guerin & Co., J. S.
Holmes Lime & Cement Co.
Kilstone Mfg. Co.
Lennon Co., J. F.
Mathewson, R. H.
Pacific Portland Cement Co.
United Materials Co.
Western Lime & Cement Co.
- Lumber Dealers.**
Acme Lumber Co.
Christenson Lumber Co.
Columbia Lumber Co.
Coo's Bay Mfg. Co.
Excelsior Redwood Co.
Hart-Wood Lumber Co.
Higgins Lumber Co., J. E.
Hauptman Lumber Co.
Kruze, J. H.
Hooper Lumber Co.
Higgins Lumber
- Co., J. E.**
Loop Lumber Co.
MacDonald Lumber Co.
National Mill & Lumber Co.
Oakley Lumber Co.
Olson - Mahoy Lumber Co.
Peterson, E. T.
Pope & Talbot
Reinhart Mill & Lumber Co.
Santa Clara Valley Mill & Lumber Co.
Santa Fe Lumber Co.
S. F. Lumber Co.
Spring Valley Lumber Co.
Sunset Lumber Co.
Tiernan & Beronio
Van Aradale-Harris Lumber Co.
Whelan Bros. & Co.
Wood Lumber Co., E. K.
- Magnetic Flooring.**
Dwan Co., Jas. P. (Inc.)
Fibrestone & Roofing Co.
Golden Gate Art Marble Co.
Johns - Manville Co.
King, J. C.
Malott & Peterson
Paraffine Paint Co.
- Mantels, Tiles & Grates.**
Cal. Tile Contr. Co.
Ginsberg Bros.
Wagner & Ottor
McIlhinney, D. J. T.
- Marble and Mosaic Work.**
American Marble & Mosaic Co.
Gnecco, M. H.
Golden Gate Art Marble Co.
Grassi & Co., P.
Mission Concrete & Mosaic Wks.
Mission Marble Works.
Musto Sons-Keenan Co.
New Era Marble & Concrete Co.
Teltz, Francis E.
Tomagnini & Co.
Vermont Marble Co.
- Metal Lath.**
Atlantic Fire-Baker & Hamilton
Brooding Co.
Berger Mfg. Co.
Fernald Co.
Holloway Expanded Metal Co.
Pac. Bldg. Materials Co.
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Western Builders Supply Co.
- Metal Stamping.**
S. F. Metal Stamping & Corr. Co.
U. S. Metal Products Co.
- Mortar.**
(Ready Mixed.)
Atlas Mortar Co.
Civiv Center Supply Co.
- Motors.**
Farnsworth Electrical Wks.
Weldenthal-Gosliner Electric Co.
- Oil and Greases.**
Fuller & Co., W. F.
Standard Oil Co.
Union Oil Co.
Whittier - Coburn Co.
- Ornamental Plastering.**
Benkman, Ed. G.
Binnet, Theodore
Larson, O. F.
Milhan, A.
Murlale, Mic
Forta, Chas. S.
- Painters and Decorators.**
Baker Co., W. T.
Barman, Harry
Barman, J.
Beck, W. T. Printing Co.
Bernstein, Wm.
Chaban & Davis.
Christiansen, Jas.
Clark & Dickson
Cramer Bros.
Copnick, T. W.
Dahl, T. H.
Donovan V. J.
Gradin, A.
Hansen, Erling A.
Johnson, C.
Journeyay, J. E.
Kissel, Ildor
McCarthy Co., T. W.
Miller I. A.
Murphy & Sons Co., Jas.
Neal L. J.
Progressive Painting Co.
Quandt & Son
Runderman, I.
Sennar, Wm. F.
Smith, J. S.
Sarge, C. B.
Swan, Robt.
Wagner, Fred
Wagner Bros.
Zelinsky, A. A.
Zelinsky, D. & Sons.
- Paints, Oil Varnishes, Etc.**
Clark & Dickson
Cohn & Co., Marion D.
Emeric & Duncan
Fuller Co., W. P.
Keystone Varnish Co.
Levy, R. S.
O'Brien, S.
Paint Products Corporation
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